Socially Engaged Applied Doctoral Research in Canada: Approaches to Contemporary Social and Management Opportunities and Challenges

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Introduction

Doctoral research is a source of innovative and impactful research that transforms society and challenges dominant theories and practices. While recognizing the changing landscape of doctoral education, the higher education community continues to emphasize the need to maintain the quality and rigour in doctoral scholarship. Central to this topic is maintaining the rigour of doctoral research design while supporting and encouraging multiple forms of research and research methodologies.

With the generous support of a Social Sciences and Humanities Council Connection Grant, the Faculty of Management (FoM) and Faculty of Applied and Social Sciences' College of Interdisciplinary Studies (FSAS) at Royal Roads University hosted a three-day online virtual conference from August 20th to August 22nd to focus on socially engaged applied doctoral research in Canada.

The primary purpose was to provide an opportunity for doctoral students from across Canada to showcase different applied research scholarly approaches, foci, modes, theories, and methods to address contemporary social and management challenges. Submissions were received within the conference scope of applied, management and socially engaged research, either advancing theory or investigating a research problem, either from a single discipline or interdisciplinary perspective. The conference also offered a unique platform for faculty members to discuss multiple forms of doctoral research, scholarship and supervision.

The conference editorial committee reviewed all submissions. As part of the review process, doctoral students peer-reviewed each other's submissions. All submissions were assessed based on common criteria that included the paper's applied nature as defined by authors; its originality, significance and expected contribution to knowledge; appropriateness of the literature review; appropriateness of the theoretical approach or framework; and the readability of the paper. The Conference Editorial Committee consisted of Dr. Holmes, Dr. Harris, Dr. Mittelmen, Dr. Hodson, Dr. Wafai, and Dr.Bernard.

The committee accepted both full paper and abstract submissions. In both cases, authors were invited to present at the virtual conference. The proceedings include all submissions and are organized as follow: 1) Part I – Presentations by four keynote speakers; 2) Part II and III – Submissions by supervisors and faculty members on applied doctoral research; and 3) Parts IV to X – Submissions by doctoral students on applied socially engaged research.

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PART I

KEYNOTE SPEAKERS

1. The Formation of Scholars for the 21st Century

SUSAN PORTER

The 21st century world, characterized by unprecedented complexity, interdependence, chaos, and uncertainty, is facing the most urgent problems of our history. The conventions and assumptions the academy and society have traditionally relied upon are no longer adequate to the task of addressing them, or effectively navigating the changing and expanding ways of working. Doctoral graduates are 'scholars' in the broadest sense, using their knowledge and intellect to integrate, discover, apply, and share knowledge. If they are to meet the moment of this day, their scholarship will need to incorporate different and unfamiliar perspectives and ways of knowing, and they will need to be systems thinkers and effective collaborators and agents of change. As part of its 'reimagining the PhD' focus over the past six years, the UBC graduate school has expanded opportunities for PhD students to develop these holistic scholarly capabilities, in part through encouraging, supporting, and legitimizing more capacious forms of doctoral research, supervision, and the dissertation. These initiatives will be described, as will the work done on behalf of the Canadian Association for Graduate Studies to understand the national sentiment on the issues.

Bio

Dr. Susan Porter is the Dean and Vice-Provost of Graduate and Postdoctoral Studies at the University of British Columbia (UBC), the Past President of the Canadian Association for Graduate Studies (CAGS), and a Clinical Professor in Pathology and Laboratory Medicine at UBC. A strong focus throughout her administrative career has been the preparation of graduate students and postdoctoral fellows to thrive and to contribute meaningfully through their work after graduation or fellowship completion. She has led a concerted effort over the past eight years towards a rethinking of the core of doctoral education — students' research, their dissertation, and the ways in which they learn and are mentored.

At UBC, she has been leading a "Reimagining the PhD" conversation and series of initiatives, most notably a multiple award-winning "experiment" (the Public Scholars Initiative) that is demonstrating the immense value and legitimacy of broadening doctoral research that fosters students' holistic development to better address today's urgent needs. She has also co-led a national CAGS task force on the subject, and is working to further the conversation and to provide support and resources for the graduate community across Canada and beyond.

2. Effective Research Training for Applied and Socially Engaged Research

DOMINIQUE BÉRUBÉ

Dr. Bérubé's keynote engaged doctoral researchers on how SSHRC can better respond to their realities, particularly for those engaged in community-based and other types of applied research. She explained the different ways that SSHRC supports doctoral students and community-based, partnered research, sharing the agency's efforts at improving Equity, Diversity and Inclusion, better supporting Indigenous research, and partnering with organizations such as MITACS. Training-related results from the recent evaluation of SSHRC's Partnerships programs was presented, and the audience was invited to provide feedback on the agency's Guidelines for Effective Research Training.

Bio

Dominique Bérubé was appointed vice-president, Research, at SSHRC in October 2019. In this role, she is responsible for developing the long-term vision and future direction for SSHRC's core research funding programs.

In addition, Dominique oversees the strategic direction and delivery of tri-agency programs and policies, in collaboration with the other federal research funding agencies. This includes the delivery of the Canada 150 Research Chairs Program, the Canada Excellence Research Chairs Program, the Canada First Research Excellence Fund, the Canada Research Chairs Program, the New Frontiers in Research Fund and the Research Support Fund. This also includes the implementation of a renewed Indigenous research and research training strategy. As well, she chairs the executive board of the Tri-agency Grants Management Solution initiative.

Dominique was previously vice-president, Research Programs, from 2015 to 2019. In that role, she directed efforts to improve program accessibility and to implement equity, diversity and inclusion policies.

Prior to joining SSHRC, Dominique worked at the Université de Montréal, beginning in 2007. She held many positions, including acting vice-rector, Research; associate vice-rector, Research; and executive director, Research Services and Commercialization.

Dominique holds a PhD in environmental sciences from the Université du Québec à Montréal and a master's in science and a bachelor's degree in engineering from Polytechnique Montréal.

3. The Research Process: Dealing with Complex, Wicked Challenges

ANN DALE

Never has the production of useful knowledge and applied research been more important in this age of disinformation and misinformation. Even more important is the communication of evidence-based research to decision-makers, policy development and the general public. COVID-19 has shown the importance of listening to the science and making informed decisions in a highly charged risk context. How does one make a difference with research? What are the most proactive ways to disseminate research outcomes in more accessible and jargon-free ways? Is there a need for a return to the notion of the 'public intellectual' who bridges the terror of either/or?

Bio

Ann Dale is an award-winning Professor and Director of the School of Environment and Sustainability at Royal Roads University. With extensive knowledge in sustainability, governance, climate change adaptation and mitigation, as well as social she hopes to make a difference with her research for sustainable community development. As a former executive in the federal government and a key architect of the National Round Table on the Environment and the Economy, she brings a wealth of practical and theoretical knowledge to her research. She has written widely on sustainable community development and has received national and international recognition for her work. She has won several awards, including her university's first Canada Research Chair in sustainable community development, is a Trudeau Fellow (2004), and a Fellow of the World Academy of Art and Sciences. Dale's book, *At the Edge: Sustainable Development in the 21st Century*, received the 2001 Policy Research Initiative Award for Outstanding Research Contribution to Public Policy. Professor Dale was awarded the 2013 Molson Prize for the Social Sciences by the Canada Council for the Arts, and is a recipient of the 2016 Canada's Most Powerful Women, Top 100. She led MC3: Meeting the Climate Change Challenge, a major climate change adaptation and mitigation research project in British Columbia. She is also active in the Canadian environmental movement: the founder and chair of the National Environmental Treasure (NET) and is the former co-chair of Women for Nature. Her latest book, *Edging Forward: Achieving Sustainable Development*, was published in 2018 and was exhibited along with the Edging Forward Art Collection at the Robert Bateman Centre in the Fall of 2017.

4. Knowledge, Activism, and Hope: Finding Balance

THOMAS HOMER-DIXON

Most of us understand intuitively that if we try to live without hope, we won't flourish; we'll exist only in the most basic physical and psychological sense. As the French philosopher Gabriel Marcel marvelously said: "Hope is for the soul what breathing is for the living organism."

But problems like climate change are now hope's most formidable enemy. Global warming isn't even bad yet—we're experiencing today just the leading edge of its disruption—but the threat of climate catastrophe is already causing thousands of women to forgo having children. It's driving a worldwide surge in anxiety and depression, especially among young adults. And it's energizing misguided discussion of whether human civilization is destined to collapse.

This loss of hope can be self-fulfilling, because it fatally weakens our agency. The absolute best way to ensure we'll fail to solve our problems, is to believe we can't. I argue for "honest hope"—a moral attitude that starts from a presumption about the importance of a commitment to truth and that's anchored in resolute scientific realism about the gravity of the dangers we face. Honest hope can motivate our agency, and that agency can be a catalyst for action to solve our most critical problems.

Bio

Thomas Homer-Dixon is Director of the Cascade Institute at Royal Road University, and he holds a University Research Chair in the Faculty of Environment at the University of Waterloo in Waterloo, Canada. Between 2009 and 2014, he was founding director of the Waterloo Institute for Complexity and Innovation and prior to that the Director of the Trudeau Centre for Peace and Conflict Studies at the University of Toronto.

Born in Victoria, British Columbia, Canada, he received his B.A. in political science from Carleton University in 1980 and his Ph.D. from the Massachusetts Institute of Technology in international relations, defense and arms control policy, and conflict theory in 1989. He then moved to the University of Toronto to lead several pioneering research projects investigating the links between environmental stress and violence in poor countries.

Since joining the University of Waterloo in 2008, his research has focused on threats to global security in the 21st century, including economic instability, climate change, and energy scarcity. He also studies how people, organizations, and societies can better resolve their conflicts and innovate in response to complex problems. His work is highly interdisciplinary, drawing on political science, economics, environmental studies, geography, cognitive science, social psychology, and complex systems theory.

He teaches undergraduate and graduate courses on topics ranging from environmental security to international relations and complexity theory. In 1999 he received the University of Toronto's Northrop Frye Teaching Award for integrating teaching and research.

Dr. Homer-Dixon's books include *Commanding Hope, The Upside of Down*, which won Canada's 2006 National Business Book Award, *The Ingenuity Gap*, which won the 2001 Governor General's Non-fiction Award, and *Environment, Scarcity, and Violence*, which won the 2000 Caldwell Prize of the American Political Science Association.
His academic writing has appeared in leading journals, including Ambio, International Security, Journal of Peace Research, and Population and Development Review. He has written for non-academic audiences in Foreign Policy, Scientific American, The New York Times, and the Financial Times. He now writes regularly for the Toronto Globe and Mail in Canada.

A widely sought speaker, Dr. Homer-Dixon has delivered addresses on his research to academic and general audiences around the world. He has also consulted to senior levels of government in Canada, the United States, and the United Kingdom.

DOCTORAL EDUCATION: SUPPORTING APPLIED DOCTORAL RESEARCH: SUPERVISOR AND FACULTY MEMBER SUBMISSIONS

5. Who Earns a Terminal Degree in Leadership?: Supporting Applied Doctoral Dissertations

TANIA CARLSON REIS AND MARILYN L. GRADY

Introduction

Leadership remains an expanding discipline of study. Leadership programs span multiple domains within education, government, community, and business. Companies offer leadership development training, and non-profit organizations employ leadership frameworks. Leadership development is both formal and informal. In the end, practical and pedagogical forces intersect to build leadership knowledge overtime (Day & Thornton, 2018).

Adult learners looking for leadership education often turn to terminal degree programs in higher education. Ph.D. or Ed.D. programs in leadership development are housed within different disciplines of study. Some programs are specific to educational administrators in PK-12 schools or higher education; or are focused on developing student affairs professionals. Some programs are connected to business or medical leadership. The broad applicability of the leadership construct makes it valuable and useful within applied doctoral programs.

Connecting adult learners from different professions in a single terminal degree leadership program is a challenge. This session will describe how two Ph.D. and Ed.D. leadership programs used tenets of Danby and Lee (2012) to frame doctoral pedagogy as both design and action (p. 3). Through a process of applied research, elements of theory and practice were implemented to overcome student attrition and support degree attainment.

Literature

According to Danby and Lee (2012), doctoral program design includes pedagogy, and an interactive element is embedded in doctoral student training. Teaching and learning are not separate constructs but are implicitly connected through program delivery. Learning is co-created, not only in class content, but through social connection. More so, social connection bridges to program design, and includes intentional interaction between the student and doctoral advisor (Barnes & Austin, 2008; Grady, 2012; Harding-Dekam, et al., 2012)

A relational connection between a doctoral advisor and advisee mitigates program attrition, and supports degree completion. Doctoral advisors socialize students to discipline and program designs (Barnes, 2010). Doctoral advisors make implicit elements of the curriculum explicit, and convey not only subject knowledge, but ways to integrate course content with individual research or experience (Harding-Dekam, et al., 2012).

Advisors provide career and intellectual guidance, but often the relationship merges into psychosocial dimensions (Gammel & Rustein-Riley, 2016; Lunsford, 2012). Adult learners need to know the "why" behind the task. (Knowles et al., 2020). Given the noise in an adult learner's life, even a leadership Ph.D. program with a theoretical foundation needs to be explicit in purpose and design.

Description

The programs presented in this session utilize hybrid delivery. Students in the programs represent multiple professions: PK-12 teachers or administrators, higher education professionals, business personnel, health care leaders,

and directors of non-profit organizations. The programs have a strong foundation in leadership theory, but many of the students in the program are leadership practitioners. The session will include how the program implemented: 1) a practitioner focused dissertation option; 2) opportunities to present student scholarship through an onsite peer reviewed conference; and, 3) ways that onsite and distance dialogues with advisors improved student dissertation outcomes. The program changes are presented through the lens of Danby & Lee (2012) and the dynamic of pedagogy in action. Practices in a doctoral program can be shaped to fit the learner and meet the program outcomes.

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6. Models and Variations of Dissertations and Supervision Practice: Where Should We Be Going?

DEBRA HOVEN

The professional doctorate (EdD) at Athabasca University was Canada's first fully online doctoral program, now in its 14th year. The Carnegie Project on the EdD (CPED; Golde, Walker, & Associates, 2006) and our own research have shown that increasing numbers of grad students are looking for doctoral programs that are more workplace or professionally oriented, moving away from the "traditional" perception of doctoral programs as preparation for a career in academia.

While many online programs struggle with motivation and retention (Ivankova & Stick, 2007; Hart, 2012; DeClou, 2016), our cohort-based program has managed to maintain high completion rates – above 70%. According to our research, two of the main reasons for our high completion rate derive from the cohort model used in our program and the in-person orientation (in pre-COVID times) in the first year of the program.

For the purposes of this program, the cohort model refers to the requirement for students to enrol in the program at the same time, work to a time-sensitive deadline, and subsequently complete the same prescribed courses together throughout the program. This version of the cohort model includes initial online preparation of a small-group project before students know each other or have met each other in-person. The students then normally attend a week-long in-person Orientation, which includes presenting their group projects, and subsequently work entirely online for the remainder of their program. This approach is supported by research elsewhere recommending that this kind of initiation activity focus on learner-learner interactions to build trust and understanding for potential mutual support (Pemberton & Akkary, 2010; Hoven et al. 2020). The positive effects of this building of trust has been evident in our program in the organically-formed cohort sub-groups that continue beyond the coursework components into data collection and analysis, as well as the final dissertation writing.

In light of the fact that we offer a professional doctorate, in recent years we have moved away from the more academic dissertation and academic preparation path to offering flexible paths for professional students in government, the corporate world, and self-employed businesses and consultancies. This includes a manuscript-style dissertation, also known as dissertation-by- publication, and workplace- or consultancy-based projects of a pragmatic or experimental nature. In addition, the needs of our Indigenous students also necessitate flexibility in committee structure, examiners, research projects, shape of the dissertation document(s), and re-usability or community applicability of the research project outcomes.

A recent mixed methods research study investigated two groups of Doctorate in Education students and forms part of an ongoing endeavor to improve the student experience of and success in the program. The first group, Cohort 1 (2008 intake) completers, were identified based upon ongoing communication with the (then) Program Director, also a faculty instructor in the program. A collaborative self-study approach was concurrently undertaken by students from the Cohort 11 (2018) intake of the program. The self-study components were conducted by the self-identified (volunteer) sub-group of Cohort 11 participant-researchers, under my mentorship.

Main results of these two studies include the pre-eminence of supervisors and supervisor qualities as well as the importance of the whole-group orientation to establish trust and understanding of who among the cohort have particular qualities and experience in certain areas. Among supervisor qualities, features mentioned included openness, flexibility, reflexivity, understanding & empathy, as well as genuine interest in students and their topics, having their own research agenda, and currency of their research. Also of critical importance were the establishment of clear expectations on both sides, collaborative and negotiated selection of committee members and external examiners, compatibility of personality, clear and regular communication, and avenues and strategies for maintaining mental health and wellness.

Finally, more research and discussion are needed in areas such as collaborative, inter-institutional data-keeping and analysis, student persistence, timeliness, deferral, and program abandonment. The black box of supervision needs to be

put under several lenses: how are supervisors mentored, what professional development and guidance is available, and how can we cultivate more collaborative openness on supervisory practices.

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7. Taking Up Research for the Common Good

CONSTANCE BLOMGREN

The following position paper concerns the "teacher-inquirer identity" (Badia et al., 2020, p. 865) and the *taking up* of research post-graduation for those who attain a doctorate and remain within the K-12 system. This topic of research literacy and teacher-inquirer identity speaks to the increasing expectation for in-service K-12 teachers and their leaders to read and engage in educational research (Alberta Ministry of Education, 2013; Alberta Teachers Association, 2020; British Columbia Teachers Federation, 2021). These expectations coincide with the increasing access of research studies freely available through open access journals. Evidence-based teaching demands and the ongoing availability of current research has been digitally amplified, and thus all levels of educators are needing to make sense of research and research processes.

There is exposure to research in pre-service education programs (Afdal & Spernes, 2018) but in graduate programs this exposure becomes a heavy emphasis – reading theory, reading research, and learning how to read theory and research for deep professional understanding. This *reading of research* by graduate students is also coloured through their individual teaching experiences, that is, *praxis*, whereby theory and practice comingle to make a blended understanding with theory informing practice and practice informing theory. From pre-service to doctoral studies in education, the teacher-inquirer identity evolves over time and through interplay and interactions among experiences comingling with professional learning and encounters with researchers and their outputs (Badia et al., 2020). Stretching toward the epitome of the teacher-inquirer identity, graduate studies pull students toward such an identity yet in professional contexts (i.e., K-12 teaching and leadership positions) this identity may not be fully embraced (Taylor, 2017). For many graduate student professional colleagues, the undergraduate experience with research has been as been as audience and with content, not as participants nor research processes (Healey & Jenkins 2009 as cited in Afdal & Spernes, 2018). These same colleagues may look to the doctoral graduate as a knowledgeable other because of their advanced degree and this tendency may be even more so with the rise of research availability and research literacy expectations.

Many education doctorate students will be in leadership positions and may be called upon to support research awareness and engagement in staff members. Because of such situations, does the graduate holder not have some scholarly obligation to model, show, and provide others who have not partaken of graduate studies the benefits of their additional studies? And does not a new grad have the obligation to also inform those with older graduate degrees that the academy has changed, research topics and methodologies have also changed, and that what made a graduate degree in the past has evolved? Are these new grads not unlike a traveller to foreign places, coming home and telling what is happening elsewhere and that perhaps those who stayed back can learn from those who encountered new learning elsewhere?

Is part of the education doctoral journey to support the uptake of research literacy not only for the graduate students individually, but also for their future selves as part of a learning community (e.g. they may be part of such communities contemporaneously during their graduate studies) and may be participating in or leading post-graduation? And that in the doctoral journey, their studies implicate them in future modelling of how one takes up research. This process may not always mean active research studies, however defined, and will frequently include the reading of research and theory informed by contemporary insights as part of their teacher-inquirer identity. When tasked with implementing an educational innovation, the graduate can articulate through their teacher-inquirer identity a critical understanding of what is being asked of the profession, individually and collectively, and navigate the innovation either as research audience or participating in research processes. The knowledge, skills, and attitudes of the teacher-inquirer (Badia et al., 2020) finessed throughout the graduate degree thereby help others make sense of the wealth of research that affects education and the constant pressure to solve educational problems.

As supervisors of doctoral students we are also tasked with articulating our own teacher-inquirer identity, as a stance and as a process (Badia et al., 2020). The expansion of research in both availability and as part of educational practice

challenges the professorate to think of this extension and its implications for our own teaching and inquiring; to think again of our teacher-inquirer identity, of how, where, and when we model it and for what ends.

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8. Boundary Spanning Cultures in Applied Doctoral Research

ALICE MACGILLIVRAY

Applied doctoral research takes many forms. This paper focuses on boundary-spanning trans- or inter-disciplinary doctoral programs at Fielding Graduate University (Fielding), in which students often explore and address complex social, cultural and leadership challenges. By boundaries, I mean socially constructed differentiators (Richardson & Lissack, 2001), which can have different impacts on different groups (Midgley, 2000).

I have been associated with Fielding since 2002: as a student between 2005 and 2009, a member of several doctoral committees, co-facilitator of workshops with faculty and with alumni, organizer of Canada-based intensives for doctoral students, co-investigator for internal research, governance member, chair of the alumni council, a fellow, and member of the president's sustainability advisory council. As context for comparisons, I have played smaller roles in the development or delivery of doctoral studies in three other institutions.

Doctoral students from over 25 countries have studied at Fielding, and many—such as Alison Granger Brown—have done applied research in Canada (Fielding, n.d.). The faculty portion of the website (Fielding, n.d.) uses the phrase "40 Years of Delivering Personalized Learning" implying curricula with permeable boundaries (geographic, methodological, disciplinary…).

I am interested in applied, boundary spanning doctoral studies because I believe they are essential for wicked problems facing the world in this century. Universities have deep traditions with discipline-based doctoral programs; evolving programs with applied inter- and trans-disciplinary work can benefit from learning with and from each other. Successful boundary- spanning relates to culture as much as to content, and culture change is never easy.

What is applied? Some applied doctoral research is labelled *project* in contrast with *dissertation*. Scholars such as Connolly (2020) worry about the business-oriented slippery slope in higher education. Connolly values applied work *and* is concerned about threats to generative imagination. Fielding's applied dissertations use both short term and more generative, upstream approaches (See Appendix A). Key to me is that students embark on doctoral research with the *desire to catalyze or effect positive change*. This would include but would not be restricted to action research. In practical terms, research spanning a few years—or even a decade—may not be fully applied for some time. After all, wicked problems such as biodiversity loss, climate change, and unequal access to resources have developed over centuries. And as with all complex challenges, research may yield unexpected results. Bentz and Shapiro (1998) describe research done by Don Bushnell (Fielding Faculty Emeritus) in which he developed resources for members of urban gangs. "Whereas one gang used the resources and personal support Bushnell provided through his project to develop a legitimate enterprise in cooperation with a rival gang, another used it to become more efficient at extortion and other illegal activities" (p. 55). In such cases, the definition of *applied* may lead to ethical debates. In this paper, I consider *applied* as research with the intent of positive change.

Boundary spanning experiences I share in the full paper are linked to the work of two other scholars. The first is systems scientist Gerald Midgley's work with systemic intervention (2000, Fazey et al., 2018, Sydelkoa, P. et al., in press) including theoretical and methodological pluralism, marginalization, and the Theory of Boundary Critique. Midgley's work creates space between entities (such as theory and practice) in order to explore emergence, synergies and marginalization. Midgley's research, which I have built on in the past, frames perspectives for experiences I share.

I also connect experiences with principles of dialogue such as "Members have the knowledge and wisdom to jointly address an organization's adaptive challenges" from a post by Nancy Dixon (2021), retired professor from The George Washington University. Her list of principles draws explicitly on the work of some systems scientists, and implicitly on others, such as C. West Churchman's idea of sweeping in as much as possible to understand a problem and make decisions. Ulrich (2004) noted that Churchman's sweeping in principle "embodies nothing less than a pragmatic criterion of truth: true knowledge and understanding of a problem are the result of a process of inquiry that in principle is endless

and must remain open to considering ever more aspects of a problem's environment" (p. 202). Ulrich also raised the question of exactly what should be swept in, and how that may relate to the limitations of science (and implicitly the growing value of social sciences).

Conclusions describe how the cultures of Fielding's doctoral research spaces facilitate relevant, applied social research through a not-for-profit institution. The conclusions address elements of culture including boundary-spanning, systems perspectives, egalitarianism, dialogue, and inclusion.

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Appendix A: Sample of Applied Fielding Dissertation Research

Changes in Society and Systems

Cloutier, C. J. (2017). *Resolving the wicked nature of compensation: A meta-ethical approach* (Order No. 10622078) [Doctoral dissertation, Fielding Graduate University]. ProQuest Dissertations & Theses Global.

Zayas, N. L. (2011). A *comparative analysis of online versus traditional teaching of environmental literacy using participatory action research* (Order No. 3457978) [Doctoral dissertation, Fielding Graduate University]. ProQuest Dissertations & Theses Global.

Changes in Groups, Organizations and Services

Benally, T. (2017). *Toward true educational sovereignty for the Navajo nation: Structure, politics, curriculum, and quality* (Order No. 10255095) [Doctoral dissertation, Fielding Graduate University]. ProQuest Dissertations & Theses Global.

Brown, J. (2002). *The world café: Living knowledge through conversations that matter* (Order No. 3041666) [Doctoral dissertation, Fielding Institute]. ProQuest Dissertations & Theses Global.

Charles-Ford, S. (2014). *Improving post-incident trauma-informed care for drive-by shooting Victims/Survivors by building collaborative leadership systems among agencies and their clients* (Order No. 3633100) [Doctoral dissertation, Fielding Graduate University]. ProQuest Dissertations & Theses Global.

de Jonge, L. (2013). *Creating shared value: Using social media to extend a corporation's commitment to social responsibility* (Order No. 3555533) [Doctoral dissertation, Fielding Graduate University]. ProQuest Dissertations & Theses Global.

Changes Through Self

Berg, M. (2010). *What are the lived experiences of women over 50 who report a dramatic shift from a negative to positive self-image?* (Order No. 3418918) [Doctoral dissertation, Fielding Graduate University]. ProQuest Dissertations & Theses Global.

Garthwaite, L. J. (2014). *Personal practices for emancipatory systems change* (Order No. 3628944). [Doctoral dissertation, Fielding Graduate University]. ProQuest Dissertations & Theses Global.

9. Together is Better: Co-Supervision/Co-Mentoring of Students in an Online Doctoral Program

CINDY IVES; BETH PERRY; AND PAMELA WALSH

Our current research focuses on recent experiences of co-supervising doctoral students who are conducting interdisciplinary, socially engaged applied research (SEAR) for their traditional and manuscript-style dissertations.

Embracing a philosophy of openness (Athabasca University, 2020) including open educational scholarship, we "draw on open technologies, pedagogical approaches and open educational resources (OER) to facilitate collaborative and flexible learning" (Campbell, 2021). We conceptualize graduate supervision as a mentoring relationship with students (Kumar & Coe, 2017; Kumar & Johnson, 2017), inviting them to participate with us in the co-creation of knowledge. The mentoring approach contributes to reciprocal learning between students and supervisor/mentors.

Effective mentoring is associated with higher success and retention rates, student-faculty research collaboration, higher rates of publication after graduation, and increased faculty member career satisfaction (Kumar & Johnson, 2017). By offering co-supervision and co-mentoring in a spirit of open pedagogy, we share a guiding philosophy that informs our actions and interactions with one another and with learners (Hall & Burns, 2009).

Grounded in a scholarship of engagement that connects the resources of the university to society's pressing problems (Boyer,1996), we expect socially engaged applied research in our online doctoral program to address educational challenges that include those related to social justice, and health and well-being. Principles of SEAR include quality, reciprocity, and crossing of disciplinary boundaries (Beaulieu et al., 2018). Beaulieu and colleagues defined reciprocity in terms of collaboration with academic and practitioner partners; most of our students are practising educators. Since complex social issues are often best studied through interdisciplinary collaborations (Vanstone et al., 2013), interdisciplinary research can address the complexity of the research questions doctoral learners are investigating. Supervising interdisciplinary research projects to successful completion presents distinct challenges. As Watts (2010) points out, it is unlikely that a solo supervisor has the breadth of knowledge required to support a doctoral student embarking on a complex interdisciplinary investigation. Consequently, co-supervisors need to learn how to navigate this new role successfully. Robertson (2017) reminds us that the most critical element in successful doctoral supervision is trust, defined as believing co-supervisors are reliable, truthful, and capable. For Robertson (2017), trust is the foundation to voice, resilience, and creativity in supervisory teams.

As co-supervisors, we have agreed that co-mentorship of interdisciplinary students requires a different pedagogical approach than supervisors might use with a single discipline learner. Specific considerations when supervising interdisciplinary students include adopting a stance of flexibility when working with literatures from different disciplines and encouraging a reflexive orientation and openness toward these diverse bodies of knowledge and ways of knowing (Vanstone et al., 2013). Such an approach is essential to supporting the learner; it also becomes a learning experience for the supervisors, as we are exposed to new ways of knowing and related (but often new) knowledge. Learning to co-supervise interdisciplinary students provides a professional learning opportunity for the supervisors (Kumar & Johnson, 2017).

Our work builds on current literature related to graduate supervision and is illustrated with examples from our experiences with students in an online practice-based doctoral program in distance education. We emphasize the importance of quality and rigour in socially engaged and applied research. We highlight positive outcomes and lessons learned related to improving our co-supervision and co-mentoring practices. We offer a critical perspective on the need for sensitivity to power, equity, and student agency. Finally, we revisit recommendations in the Canadian Association of Graduate Studies (2018) and Commonwealth of Learning (Tait, 2018) reports on doctoral studies from the perspective of our shared experience as co-supervisors and co-mentors. The conference offers us an opportunity to share our co-mentorship insights and elicit feedback from colleagues who also face the challenges of changing practices in interdisciplinary research, novel dissertation formats, co-supervision requirements, and open education.

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10. The Network Interactions Between Doctoral Students and Their Chairs in Determining Their Dissertation Topics

ANTHONY OLALERE

The dissertation work of doctoral students is significant in several respects. It is the climax of a student's ability to carry out original independent research. It is the apogee of years of study and reflects the depth of development in students' technical, analytical and writing skills. This brings to bear the relationship between the student and their dissertation chair. Much more is that the student's dissertation work and the department's doctoral program have a great impact on accreditation bodies in the assessment of institutions (Isaac et al., 1992; Katz, 1997). Therefore, the reputation of the chair and the department's doctoral program are at stake as a result of the quality of the students' doctoral dissertation work produced. As for the student, their dissertation work not only influences their future research focus but may play a vital role in establishing a career in academia. It is with these matters in mind that the process of selecting a dissertation topic is critical to the student, the chair and the department.

This paper considers the various network connections related to the selection of the students' dissertation topics using the tool of Dynamic Network Analysis (DNA). As a tool of analysis, DNA studies "how entities are constrained and enabled as they interact and the process that lead to change in the interactions" (Carley, 2010, p.7). Through meta.matrix and multi-agents, DNA creates a dynamic social network that allows people, knowledge, tasks, and other groups to co-evolve. This tool was deployed to examine the influences that determine doctoral dissertation topic selection and to understand the various interactions between variables identified as agent, task, knowledge and resource and how this shapes their choice of topic.

Data was collected from 20 doctoral students in an education leadership class in the south east of the United States. In all, 17 surveys were returned using Qualtrics (an online data collection tool) and analyzed using the Dynamic Network Analysis tool called Organization Risk Analysis (ORA). The features of ORA used to analyze the data were Newman Grouping, centrality betweenness, cognitive demand, knowledge exclusivity, resource exclusivity, eigenvector centrality, and total degree centrality.

Result of the Analysis

The beauty of Dynamic Network Analysis is its capacity to determine network relations and interactions among agents. Figure 1 below identifies Agents by Research Topic. This explains the interactions between agents, chairs and their research interests. The result revealed that the most connected research agenda was the Leadership/Governance and Distributed Learning Network research agenda. Figure 2 measures Agents by Faculty Influence. In other words, who the students are most influenced by in connection to faculty. The result shows the interactions between students and their chairs using the centrality Eigenvator (this measures influence of knowledge that no one else possesses). Faculty 3 (0.055) and 8 (0.037) influenced students the most. Figure 3 measures Agents by Factors. Factors here represent constructs that influenced them the most in choosing their research topic. The most influential are personal interest (0.50) and professional experience (0.42) from classes attended. Figure 4 shows Agent by Class Influences by Research Topic. This represents the networks of class influence by research topic with Leadership (0.50), distributed learning (0.34) and complexity and creativity (0.30) having the highest rates of influence.

Figure 1 *The Measurements of Agent by Topic*

	Centrality, Eigenvector	Centrality, Total Degree
Assessment	-0.0980	0.0159
Athletics	-0.0636	0.0159
Faculty	-0.0739	0.0159
Finance	-0.0725	0.0238
Mission Creep	-0.0417	0.0079
Diversity	-0.1702	0.0397
Laws/Policy	-0.0975	0.0238
Leadership/ Governance	-0.5020	0.0794
Complexity/ Creativity /Networks	-0.3018	0.0476
Distributed Learning/School Choice	-0.3480	0.0714

Figure 2 *Agent by Faculty Influence*
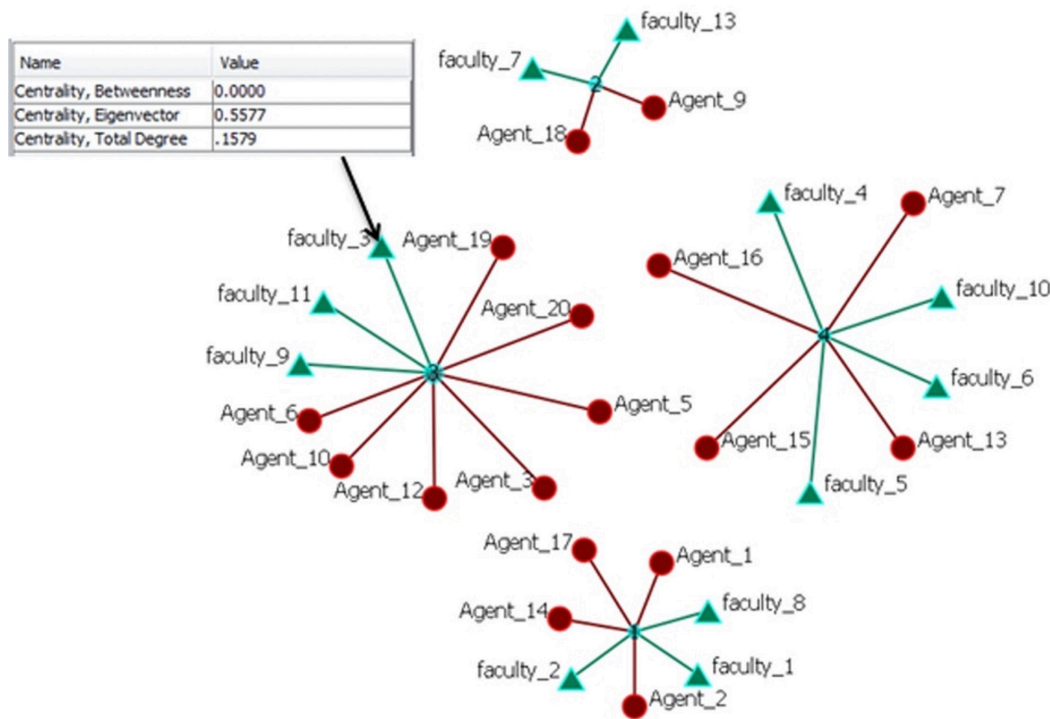
Figure 3 *The Measurements of Agent by Factors*

	Centrality, Eigenvector	Centrality, Total Degree
Personal Interest	-0.5082	0.0873
Relationships	-0.0564	0.0079
Influences from Previous Classes/Readings	-0.0938	0.0159
Professional Experience	-0.4200	0.0873
Personal Life Experience	-0.1567	0.0317

Figure 4 *Agent by Class Influences by Research Topic*
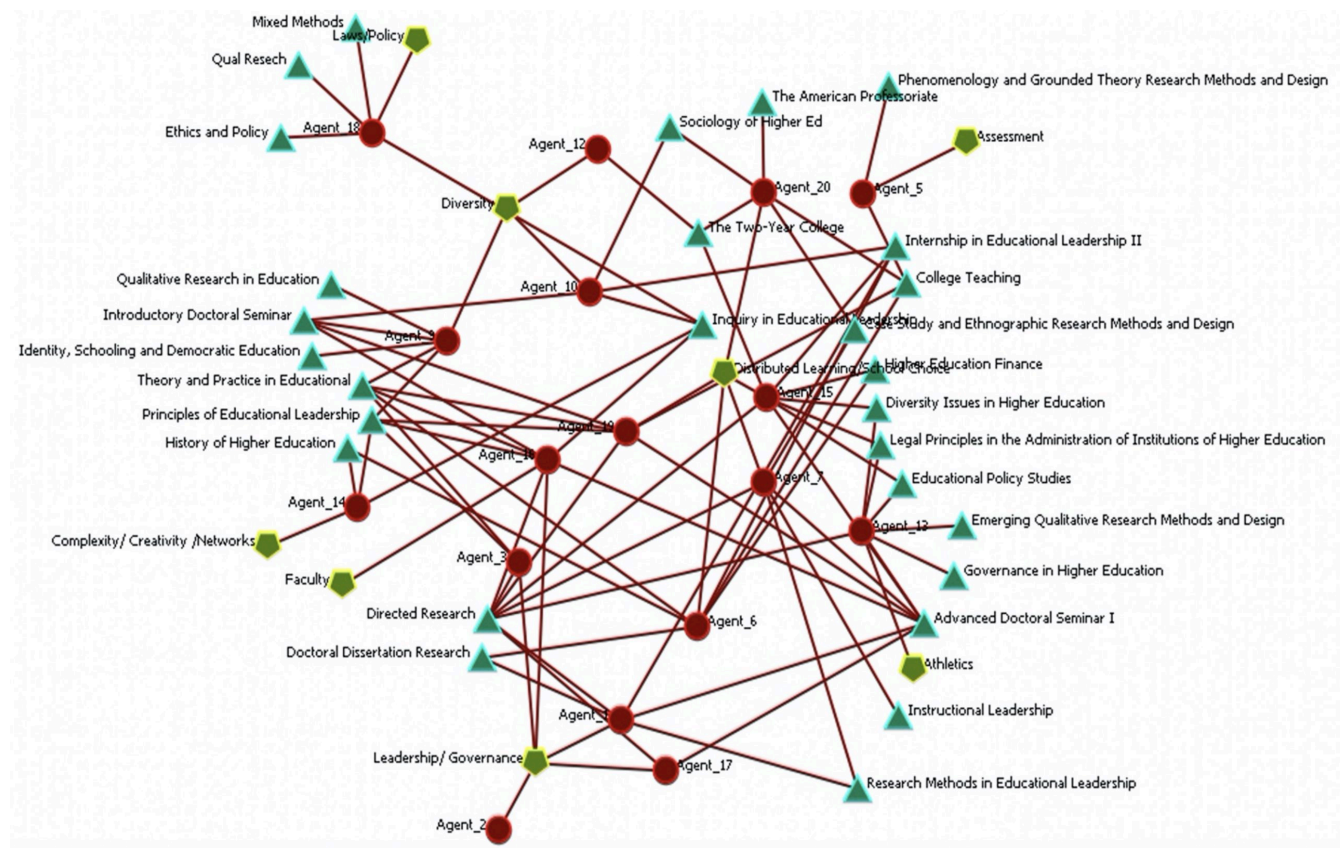
Olalere, A. A., De Iulio, E., Aldarbag, A. M., & Erdener, M. A. (2014)

Conclusion

In dissertation topic selection, students' understanding of factors to consider will be instructive to include in the

doctoral student orientation and advising to eliminate the stress and confusion this can create. Students are influenced by more than one single factor in selection of their dissertation topic however, some factors are just weightier than the other.

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11. The Myth of Mastery: Examining the Supervisory Role Through a Self-Learning Lens

DOUG HAMILTON

Introduction

A positive and constructive relationship between dissertation supervisors and their students is a key factor in a successful outcome for doctoral candidates (Gill & Bernard, 2008; Golde & Walker, 2006; Golde, 2000; Halse & Malfroy, 2010; Lee, 2008). As well, the quality of doctoral supervision has significant implications for doctoral program progression, attrition, and completion rates (Halse, 2011; Ives & Rowley 2005; Sadlak 2004). Over the last 15 years, considerable attention has been paid to positioning doctoral supervision as a critical factor in improving the quality of the doctoral experience in Europe, the United States, Australia, New Zealand, and Canada (Allen et al., 2002; European University Association 2008; Green & Usher 2003; Golde & Walker 2006; McCallin & Nayar, 2012; Neumann 2003; Pearson et al., 2008; Walker et al. 2008). During this period, there has also been increased emphasis on exploring different supervisory roles, styles, models, and frameworks (Brew & Peseta, 2009; Lee, 2008; McCallin & Nayar, 2012; Parker-Jenkins, 2018; Vilkinas, 2007). Despite this increased attention on the supervisory process, an underexplored dimension of the supervisory-student relationship is the importance of ongoing 'self-learning' by supervisors that can lead to further mutual and reciprocal learning opportunities (Halse, 2011).

Although most supervisor-supervisee relationships are developed based on a collegial and, sometimes, even a collaborative basis, supervision is a predominantly conceived as a one-way learning process focused on enhancing the doctoral candidate's learning process. Supervision often serves as an extension of the teaching process –albiet an advanced one– where supervisors help doctoral candidates learn through the process of developing and completing their dissertation (Connell, 1985; McCallin & Nayar, 2012; Nulty et al., 2009; Parker, 2009). The supervisors' main roles are to share their experiences and expertise with a student through the process of advising, mentoring, reviewing, critiquing, and enculturation (Määttä, 2012; Pearson & Kayrooz, 2004). Rightly so, the emphasis on supporting the learning of students takes priority over the supervisor's own potential to learn and to reflect on their supervisory experiences in an ongoing way. Little attention has been given in the research literature, however, to both the processes and outcomes of supervisors' own ongoing self-learning processes (Halse, 2011). Therefore, the purpose of the proposed session is to provide a forum and reflective space for participants to individually and collectively explore their own self-learning experiences during the supervisory process in the hopes of heightening the value and importance of this process.

Background

Knowles (1975) defines self-learning as "a process by which individuals take the initiative, with or without the assistance of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, and evaluating learning outcomes" (p. 18). Adapted to the doctoral supervision context, I define self-learning as the informal process of ongoing professional growth experienced by supervisors based on dialogical and mutually-beneficial relationships with dissertation candidates.

Self-learning can be enhanced through the process of reflective practice which can be defined as "learning through and from experience towards gaining new insights of self and practice" (Finlay, 2008, p. 1). This process involves examining one's own assumptions about practice, becoming more self-aware of one's own actions, and being able to

critically evaluate these actions in order to adopt new strategies to improve future practice (Brew & Peseta, 2009; Brew & Peseta, 2004; Finlay, 2008). Various models of reflective practice have been proposed that all have a common focus on the practitioner reflecting on their concrete experiences, drawing out insights and implications from these experiences, and considering what actions and behaviours can be adapted that will lead to further success and professional growth (Brookfield, 1995; Gibbs, 1988; Johns, 2013; Kolb, 1984). In the context of doctoral supervision, applying a model or a process of reflective practice enables a supervisor to adjust their supervisory approach based on their own critical evaluation of past supervisory experiences to better support current and future students in the dissertation development process (Brew & Peseta, 2009; Brew & Peseta, 2004).

Workshop Design

This participatory workshop is designed to help participants increase their awareness of the value of reflecting on their own ongoing professional growth as dissertation supervisors and to help participants surface, articulate, and explore key learning insights that have resulted from their supervisory experience. The workshop will feature a series of individual and collaborative exercises that are supported by the application of various online learning tools. Topics to be explored in the workshop include:

- Conceptualizations and assumptions about self-learning and reflective practice;
- Types and purposes of self-learning;
- Barriers and challenges to making self-learning more intentional and explicit;
- Relevant models and research that informs the process of self-learning; and
- Implications for self-learning specifically related to supervising applied, change-oriented   research projects.

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DOCTORAL EDUCATION: WHY APPLIED AND PROFESSIONAL RESEARCH: SUPERVISOR AND FACULTY MEMBER SUBMISSIONS

12. Artful and Applied? Reflecting on a Doctoral Project About Rural Youth Access to Mental Health Care

JOHN RAE AND JESSICA HOUSTON

The teenage years and early twenties are common times for the onset of mental illness (McGorry and Mei, 2018). These are also times when intervention can be most effective (de Girolamo, 2012), yet in Australia access to intervention is limited (Rickwood et al., 2007), especially in rural areas (Boyd et al., 2008). There is an urgent need for a new approach (Segal, 2018).

Presented will be an arts-based doctoral project, utilising documentary film making, that aims to generate novel solutions for improving rural youth access to mental health care. While the goal of this project might align well with that of applied research, its arts-based focus does make this alignment uncommon. By drawing on Gaber's (2012) four points of differentiation between applied and basic research — purpose, context, validity and methods — we will discuss this and use our project to argue that there are in fact ways in which arts-based research can work with applied research, and certainly with the spirit of applied research. First, the purpose of our arts-based project is to create better solutions (Gaber, 2012), the same as for applied research. Second, like applied research, this research has a 'point of origin at which the project begins' (Gaber, 2012), or a specific context. For us, that point of origin represents a very pressing need, and one that is associated with media reports like: 'lives being wasted' (The Guardian, 2021). Third, because this project involves the creation of a documentary film, it lends itself to knowledge translation, if not transformation, and while different from Gaber's (2012) emphasis on generalisability, it fits nicely with the ethos of applied research and the desire to create positive change. A more challenging link between arts-based and applied research is that arts-based research does not use methods like multiple data sets or triangulation (Gaber, 2012). Instead, the emphasis is on authenticity and trustworthiness (Amin, Nørgaard, et al., 2020), and on the generation of much-needed novel ideas, which may be reasonable alternatives.

It is useful to also highlight some challenges of arts-based doctoral supervision more generally, such as the tension between becoming doctoral, responding to a bigger picture, and being creative. There is little doubt that creativity is evident in most research projects in terms of problem-solving and insight, or what Glăveanu (2018) refers to as 'functional creativity'. In arts-based research, though, we are referring to creativity characterised by divergence and spontaneity that is grounded in the ideals of Romanticism (Glăveanu, 2018). How to achieve this in arts-based doctoral supervision alongside the other, often competing, elements of doctoral study? To answer this question, we will draw on Shaw and Holbrook's (2018) 'four-quadrant model' and discuss its use in informing a more holistic, integrated doctoral supervision.

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13. It's Not About a Gap in the Literature: Distinctive Strengths and Demands of Practice-Oriented Doctoral Education

MARILYN TAYLOR

Over nearly a decade of teaching in the Doctor of Social Science program at Royal Roads University (RRU), I have observed the enormous strengths of practice research as well as its distinctive demands in achieving quality and integrity.

Practice Research—Why Now?

There are now trends driving social research beyond academe into the wider world in what Smets et al., (2017) call a "practice turn". Gibbons (2000) and his colleagues attribute this trend to broad societal changes (e.g. uncertainty, complexity, self-organization) that call for "knowledge [to be] produced in the context of application involving a much broader range of perspectives" and "transdisciplinary...and more socially accountable and reflexive" (pp. 159, 160) social inquiry. Related to this, complexity science challenges "universal value of reductionist explanation" (Byrne & Callaghan, 2014, p. 57) as adequate to account for "social emergence and the capacities of human agency" (p. 9). These themes underscore the significance of "context" as a critical element in knowledge creation that generates relevant action (Gibbons, 2000; Flyvbjerg, 2001). Accelerating this, of course, is the urgency to resolve global problems that threaten the planet which are inherently social (Homer-Dixon, 2020).

Strengths of Doctoral Education for Practice Research

Cultivation of Student/Graduate Continuing Research Commitment

Conventional doctoral research (Ph.D.) has been seen primarily as training and demonstration of skills—research, documentation, and communication (Isaac et al., 1992). In conventional programs students are expected to begin by finding a gap in the discipline's literature and/or to focus on a research project associated with the supervisor's research agenda. In applied social science doctoral education with practice related admission requirements, mid-career students arrive with a compelling interest in a social research problem that they have experienced the need to address. In nearly a decade of teaching, I have rarely observed a complete change in research theme. Instead, students deepen their understanding of, and commitment to, their research focus. For many, the dissertation research becomes the first step in an ongoing program of research and practice.

Enrichment of the University and its Faculty in Practitioner Knowledge

In carrying their research theme throughout the course work, students educate those of us who teach and supervise

dissertation research about their worlds of practice. Assignments typically involve situating course material in relation to students' research themes which, in reading their work, we must understand. As we, the faculty, expand our understanding of the wider world, the University is linked through its faculty to the world it serves. This 'virtuous circle' advances our capabilities, individually and institutionally, to foster the future connections between research and practice.

Demands of Doctoral Education Oriented to Practice Research

Recognition and Respect for Diverse Social Science Research Traditions

When practical benefit becomes a focus, the range of relevant methodological possibilities often transcends any one given research tradition. The practice researcher balances two commitments—first, the specific practical benefit(s) envisioned, and second, the selection and capable application of relevant social science methodology(ies). Knowledge of a methodological range and their respective strengths and limitations becomes critical. Further, an understanding of their different formative intellectual origins expands the practice researcher's capabilities to make judicious choices and to establish optimally helpful partnerships with other researchers.

Comprehensive Practice Researcher Reflexivity

The importance of epistemic and methodological reflexivity, that is, making explicit one's views, values and research practices that influence research decisions and, in turn shape the research outcomes that emerge in the second half of the 20th century in social science (Alvesson et al., 2008). In practice research, however, further 'layers' of reflexivity and researcher positionality include attention to the political and ethical dimensions generated by the integration of formal research and research partners in a context of practice (Freshwater, 2001).

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14. Ethics of Witnessing: Method as Intervention

NERGIS CANEFE

This paper provides a critical discussion on ethics of witnessing as a form of responsibility in relation to doing scholarly work in areas concerning human vulnerabilities, historical injustices, dispossessed populations, marginalized groups, mass political crimes and structural violence. It is my conviction that scholarly work has to be more aggressively engaged with socially embedded and politically potent processes of violence, injustice and dispossession. In this quest, a critical approach to scholarship as witnessing lends a particularly sharp tool for developing an accurate understanding of both the structural causes and the consequences of the phenomena under investigation.

Approaches including critical ethnography, radical ethics of care, action research and methods of relational comparison already provide ample tools for reconfiguring research methodologies. Methodologies discussed in this site further encourage a grounded approach to social, moral and political problems at large and they invite the scholar/researcher to focus directly on structural reasons for historical injustices and rely on the idea of a relational self. In this context, 'witnessing' is defined as a profound form of ethical engagement and embodies a marked form of responsibility resting on the shoulders of the researcher/scholar/student.

Critical Scholarship as Praxis

The concept of ethics of witnessing as a form of responsibility, and its practice as a method amounts to the kinds of interventions essential for undertaking critical scholarly work.[1] An in-depth knowledge of consequential aspects of research practices could lead to a deeper and more engaged understanding of how to address societal and global inequalities. This approach to scholarly research requires us to rethink the practice of academic work in tandem with the needs of the community and the society at large, and the complex web of relationships between the two. As such, one takes a deliberate stance against reigning patterns marking the existing social and political order as well as against systemic violence that serves to reinforce established practices of dominance at the expense of the needs of society and in particular, vulnerable groups and individuals.

In this context, it is essential that we regard critical scholarship as a form of *praxis*.[2] Marxian notion of praxis refers to the relationship between theory and practice and dictates a dialectical understanding of social and historical change. Presenting a perspective towards scholarship based on the will to transcend the theory-practice dichotomy is the first step towards establishing a methodology for praxis-oriented knowledge production.

This is the specific context within which I explore *ethics of witnessing* as a method that would allow students/researchers to directly address social and political realities concerning the intersection of class, political subjectivity and *gender*. Subjects such as: excluded and vulnerable groups seeking representation in front of the state and its bureaucracies; and groups effected by constitutional or special decree measures that adversely affect their rights and freedoms, including freedom of assembly, freedom of movement, the right to life, freedom from detention, the right to environment, right to justice and other such basic rights claims, each have dimensions directly related to historical injustices.

Through engagement with this new kind praxis-oriented scholarship, students are invited to practice taking ownership of their insights, problem assessment, and problem-solving skills as they relate to urgent social and political issues on the ground. If achieved, emergent forms of scholarship could be systemically contextualized in terms of increased awareness of the socio-economic and socio-political milieu within which the scholar/researcher operates.[3]

[1] I am indebted to Obiora Okafor and his analysis of TWAIL (Third World Approaches to International Law) as both theory and method in my formulation of ethics of witnessing as both method and intervention. See Obiora Chinedu Okafor, "Critical Third World approaches to international law (TWAIL): theory, methodology, or both?."*International Community Law Review* 10, no. 4 (2008): 371-378.

[2] For a directly applicable theoretization of critical scholarship as praxis in the area of race theory, see Chandra L. Ford and Collins O. Airhihenbuwa. "Critical race theory, race equity, and public health: toward antiracism praxis." *American journal of public health* 100, no. S1 (2010): S30-S35. The authors argue that critical race theory provides fertile grounds for developing a transdisciplinary methodology that grounds scholarly analysis in a transformative vision of social injustice.I make a similar argument in the context of feminist work on forced migration emanating from the Global South though the methodology I propose is a direct engagement with ethics of witnessing.

[3] According to Charles Kurzman and Lynn Owens (2002), there are at least three broad trends that define the role of the scholar/intellectual in the society: the Dreyfusards and "new class" theorists including Pierre Bourdieu treat scholars/intellectuals as potentially a class-in- themselves; Antonio Gramsci, Michel Foucault, and in general theorists of "authenticity" treat scholars/intellectuals as representatives of their group of origin and thus class-bound; finally Karl Mannheim, Edward Shils, and Randall Collins treat intellectuals as relatively classless and able to transcend their group of origin to pursue their own ideals as well as articulate new ideals for the society at large. In this work, I take side with the last of these three categorizations.

EQUITY, DIVERSITY AND INCLUSION APPLIED RESEARCH: DOCTORAL STUDENT SUBMISSIONS

15. Picturing a New Life: An Arts-Based Inquiry Into the Lived Experiences of Tibetan Women who Resettled in Ottawa, Canada

ELIZA C. VON BAEYER

Abstract

This descriptive, qualitative, arts-based research study explored the lived experiences of some Tibetan women who resettled in Canada with the Tibetan Resettlement Project Ottawa (TRPO) between 2013 and 2017. The researcher was involved with the women through the TRPO and as a guest at Tibetan festivities and get-togethers before this dissertation research began. By using post-colonial research methods, with an arts-based methodology, greater equity and agency for the Tibetan women (the knowledge holders) was created. As well, a safe space was created where expertise made way for diversity, inclusion, and dialogic knowledge creation. This was especially important because the Tibetan women were new to academic research and were not native speakers of English. Therefore, the study methodology and methods were purposely chosen because they were not written or oral language based.

The arts-based methodology included visual ethnography and was accompanied by a modified photovoice activity based on the work of Wang and Burris (1994, 1997). However, rather than group discussions about the photographs the knowledge holders took for a seven-day period, a 60-minute open-ended interview was used. Eight of a possible fourteen Tibetan women shared their lived experiences of resettlement. The global pandemic started just after the pilot study, which required using an online communications platform to upload data and to conduct the interviews via video-call.

16. Reclaiming Citizenship: Geographies of Resistance of Muslim Women in Aligarh, India

WAJIHA MEHDI

Abstract

There is a global trend and rise in the politics of dehumanization, fear and division. When Donald Trump imposed the travel ban, it was an unrelenting attack on Muslims. The rhetoric of the ban is manifesting against Muslims in India in the form of rising communal riots, mob lynchings, detention centers and finally structured erosion of the formal concept of citizenship through the passing of Citizenship Amendment Act in 2019. Hindu nationalism is a majoritarian political ideology that evokes a Hindu identity, in opposition to the threatening Muslim, and believes that India belongs to Hindus. On the verge of statelessness, protest sit-ins led by Muslim women in Shaheen Bagh (Delhi) led to a wave of country-wide protests, especially sit-ins led by Muslim women across the country in December 2019. In this context, this study intends to examine everyday strategies that Muslim women employ to resist violent geographies and reclaim citizenship by accessing Aligarh city in India as the intersection of Hindu nationalism, Muslim Identity formations and communal structuring of the city. Aligarh is famously known as 'mini-Pakistan' with Aligarh Muslim University (AMU) seen by Hindu nationalists as a center for both national infidelity and Muslim nationalism. Aligarh is also one of the cities highly prone to communal violence in India. Despite these trends' strong correlation, Muslim women's spatial experiences in Aligarh remain under researched.

17. A Minority, Black Employee's Perspective on the Unspoken Racism in Alberta Health Services

NATHAN BANDA

Abstract

Black professionals face racism and discrimination despite the professed multiculturalism and tolerance in the Canadian Healthcare workplace. The purpose of this paper is to analyze the realities of workplace racism in healthcare settings through introspections and observable situations between 2009 and 2020 in Drumheller, Alberta. While we pride ourselves that we have a healthcare setting and a system that is tolerant and multicultural, racism remains a thorn in the healthcare workplace. By chronicling my lived experiences as a black professional, the realities of racism are brought to reality. Dealing with racism requires a collaborative effort between members of the racialized professionals and the privileged professionals as allies. Rather than accepting workplace racism and discrimination, these lived experiences can be a catalyst to a conversation on how to ensure a workplace is not only diverse but inclusive. I conclude by noting that steps in the fight against racism must include both personal and organizational ones.

Keywords: intentional conversations, introspections, discrimination, black professionals, career advancement, privileged professionals

18. Violation of Rights or Rites? A Literature Review Exploring the Reasoning Behind FGM's Continued Practice [full paper]

BOLUWAJI ADEWALE-OLANIRU

Abstract

This review looks at Western and African literature to identify the most common assumptions, myths, and truths behind why female genital mutilation (FGM) continues amongst practicing communities. This paper also explores how social norm practices contribute to the continuation of this traditional practice.

Keywords: female genital mutilation, traditional practices, social norms, cultural practices

Introduction

Female genital mutilation/cutting (FGM/C) is a cultural tradition practiced within 29 East African and West African countries. While there is no exact date recorded of when this practice first began, all research shows that it has been an ongoing practice for thousands of years. This cultural ritual is practiced on young girls between the ages of infancy to 15 years. According to the World Health Organization (WHO) (2008), 100 to 140 million girls and women around the world have undergone this procedure which involves the removal of the female genitals, specifically the clitoris. As a result of this procedure, many women have suffered emotional, physical, and psychological long-term and short-term negative effects. Low self-esteem, reproductive difficulties, sexual challenges, sickness, disease, and ultimately death in some cases are outcomes of the FGM/C procedure (WHO, 2008).

The reasoning behind this cultural practice stems from religion, cultural rites of passage, and social norms. For many, FGM is a generational practice that has been passed on; for others, it is a new phenomenon that demands further explanation as to why it is a continued practice. Many international organizations such as the United Nations, Save the Children, and UNICEF have made it their mission to stop FGM in countries where it is still an ongoing practice. FGM is a global problem that affects the lives of girls and women, young and old. Advocacy and protests in support of child protection rights, women's health, and human rights have been made in an effort to encourage the abandonment of the FGM practice. However, despite all the laws, policies, protests, deaths, and punishments directed toward discontinuing the practice, it continues in many countries.

This literature review explores several qualitative research journal articles and theoretical frameworks in an attempt to understand how changes in social norms, behaviours, and attitudes contribute to the continuation/discontinuation of FMG practice. An attempt is made to provide a clearer understanding of the proposed research topic and to investigate the literature reports about FGM. This literature review explores the deeply-rooted question of why FGM is a continued practice. Many of the studies that have been conducted thus far have focused on the female perspective of FGM, the after-effects of the procedure, and the rationale for discontinuing the practice. However, little research has focused on how changes in social norms affect the ongoing practice of FGM.

The following research question and corresponding sub-questions guide an exploration and examination of the literature surrounding this topic:

Research Question

What roles do social norms play in the ongoing practice of FGM?

Two sub-questions:

1. How does gender play a role in the decision-making surrounding FGM?
2. What roles do community leaders play in continuing/discontinuing the practice of FGM?

Literature Review

The researchers referenced in this literature review are from both Western and African societies. The range of perspectives from various regions of the world gives this literature review a well-rounded approach toward the myths, misconceptions, and assumptions surrounding FGM. Attitudes and cultural social norms which play a role in the prevalence of FGM can be classified into four main categories: hygienic and aesthetic, psychosexual, spiritual/religious, and socio- cultural (Le Charles, 2016, p. 104). Based on their surroundings and environment, FGM participants in certain practicing communities agree to the continuation of the practice (UNICEF, 2010, p. 5). To erase or to force abandonment of FGM may be difficult because many FGM supporters are firm believers in the benefits and rights of the practice. Since FGM is socially accepted within certain communities, it is possible that FGM supporters would not change their attitudes because they simply see no fault in the practice (Shweder, 2000). For some, FGM may also be seen as inherently protective or necessary for full female development. In contrast, those who condemn this practice are usually from external communities and thus do not hold the position of decision-maker in participating communities (Ahmed, Al Hebshi, & Nylund, 2009).

Literature shows that FGM actually plays an important role in the cultural identity and religion of women in certain communities. According to Shweder (2000), "most African women do not think about circumcision in human-rights terms. Women who endorse female circumcision typically argue that it is an important part of their cultural heritage or their religion" (p. 217). One study reports, "...Of the women who were circumcised, 96 percent said they had circumcised or would circumcise their daughters" (Shweder, 200, p. 217). From a Western stance, FGM is a dangerous and harmful procedure that mothers would not want their daughters to undergo; however, based on evidence from the literature, most women who have undergone the procedure would want the procedure carried out on their own daughters (Babatunde, 2017, p. 17). Literature also shows that uncircumcised women are often banished from the community or not allowed to marry. Moges (2009) points out "the close relation between marriage and FGM... [where] uncircumcised tribe members cannot marry and are ostracized by the community and tribe" (p. 4).

Research also shows how women who undergo FGM actually see it as a way to become more feminine. The removal of the clitoris brings a sense of womanhood and separates women from their male counterparts, an outcome which some women claim feels liberating. According to Shweder (2000), from the female perspective, FGM represents the full female identity, power, marriage, and motherhood. Many people are unaware of the strong cultural stance of women who appreciate FGM's representation of empowerment and feminism. This opposes the more popular cultural feminist approach of anti-FGM for its disempowerment of women. Less popular are the studies that show how some women embrace the cultural practice. Some women believe that if the procedure is performed hygienically and correctly in a safe medical environment, FGM can actually be an uplifting practice (Ahmed, Al Hebshi, & Nylund, 2009). Shweder (2000) explains that FGM is supported and celebrated by those who undergo the cultural practice; furthermore, FGM should not be abandoned because it is seen as wrong in the eyes of those who do not understand the practice. However, the support of this notion is not widespread.

Arguably, the Western lens will view a cultural practice as wrong and expect it to change and fit their criteria of what is right. This view is evident by the protests, campaigns, laws, and policies in Western countries for the abandonment of FGM practice. In contrast, the literature shows that in some communities FGM is an eagerly anticipated rite of passage for girls entering womanhood. According to Shweder (2000), adolescent girls look forward to celebrating this cultural rite of passage with family. Many people are unaware of FGM's significance as a young girl's rite of passage.

Practitioners of FGM are commonly viewed as an uneducated, oppressed group of women practicing a dangerous nonmedical cultural procedure (Blanco et al., 2013). Many critics wonder how women can continue this practice. According to Shweder (2000), the practice is controlled, performed, upheld, and supported by women, while men have very little to do with the decision-making surrounding FGM. Women are the cultural experts. According to Ahmed et al. (2009), "...decisions about FGM/C continue to be in the hands of grandmothers and mothers" (p. 22). A misconception of FGM is that women are victims of a violent act, yet in this case the women are both the oppressed and oppressors.

The process of adapting to a new culture is another common theme in the literature as this experience plays a role in the attitudes toward FGM. The literature also shows that geography may have an impact on social norm changes (Blanco et al., 2013). According to Johnsdotter (2008), the distance between where people live and their country of origin can contribute to their shift in attitudes. This effect occurs because one's sense of belonging to the new society has a significant role in one's adaptation of new customs and also in the shedding of traditional customs (2008). The farther away people live from their country of origin, the less likely they are to continue certain behaviours and customs. The farther away people live from their country of origin, the easier it is to resist the pressures of behaving according to expectations established by the culture of origin. For example, if the diaspora is far from their original community, it is easier for members of the diaspora to resist the pressure of continuing certain practices. As well, one's sense of belonging to the new society plays a significant role in one's adaptation of new customs (Blanco et al., 2013). As reported by Johnsdotter (2008), "In Canada, African immigrants explained that distance from families and acculturation to Canada caused them to change views on FGM" (p. 118). Removing oneself from a familiar environment and adapting to another environment can impact one's view of a particular cultural practice.

This shift in attitude toward FGM has been exemplified by Eritrean and Ethiopian people living in Sweden, many of whom recalled that the practice of FGM was left behind upon their arrival to Sweden (Johnsdotter, 2008). These immigrants rationalized that their children who were born in Sweden were Swedish and would thereby follow the Swedish customs and rules. In fact, parents actually worried that members of the older generation in their home countries would try to circumcise their Swedish daughters. It is interesting to note that those who had previously supported FGM were now against FGM and had rejected the practice. They claimed that being Swedish was an important part of their identity and self-image; therefore, their identification with their country of settlement had formed the foundation of their rejection toward FGM. However, Somali Swedes still retained some positive cultural aspects of FGM (Johnsdotter, 2008). According to Morgan and Pearson (2017), if your new host country has a different way of expressing or celebrating a rite of passage, then you often tend to shift your views and adapt new cultural practices. Yet despite these trends, the Nigerian diaspora has not abandoned FGM. Could it be the tight-knit nature of the Southwestern Nigerian community that makes it so difficult for these communities to leave behind old traditions?

Contemporary literature tends to link FGM to religion, claiming that Muslim women undergo FGM out of religious obligation (Ostrom, 2014). According to Gele et al. (2012), the religious aspect plays the strongest role in the attitudes toward FGM. However, studies have shown that there is no direct link between FGM and religion, specifically Islam (Ahmed, Al Hebshi, & Nylund, 2009). There is no written statement in the Quran that women must undergo FGM. In fact, the Quran only states that one should be clean and purified, especially during prayers. According to the Quran, "truly God loves those who turn unto him in repentance and loves those who purify themselves" (2:222). Although FGM is not specifically addressed in the Quran, it is perceived as an Islamic requirement. Moreover, those who practice FGM have shown themselves to be very religious. In Muslim context the practice of FGM may symbolize a way to maintain purity. However, this connection between purity and FGM may be a misconception because there is no direct link between them. Therefore, this idea of de-linking religion from FGM could play a role in whether the practice is continued or not. Some Muslim men, convinced by the opinions of religious scholars and sheikhs de-linking FGM and religion, have come to agree that there are no religious grounds to continue the practice of FGM (Mackie & Moneti, 2014).

Studies in the literature relevant to the context of this project focus on topics of child safety, women's health, human rights, freedom to practice cultural traditions, attitudes, and cultural social norms. Child safety plays a vital role in FGM as many participants who involuntarily undergo this procedure are young female infants as young as two weeks old. These procedures are often practiced in unsanitary environments by untrained health professionals with little to no knowledge of anaesthesia or recovery aftercare. Therefore, female infants are placed in precarious positions where they are at risk for complications, infections, pain, and ultimately death resulting from excessive loss of blood.

According to Gage (2015), anti-FGM legislation has the ability to change attitudes toward FGM (p. 11). Studies have shown that strong law enforcement at the governmental level can influence the attitudes and behaviours of those who practice FGM. Once the legal consequences are stated at the governmental level, people may become more apprehensive about committing or undergoing such procedures. Although anti-legislation could change attitudes toward FGM, results from the literature suggest that legislation is not enough. According to Dalal et al. (2015), legislation must be incorporated with education to create adequate awareness among these communities that continue to practice FGM (p. 166).

According to Blanco et al. (2013), issues of female genital mutilation/cutting (FGM/C) are usually discussed secretly or only among women in the communities where these practices are deeply rooted. More often than not, the perspectives of men are not acknowledged. Even though the issue mainly concerns women, men could be influential in the continuation or discontinuation of this practice. In fact, this study concludes that men do play a significant role in the abandonment of FGM/C. In order to properly explore this gender gap in the research, a transversal descriptive study was designed to examine Gambian men's knowledge and attitudes toward FGM/C along with related practices in their family/household (Blanco et al., 2013). The results showed that ethnic identity was the leading factor in shaping how men understand and value FGM/C. Many supporters of the continuation of FGM/C belong to traditionally practicing ethnic groups. Many men in this study would encourage the continuation of FGM/C for their daughters, although it was revealed that these men had low involvement in the decision-making process with very few making the final decision (Blanco et al., 2013). According to the authors,

> ...in a recent study conducted in The Gambia with health care professionals, it was discovered that FGM/C found higher support among men. While women would give more strength to the deep cultural roots of the tradition, men seemed privilege to a moral perspective, prioritizing the fact that the practice is mandatory by religion and attenuates women's sexual feelings, contributing to family honour. (Blanco et al., 2013, p. 2)

Very few men in this study were aware of the health consequences of FGM/C, but those who understood the harmful effects of the procedure were willing to encourage its discontinuation (Blanco et al., 2013, p. 10). This study takes an interesting look at how social norms play a role in FGM to the point where men are unaware or ignorant of the long- and short-term effects of FGM.

Education, which is another theme in the literature, has been identified as a way to eradicate the practice of FGM. Female empowerment often becomes effective when focusing on the improvement of women's education and literacy. According to Gage (2015), education provides additional knowledge of "what is labelled as 'modernity'. This involves new social, economic and political institutions, but also a new way of thinking. Modernity entails rationalization and reflexivity, the idea that society is malleable and that people control their own fate" (p. 11). Although this statement may be valid, other elements are needed to eliminate FGM. According to Briggs (2002), information, education, and communication (IEC) are necessary ingredients in the gradual enlightenment of a traditional society; moreover, it is important to be cognizant that a change in culture may sometimes be very slow or sometimes rapid as a result of social events or contact with other cultures (p. 51).

According to the results of a study by Sakeah et al. (2006), Somali men who did not go to school or who only finished primary school were most likely to prefer marrying circumcised women as opposed to the marital preferences of men who had attended secondary school or higher (pp. 41-42). The research also revealed that religion and ethnicity play a vital role in forming the reasons why men prefer to marry circumcised women. For example, Muslim men were more likely than Christian men to marry circumcised women (p. 45). In the results section of this study, the discussion of a number of policy implications led to suggestions for further research.

Allowing FGM participants to narrate their own experiences and comparing the narratives of subgroups can aid

in forming an understanding of why there is a continuation of FGM. According to a study by Berggren et al. (2006), both genders mentioned the silent culture between the sexes as the major obstacle for change in FGM practices (p. 34). This study focused on the respective perspectives of Sudanese women and men on their experiences of female genital cutting (FGC) with emphasis on reinfibulation (RI) following delivery (p. 25). The results revealed that each gender blamed the other for the continuation of the practice; furthermore, both men and women were viewed by the researchers as victims of the consequences of FGC and RI (p. 27).

According to Lien and Schultz (2013), FGM is also a concern for female children. Yet many of the children who undergo these procedures are not very clear on what is happening or why it is happening. They may not be given time to reflect. This study used qualitative research to examine how women involved in FGM understand what has happened and why this procedure was done to them when they were younger. In-depth interviews were conducted amongst 18 women of Somali and Gambian backgrounds in Norway. These women were asked about their FGM experience. The purpose of this analysis was to learn about the knowledge that was used by these women in their meaning-making process. Two different strategies were used to ultimately achieve the same educational outcome. One strategy involved giving information, and the other strategy depended upon keeping the practice a ritual secret (Lien & Schultz, 2013, p. 170). It was revealed that while the learning process around FGM was often monitored and guided, this process stopped short of reflective thinking. As a result, most of the knowledge had been internalized and was morally embraced by the women of this study (Lien & Schultz, 2013, p. 171). Most of the analysis was conducted through the use of metaphors and narratives, and many of the stories discussed were anecdotal. Without sufficient time for critical reflection, the authors suggested that behaviour change programs aiming to end FGM should work toward:

> ...understanding these immigrants' previous learning processes and the characteristics of the knowledge they may have internalized. This could in turn assist in the further development of educational programs and help facilitate and differentiate the learning process by identifying and implementing educational stimuli that can promote critical reflective thinking. (p. 173)

Studies have shown that the decision-making behind FGM contributes to the attitudes toward FGM. According to Gage (2015), decisions of FGM are not solely made by the mother, but rather by the family as a whole. Families are likely to consider the surrounding community, as FGM reflects the status of both the daughter and the family as a whole (p. 11). The study by Gage (2015) showed that a mother does not possess enough individual power in these communities to block the decisions which are made, but as a group, women do play a significant role as guardians of traditions (p. 11). Although the women in a community are usually the ones in charge of the decision-making, according to Al-Khulaidi (2013), studies have shown that men also play a vital role in the attitudes toward FGM. For example, a daughter is more likely to receive FGM when her father's attitudes toward FGM are positive (p. 3).

Studies in the literature have also revealed that attitudes toward FGM have been upheld as a traditional rite of passage to adulthood. According to Kaplan (2016), the physical phase of the socializing process moulds the attitudes and beliefs of women, thereby preparing them to be eligible for marriage (p. 104). According to Briggs (2002), FGM has been justified by participants who felt that this ritual forms the basis for socialization into womanhood while curbing female sexual desires. This justification of FGM has also been observed by the findings of other scholars (Helm, 2014; Freymeyer & Johnson, 2007). It seems that women are rewarded for the practice with social recognition and status. Undoubtedly, one of the main factors behind the persistence of FGM is its social significance for females. In most regions where it is practiced, a woman achieves recognition mainly through marriage and childbearing – and men may refuse to marry a woman who has not been circumcised. Therefore, to be uncircumcised is to have no access to status and no voice in these communities (Briggs, 2002, p. 49). As such, FGM is perceived as a requirement for women. According to a study by Dirie and Lindmark (1991), the majority of participants related the circumcision back to their religious beliefs of being clean and pure. According to the literature, uncircumcised women are seen as non-virgins who are both unclean and impure (Johnsdotter, 2008) This view primarily stems from the religious aspects of FGM practice.

Interestingly, according to Leonard (2000), the common concepts behind FGC in relation to traditional, social, or religious norms were not identified as reasons for women wanting to undergo the procedure. Leonard (2000) indicates that the subject of FGC is at an impasse – with absolutists arguing that intervention to stop the procedure is required, and relativists asserting that outsiders have either no right or no ability to impose such change upon others (p. 162). In a

study by Leonard (2000), participants were interested in and willing to put their daughters through the unsafe practicing of FGM. Fifty-two per cent of the participants had been operated on by untrained medical professionals; many had used traditional birth attendants or been operated on at home (pp. 584-585). Leonard (2000) advises that an alternative way to bring a fresh perspective to FGC is to look beyond the current discussion of FGC and past the common norms and approaches (p. 186).

As summarized by Herniund and Duncan (2006), female genital cutting (FGC) has been a topic of interest for researchers, particularly in trying to comprehend why people continue to undergo or perform FGC. Attempting to understand the behavioural changes and attitude shifts toward FGC is vital to establishing initiatives to abandon the practice. The theoretical model approach was used in a study by Herniund and Duncan (2006) to understand the behaviour change of those who changed their mind about the practice. This qualitative study collected data from Senegal and Gambia to examine how the theoretical model approach or stages of change theory could explain why FGC is practiced. The results of the findings show that individual readiness to abandon FGC is viewed as a collective change rather than an individual change due to social pressures from the community. The data showed that the concepts of the stages of change comprise a multifaceted construct that captures behaviour, motivation, and features of the environment in which the decision is being made (p. 57). The stages of change theory can be used to identify both the individual decision-maker's readiness for change as well as the readiness for change at a community level. Further research must be employed in the form of quantitative population research.

According to Dirir et al. (2004), FGM occurs in many different regions around the world. This United Kingdom-based study attempted to examine whether there is a relationship between the age and experience of the arrived immigrants from Somalia and their attitudes toward the continued practice of FGM. The study was conducted in the greater London Area (GLA) and focused on young, single Somali women and men between the ages of 16 and 22. The study used quantitative research, and data was gathered using a cross-sectional survey based on snowball sampling of 80 males and 94 females. The results of this study showed that the abandonment of FGM was associated to living in GLA from a young age; therefore, the authors concluded that such traditions surrounding the reasoning behind FGM had been abandoned. For example, those living in Britain before the age of six were less likely to be circumcised (42%) in comparison to those who had arrived after the age of six (91%) (p. 84). However, groups who remained rigid in their thinking included older generations, males, and new arrivals who were either uninterested in adapting or who refused to adapt to the practices of their new environment. During the in-depth emotional interviews, it was revealed that there is an important connection between FGM and virginity and marriage. Participants also shared that they faced some sexual and health issues as a result of FGM. The study showed that current age and age upon arrival are factors for men who wanted to marry women who were circumcised. Of the males who had first arrived at the age of 11 and older, 50% wanted circumcised wives compared to those who had arrived at a younger age. This study revealed that 18% of female participants and 43% of male participants intended to circumcise their daughters. Females were less likely than men to agree with the common notion of sexuality and religion that underpins the practice. Many of the participants also explained that their parents' reasons behind FGM were more traditional than their own thoughts and views.

Conclusion

FGM is a broad, sensitive topic that generates a wide range of discourse. Considerable research has been conducted to explore various aspects of this phenomenon. Studies in the literature explore how human behaviour and social norms are accepted through the lenses of culture and tradition and religion. FGM is a prime example of how cultures and traditions play a significant role in decision-making, attitude, and behaviour. It is vital to try and understand why FGM continues to be an accepted practice regardless of the academic and popular culture studies which have commonly reported the disadvantages and negative consequences of FGM. To this end, it is important to note that most studies have been conducted through a Western lens. The viewpoint of FGM must be studied through the African lens especially

because that continent had the highest FGM rate. This approach is the most effective way to understand the ongoing practice in relation to changes in social norms.

According to Arias (2016), there are five different types of social norms: social, behavioural, personal attitude, moral, and legal. Social norms are widely held beliefs about what is typical and appropriate in a reference group. Social norms may or may not be based on accurate beliefs about the attitudes and behaviours of others (Arias, 2016). Behavioural norms are what someone actually does, whereas social norms are beliefs about what other people do and what other people think should be done (p. 11). Personal attitude norms are unlikely to direct behaviour for the majority of people in a reference group when these attitudes are contradicted by social expectations (p. 12). Moral norms, which tend to be more motivated by conscience than by social expectations, are related to deeply-held values rather than a matter of judgement or taste associated with personal attitudes (p. 12). Finally, legal norms are formal rules of the game, commanded by the state and enforced through coercion (p. 12). In order to tackle harmful social norms, interventions need to create new shared beliefs within an individual's reference group which in turn will change expectations around behaviour (Arias, 2016).

There are implications for working with diaspora communities such as the Somali community in Toronto. For example, if some study participants wanted their daughters to undergo the procedure either illegally in Canada or by sending their daughters to Somalia, then there is no way I could stop my participants from making this choice. Furthermore, based on confidentiality contracts, I could not report any cases to social services or greater authorities. As another challenge, it is possible that when participants are revealing their stories or being interviewed, some concerns may arise or alarming information may come to light which I may be uncomfortable with; however, due to the confidentiality contract I will not be in a position to become involved.

Why should this paper be considered applied research?

This paper uncovers why female genital mutilation (FGM) is a continued practice. This investigation into a real-world problem aims to solve, eliminate, or reduce the amount of child abuse and gender-based violence inflicted through FGM in certain communities around the world. Knowledge and information are presented with the intention to not only keep the discourse of FGM going but to also educate those who are unaware of the harmful short-term and long-term emotional, physical, and psychological effects of this traditional practice. While numerous studies and advocacy initiatives have strived to eliminate this practice, research shows that FGM is still a major problem in many of these practicing communities in Africa, South Asia, Asia, and Europe. This applied research can assist with existing research surrounding FGM to find new solutions to eliminate the continued practice of FGM.

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19. Youth Struggles for Political Power Change Amidst Police Brutality in Uganda: Lessons for Future Youth [full paper]

DOROTHY MASSA

Abstract

On a global scale, the youth continue to be perceived as key actors in the political struggles of nations. However, their participation is still undermined by social, economic, and political factors. This article, therefore, reviews the youth's struggles for political change amidst police brutality in Uganda. The youth have engaged in various platforms and channels to demand for political change in Uganda including protests and riots, music, social media, as well as the creation of political campaigns, activism and movements. But, the youth's political struggles have come at a cost. The youth have been brutalized by police to the extent that some have lost lives, while others have been heavily injured, arrested, and/or detained in designated and unknown government custody. Despite the fact that the public may perceive police brutality in Uganda as mere beating on streets, it is far beyond this; some youth have lost breast nipples, nails have been plucked out, and others have lost genitals as a result of torture in police custody. Despite the gruesome police brutality, the youth have continued to struggle for their political rights and to demand for political transformation in Uganda after 35 years of president Museveni's rule. With the persistence of the excessive use of force by police against the youth, and the youth recently becoming more vocal about their political stances, it is still too early to conclude that the youth's efforts will create any political change in Uganda in time for the 2026 general elections. By and large, the youth's political struggle should not be contested in any way; instead, government should enhance the youth's civic education to enable them to participate in meaningful politics in Uganda.

Introduction

Uganda is considered to have the youngest population in the world, with more than 75% of the total population being below the age of 30 (Mofat and Bennet, 2021; Ford, 2019). While the term youth is widely documented and defined in the literature, there is no agreed and unified global definition of youth. Therefore, this article adopts the definition provided by the 1995 Constitution of the Republic of Uganda (hereinafter the Constitution). According to the Constitution, a youth is a person between the age of 18 and 35, meaning that about 23% of Uganda's total population (which is 46 million) is categorized as youthful (The State of Uganda Population Report, 2019). As Magelah and Ntabirweki (2014) reveal, about 400,000 Ugandan youth enter the labor market annually to compete for approximately 9,000 employment opportunities. With the number of youth entering the labor market being disproportionate to the number of employment opportunities available, youth unemployment is estimated at 13.3% (Daily Monitor, 2021). Youth unemployment has detrimental effects not only to society but to Uganda's economy and the political arena. Against this background of inadequate involvement of young people in Uganda, Uganda's youth have resorted to other means such as politics, to solve the twin problem of unemployment and a regime that they perceive to be plunging the country to lawlessness.

Much as the 2030 Agenda for Sustainable Development recognizes youth as "valuable agents of change", youth's participation in the political discourse and domain is still inadequate (Mengistu, 2016). According to Oroma (2017), the youth are still hampered by limited resources and civic skills to ably participate meaningfully in Uganda's political

processes. The situation is worsened further by the perception that the majority of the world has on the youth. Outlined by Daniella and Casale (2011), the youth continue to be depicted on the negative perspective, as well viewed as frustrated and isolated individuals with limited voices in the political process (McGee and Greenhalf, 2011). Particularly in Uganda, President Museveni has continuously regarded the youth as 'lazy, security threats, and vessels of political violence' (Maganga, 2020). These stereotypes not only demean the youth, but they also undermine their efforts to become better political agents and/or actors. Realistically, without positively and meaningfully engaging the youth in the economic and political domain, the effort and voices will always be undermined.

In the past ten years, the youth in Uganda have essentially been a push factor for political power transition. Despite the youth's efforts, there is limited published work on this topic, especially in Uganda. Therefore, this article is predominantly based on the review of existing information from newspaper and journal articles, within Uganda and around the world. The article is an applied research because it provides lessons that can help the youth become better political agents. The article is structured as follows: the introduction; the legal frameworks governing civil and political participation; police and its mandate; People Power, Our Power Movement (PP-OPM) and youth struggles for power change; an elaboration of police brutality; and finally, a conclusion and lessons for future politics. For the purpose of this paper, police brutality refers to the cruel and violent ill treatment of civilians by the police. In this case, brutality may be in the form of torturous acts such as beating, plucking of nails, hurting of male genitals, extrajudicial killings, and the use of unnecessary force such as teargas, pepper spray, water cannon, rubber bullets, and live ammunitions against protestors.

Legal Frameworks Governing Civil and Political Participation

Globally, the international and regional legal frameworks on human rights are indispensable in the promotion people's rights. Uganda is a signatory to various international and regional frameworks governing civil and political participation. The country ratified the 1948 Universal Declaration of Human Rights (UDHR) in 1986, the 1966 International Covenant on Civil and Political Rights (ICCPR) in 1995 (accession(a)), the Optional protocol to the ICCPR in 1995(a), and finally, the 1985 Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) in 1986(a). In the African continent, Uganda ratified the 1986 African (Banjul) Charter on Human and Peoples' Rights (African Charter) in 1986. Despite the value attributed to the international and regional laws, the usefulness of ratifying the different frameworks is questioned by the general public because the modern regime has consistently breached the laws, and nothing much is being done to hold Uganda accountable for violating them. Arguably, none of the stated laws can transform Uganda's civic and political landscape because the leadership is not sternly held accountable.

Overall, Uganda's political affairs are governed by domestic laws, the main one being the 1995 Constitution of the Republic of Uganda (hereinafter the Constitution). In relation to the youth and politics, article 38 of the Constitution particularly guarantees each Ugandan "the right to participate in the political affairs of government, individually or through representatives in accordance with the law". The Constitution further warranties the "freedom to gather and demonstrate together with others peacefully and unarmed". Generally, the political rights contained in the Constitution align with those outlined in the UDHR, ICCPR and the African Charter to which Uganda is a party. Notwithstanding, despite the existence of the Constitution, so often, issues regarding civil and political rights are determined by those in power, with the Constitution sometimes being altered to favor the interest of those in power.

Another key framework governing specifically civil and political rights is the 2013 Public Management Order (POMA). On the surface, POMA seems to be useful in terms of promoting political rights. However, on implementation, it empowers police to either accept or reject political procession, and has been referenced when violating the political rights of opposition parties (Kagari and Edroma, 2006). From Amnesty International's (2016) point of view, POMA is inconsistent and incompatible with the Constitution's rights of equality and freedom from discrimination (article 21), personal liberty (article 23), respect for human dignity and protection from inhuman treatment (article 24), the right to privacy (article 26), the right to a fair hearing (article 28), and freedom of movement (article 29). The way POMA is

implemented also contradicts article 21 of the ICCPR, article 11 of the African Charter, and article 20 of the UDHR, which state that everyone has a right to peaceful assembly and association. In terms of implementation, POMA usurp all the international legal frameworks that Uganda is a state party to as well as the Constitution.

Generally, POMA has persistently been used by police to limit political assemblies and the youth's political struggles. Such legislation is not new because it existed in the postcolonial era (between 1962 and 1986). The suspension of political activities decree, during Amin's regime (the President of Uganda between 1971 and 1979) permitted police to get away with the abuse of power as long as it was purposely done to maintain public order (Omara, 1987). Like Amin's decree, which suppressed citizen's political views and rights, the POMA has equally repressed the political rights of pressure groups and opposition in Uganda. To the public, POMA is largely perceived as a rubber stamp to any opposition activities which opposes or challenges the regime. Comparable to Amin, President Museveni's political interests are subjected to POMA's existence because the way it is implemented perpetuates police brutality and instills fear among the public; thus, the opposition find it hard to front their political ambitions.

Police Governance and its Mandate

Police is one of the state security organs in Uganda, and it is mandated to maintain internal security within the country. Its autonomy is derived from section 211 of the Constitution: (a) to protect life and property; (b) to preserve law and order; (c) to prevent and detect crime; and (d) to co-operate with the civilian authority and other security organs established under the Constitution. The police mandate is further classified in the Police Act (1994) as amended by the Police (Amendment) Act (2006). Particularly, section 4 of the Police Act gives the police a mandate to protect life and property, preserve law and order, prevent, and detect crime.

Overall, the police is led by an Inspector General of Police (IGP) and a Deputy Inspector General of Police (DIGP). Both the IGP and the DIGP are appointed by the President, with the approval of parliament, as necessitated by article 213 (2) of the Constitution. Although the Constitution can be seen as a strong legal instrument, part of its Achilles heel (which has essentially led to the dismissal of the Constitution and the prioritization of POMA) is the fact that it does not give a limitation as to who can and cannot be appointed. As a result, given the authority granted to him by the Constitution, Museveni (the current President) is appointing army officers to leading positions of the police institutions. While this may seemingly be a strategy by the President to protect the regime's interest, the infiltration of army and the extent of their actions, contradicts with article 212 (a) to protect life and property, (b) keeping law and order, (c) defense and detect crime and finally, to cooperate with the civilian authority. Through the appointment of the army into police work, not only has the President made the police instruments of the state machinery, but he also politicized the police and made the institution liable to the regime.

Evidently, since 2001, Uganda has had a chain of army members leading the police including General Katumba Wamala, who led the police between 2001 and 2005. Although Katumba's reign was decent in terms of its defense of the political rights of the citizens, he established a security agency within the police commonly referred to as 'Operation Wembley' to crack down criminals which cost people's lives and promoted torture. Later, General Edward Kale Kayihura succeeded Katumba from 2005 to 2018. Kale is remembered for leading a brutal police force that was and still is loyal to President Museveni. Kale's reign unveiled substantial police brutality including murders, extortions, and kidnappings (Oxford Analytica, 2017). His reign completely displayed a lack of patriotism and professionalism as stipulated in article 211(3) of the Constitution. However, following the public outcry of high-level brutality, Museveni replaced Kale with Martin Okoth Ochola, a career police officer, to take on the IGP position. Whereas Ochola was appointed to disguise the misrepresentation of military in police, throughout his reign, Ochola has been and continues to be deputized by senior army officers including Major General Stephen Muzeeyi Sabiti (2018 and 2020) and Major General Paul Lokech (2021 to date), who were also appointed by the President. Since the integration of army into police in 2001, policing strategies in Uganda have been critiqued for being extremely brutal to the extent that the institution has lost public trust.

Not only has President Museveni militarized the police by appointing army generals to lead it, he has created a chain of

security groups and military organization governed under the national army known as the Uganda People Defense Force (UPDF) to further enhance his political autocracy. Some of these security groups include: the Special Forces Command, the Local Defense Unit, the Chieftaincy of Military Intelligence, the Internal Security Organization, the External Security Organization, the Joint Intelligence Committee, and Political Intelligence Network (Muhereza and Kwesiga, 2020).With these sects of security interfering with police functions, superseding the powers of the police, and concurrently being drawn into the 'the turmoil of Ugandan politics', there has been an increase in police violence by those policing the country.

The use of the army to lead the police is not new; history shows that the army was appointed within police during the colonial rule era (between 1894 and 1962). In other words, from the onset of the British rule in Uganda, the police were not a standalone institution but rather an army led body. For example, ex-serviceman John Anthony Beaden served as senior superintendent of police in 1960, and later he became a commanding officer at the Uganda police training school; and Lt Col Bentley Watson James (1946-1949) was appointed by the British as Assistant Commissioner of Police responsible for Buganda (one of the many kingdoms of Uganda). Similar tendencies have been emulated by the post-independence era governments and the current regime. For instance, the very first Inspector General of Police (IGP) in Uganda between 1964 and 1971 was ex-serviceman Lt Col Wilson Erinayo Oryema (Daily Monitor, 2018) who served during Milton Obote's first rule (1962-1971). Clearly, the appointment of the army into police leading positions by President Museveni is not only a tradition from the colonial and post-independence era, but a measure of sustaining and defending the present regime's political interests.

Although Nseroko (1993) argues that it is imperative to decentralize the national police system because it helps create stronger ties to communities, based on Bayley's (1971) argument on police independence, it is impossible to decentralize police that is typically under the governance of army because these are two different security entities with different mandates. Also, the army infiltration into police work implies that the police have to confirm to the President and his subordinates. Supporting Kagari and Edroma's (2006) argument on police neutrality, with the army overseeing police's work in the current regime, the manner in which the army is implementing police work has undermined the underlying principles governing democratic policing. By and large, with the army's presence in police work, the limits between police and army is not unclear, thus this may ruin the police's allegiance, competence and discipline (if it has not already done so).

People Power, Our Power Movement and Youth Political Struggles

As stated earlier under article 38 of the Constitution, citizens have a right to choose among different political parties to engage in Uganda's political space. Although there are many different political parties in Uganda, the renowned ones are the National Resistance Movement (NRM), formally known as the National Resistance Army (NRA), founded in 1986, and led by President Yoweri Kaguta Museveni (Museveni). The NRM has been the ruling party for the past 35 years. Asides from the NRM, there is also the Forum for Democratic Change (FDC) founded in 2004 by Museveni's Aide Colonel. Dr. Kiiza Besigye, and the newly created National Unity Platform (NUP) created in 2019 by youth leader, politician and musician Honorable Robert Kyagulanyi better known as Bobi Wine (hereinafter Wine). Wine also leads the People Power, Our Power Movement (PP-OPM), which is not a political party but a political resistance movement. The PP-OPM was founded in 2017 and according to Ford (2019) "its idea is authenticated in the name itself". NUP emerged from PP-OPM and they both have a similar goal of 'revolutionizing Ugandans' from the alleged 'monopoly and doctorial rule' of Uganda's longest serving President, Museveni. Even though Uganda's Constitution encourages citizens to freely engage in Uganda's political processes, trends have changed of over years. The current ruling government has become monopolistic by way of undermining the opposition's participation.

Efforts to revolutionize Uganda have been underway since 2001, however, these have been marred by police brutality. Nonetheless, the opposition and their supporters, who are mainly the youth, have continued to engage in national political processes. For the past 20 years, the youth have been at the center of Uganda's political movement either

supporting or opposing the ruling government. The youth account for about two-thirds of the 17.2 million registered voters (African report, 2021). Like the FDC which was the very first political threat to President Museveni and gained massive support from the youth between 2011 and 2016, PP-OPM and the NUP continue to gain overwhelming popularity and support both locally and internationally. PP-OPM has a large following and support of urban, poor, rich, unemployed, employed, literate, and illiterate youth. Some of the NUP's supporters are new, but the majority were followers of the FDC and other opposition political parties. Notably, PP- OPM continue to gain momentum because the youth have been looking for a party that could front their political ambition of revolutionizing the country for a long time. The youth's political struggles have not only manifested through political protests and riots, but the youth have utilized various avenues to ensure that their voices are hard including: formation of political movements, political activism physically and on social media, defiance, music, and slogans, purposely pinning the regime's ruthlessness.

To begin with, the youth's struggles are expressed through the formation of political movements such as the PP-OPM. Through the PP-OPM, Wine and his youth supporters composed the song 'Tuliyambala engule mu Uganda empya' meaning 'we shall wear a crown in the new Uganda'. The song came after Wine 's house arrest, however, the message in the song has come at the expense of brutality and banning of Wine's music shows. Regardless of the current regime's attempts to brutalize and rubber stamp Wine's music and political struggles, the PP-OPM has not only unveiled how Uganda is an undemocratic nation, but it has also propelled and empowered the youth to intensify political participation more than ever before. Through the PP-OPM, the youth have won parliamentary seats and other ministerial political position at grass root levels. Thus, in the 2021 elections, NUP garnered about 59 parliamentary seats and became the official opposition group in the forthcoming 11th parliament.

In Uganda slogans such as 'Tukoye' meaning 'We are tired', and 'Mzee Agende' directly translating to the 'Old man should leave', were common at the time of Besigye's election campaigns, the 2009 Kabaka riot, and the recent 2019 protest following Wine's arrest over defying COVID-19 guidelines. A series of protests are deep rooted in citizen's disappointment with the regime and its subordinates. Much as the use of slogans may be underrated by states, slogans have plunged countries into civil unrest. For instance, in Sudan, young Sudanese women were at the center of the uprising with the slogans "just fall that's all!", and "we want a civil state that respects human rights and diversities" (Ahmed, 2019), resulting in a coup d'état that deposed President Omar al-Bashir (Ahmed, 2019; Hassan and Kodouda, 2019).

Furthermore, with the PP-OPM momentum, the youth political struggles are displayed through the formation of political campaigns to sabotage the government's interest to retain power. For instance, the youth have been particularly vocal about their opposition to the amendment of the Constitution to lift the age limit for presidency. In complete objection of the amendment, Wine, alongside other opposition politicians and other young Ugandans, championed the "Togikwatako" campaign meaning 'Do not touch [the Constitution]' (The Independent, 2017). Since 2017, the campaign has attracted the attention of government, the youth both from oppositions and the ruling party, and those in the diaspora. The Togikwatako campaign wielded pressure through riots and protests, and over social media. However, the youth have been met with fierce force by the police and other security forces in civilian clothes. Consequently, hundreds of protestors have been violently arrested and tortured for demonstrating against the plan to amend the Constitution (DW, 2017; The Independent, 2017). Since the launch of the Togikwatako campaign, followers of PP-OPM have been target for police brutality and other forms of harassment such as arrests and detention, killing and kidnapping, and they have become political prisoners. The manner in which government is handling those who are opposing the regime typically signifies greed for power.

In a similar manner, the opposition politicians who supported the 'Togikwatako' campaign clashed with NRM supporters in parliament and were consequently met with force and torture from the Special Force Command (Reuters, 2017). Consequently, opposition politicians succumbed to brutality by the Special Force Command. Despite the struggles following the NRM legislators (who are the majority in parliament) and a court ruling of July 26, 2017, the Constitution was amended by scrapping the age limits. The removal of article 102(b) from the Constitution to pave a way for lifelong presidency left remarkable anger mainly among opposition leaders and their predominantly youth supporters The recent amendment implies that without the age limit, Ugandan's may continue to have life presidents, or further adjustments are likely to surface in favor of those in power (Osiebe, 2020).

Although the youth did not change the NRM legislator's political decision, the youth devised other measures of impeaching the NRM party and individuals who defied their vows of protecting and defending the Constitution. In protest, whoever supported the amendment was not voted for in the 2021 elections, resulting in a reduction of NRM Members of Parliament (MPs) from a total of 447 in 2016 (Inter Parliamentary Union, 2016) to 336 in 2021. A difference of 111 NRM Parliamentary seats signifies a heavy loss not only to the party but also its master (Barigaba, 2021); this is a clear indication of the youth's willpower in Uganda's electoral process. Particularly, in the places where Wine is popularly supported and an area which constitutes the largest number of voters, NRM had a dozen of its ministers (who are simultaneously MPs) replaced by mainly NUP members. This denotes that much as the youth may not have direct power to oust or impeach the regime, they are able to indirectly suppress it powers. According to the Commonwealth youth program, a program which voices youth's perspective across the world, Wine is regarded as 'Uganda's Nelson Mandela' and a 'saint' for change of power.

While the existing political space where youth's voices are meant to be heard is undermined by political threats and brutality, the youth have resorted to music to further increase and strengthen their willpower. This does not only apply to the opposition alone but some young musicians who still support Museveni's ideology such as Iryn Namubiru have engaged in songs that praises the regime such as 'Tubonga nawe' meaning 'We are with you'. However, a vast majority of them are releasing songs that directly pin the current regime for its greediness for power and critique political violence (Aljazeera, 2018). For instance, Wine released 'Dembe' meaning 'freedom', which was specifically against the Constitution amendment, 'Situka' meaning 'arise', and more recently, 'Akatego', a slag that is loosely translated as 'fear', in honor of youth political prisoners in Uganda. Other musicians such as Ronald Mayinja released 'Bunkeke' meaning 'tension'. Eddy Kenzo also released 'System Volongoto' meaning 'A trashy government system'. As Sifiso Ntuli states (in a study by Vershbow (2010)), 'it is easy to understand a message through a song compared to the long political speech'. Principally, music does not solely cause political revolution, rather, it is a channel that steers the public into action.

The youth's struggles have by far led to calling the President out of his name, with him often being referred to as "Bosco Katala". In the local Luganda dialect, Katala means someone who is 'backward', usually from the 'village' (African News, 2018). Additionally, according to African News, Bosco is an acronym for Brutality, Oppression, Selfishness, Corruption, and Oligarchism. Calling the President out of his name forced him to threaten the public with penalties for whoever does it. As if this was not enough, the youth have over time engaged in acts of mockery towards the current regime by painting piglets yellow (the color of the current ruling party) and dumping them at the parliament building as part of the jobless-brotherhood movement (Larok, 2017). While the throwing of the pigs was observed as an abuse by the regime, the opposition applauded the action. With significant and sufficient civic education and resources, the youth have the capacity to cause change.

Evidently, as Ojok and Acol (2017) and Yom (2005) posit, the youth's struggle to end exploitative political power structures through movements and/or campaigns is on the rise. Therefore, the NRM's argument that opposition leaders are not actively supporting the youth because they have only simply applauded the throwing of pigs, carrying TVs to parliament to oppose government policies on digital transition is vetoed. This argument is disapproved by an array of evidence showing that opposition leaders have taken a step further to lead the youth in political protests, campaigns, and movements. For example, the "Walk to Work protest" was initiated and led by the opposition leader Dr. Colonel Kizza Besigye, in April 2011. The protest left the Colonel with injuries due to pepper spray, rubber bullets, and torture while in police custody (Gatsiounis, 2021). In addition, the "Togikwatako" campaign by Wine and other opposition political leaders (discussed earlier in this article) is another clear trend of political leaders' support to youth political struggles in the country.

The use of social media to further increase youth's voices at the same time to pin the government is undebated in Uganda. The use of Twitter and Facebook to challenge the regime (Anguyo, 2021) have recently gained prominence to the extent that the government has repeatedly blocked social media, especially during political riots and elections, and the imposition of social media taxes. Whereas the youth's efforts have supposedly been sabotaged by government, particularly through the social media taxes, the youth have turned to Virtual Private Network (VPN) to bypass government taxes. As illustrated by the African Report (2021), the youth have explicitly and consistently stated that

'no amount of degrading acts will stop [them]'. There is plenty of literature on the impact of social media on political outcome (Dellvigna and Ferrara, 2015), which neither government or opposition and their supporters should ignore.

Durham (2000) precisely argues that youth have a vital role to play in the political arena of countries because they are creative Through political movements, the youth have been involved in freedom or independence struggles, mobilizing and campaigning against the autocratic governments. With good coordination, understanding, and enough resources, it is probable that the youth can exert enormous pressure for a change of government. Literature shows a history of endless examples of how young people have plagued political structures, especially in Africa (Ojok and Acol, 2017), and across the world. These include: Sierra Leone, where the disillusioned and unemployed youth played a great role in establishing the revolutionary united front (Mengistu, 2016); an uprising that led to the burning down of the Gabonese parliament in 2016 (BBC News, 2016); the coup that ousted Blaise Compare's government in Burkina Faso in 2014 (Ojok and Acol, 2017; BBC News, 2014); the 2010 Arab uprising in Tunisia which forced Zine El-Abidine Ben Ali into exile in January 2011 (Yee, 2012); Egypt's uprising in January 2011 that led to the step down of president Hosni Mubarak; and the latest viral and destructive 2021 riot that manifested as a result of Wine arrest in Uganda which upset the government of Museveni. Others have broken out in Chile, Hong Kong, Ukraine, and Serbia to mention a few (Ekaterina et al. 2020). Youth's political value should neither be overlooked or underrated because the youth are supposedly key partners in revolutionary struggles most revolts in Africa.

Police Brutality and Youth Struggle

Uganda's political history holds revolting acts of human rights violations such as extrajudicial killings and torture by burning people with hot metals plastic or tyre just to name a few. The likes of Milton Obote (1966-1971 and 1980-1985), and Idi Amin (1971-1979) left nothing but a legacy of human atrocities. The civil war between Obote and Museveni between 1981 and 1986 was not any better from of the two previous regimes of Obote and Amin. Thousands of people lost lives, with many more being displaced, abducted, arrested, detained and/or running to exile. Although Museveni expressed a high level of democratic supremacy in his early years of power, he was challenged by internal civil upheavals with the worst being that of the Lord Resistance Army (LRA) in Northern Uganda and the Allied Democratic Forces (ADF) in the neighboring Congo. While these have been contained over years, Gooloba (2008) contends that there are many reasons accounting for the persistent events of political unrest in Uganda.

The early years of Museveni's rule in 1986 to the late 1990s exhibited relative peace and tranquility. However, with the restoration of multiparty systems in Uganda through the 2005 referendum (Masengo, 2017), the regime has experienced immense crossing points with the opposition. These encounters have fostered the president to improvise means of protecting his stay in power, thus an increase in security empowerment to foster the regime's protection. That said, with the powers entrusted to security forces such as the police, Uganda has recorded high levels of unpleasant acts like Amin and Obote's regime (Fabricius, 2020). Like Obote's opponents who perceived the police as a state-owned institution (Willetts, 1975), the current regime's opponents and the modern police concede the contemporary police as state governed and conformist to the regime.

Recent opposition presidential contenders and their predominantly youth supporters have nothing to tell but a legacy of police brutality. The regime has empowered the police to protect its political ambitions as opposed to fulfilling its mandate and protecting citizens. As Bertelsmann Stiftung BTI (2020) expounds, the regime has exerted a monopoly on the use of force and exercises full control over the entire territory. Consequently, the youth have been victims of police brutality. However, despite the police violence against the youth, they have persistently continued to demand for political change. With the enormous youth's political zeal, the youth have become key actors that every political party in Uganda would fully rely on to either retain or gain political prominence and/or attain power.

While police brutality in Uganda is not new in the country's history, trends and methods have changed over time. This section covers some of the incidences of police brutality between 2017 and 2021. Vividly, the President has instigated, and justified brutality of the opposition contenders and the youth as discussed in this section. Following the chaos that

erupted in August 2018 in Arua between the opposition supporters of Honorable Kassiano Wadri and the alleged attack of president convoy, Wine and his supporters succumbed to police brutality in form of beating, pepper spray, killing and custody torture (Muhumuza, 2018). Since 2017 (after the Togikwatako campaign) Wine and his youth have been the target of the relentless state harassment and persecution (Fabricius, 2020; The East African, 2020). Repeatedly, Wine and his youth supporters have been beaten (Aljazeera, 2020), and tortured (The Guardian, 2018; BBC News, 2018) to the extent that some have sustained severe injuries and have lost lives (The Independent, 2017; Nangonzi, 2020). Inflicting torture because of people's political right, views or choice breaches not only the Constitution but also the international and regional laws that Uganda is signatory to.

With the alteration of the Constitution and other national political challenges, protests in the past five years of Museveni's reign have been manifested in retaliation to dispute the age limit. Consequently, and unsurprisingly, police has reacted with immense use of force to prevent and disperse protestors (Aljazeera News, 2020; Human Rights Watch, 2018). One key recent case of wild protests by the youth, and the worst of its kind in Uganda, was the protest that erupted after Wine's arrest in November 2020. A massive population of youth stormed the streets demanding for the release of Wine for two days. Although the protestors were peaceful, the police combined with other security forces in civilian and military clothes exerted force on rioters with teargas, water cannons, rubber bullets, batons, sticks, and live bullets (Muhumuza, 2018; Aljazeera, 2018). As a result, 50 civilians lost lives, several sustained wounds, and an unknown number were arrested. Even though section 33 and 34 of the Police Act empower police to stop and disperse processions, section 28 of the same act requires police not to use excessive force.

Lately, there has been immense criticism of police mishandling opposition political assemblies and procession. Far too much force has been used to revolutionary protestors. The conditions under which police addresses riots displays a lot of anger, greed, and a hangover from the previous regimes to meet the regime's needs. As the African Report (2021) rightly notes, police's rough response reveals less changes from the past regimes in Uganda. The method applied by modern police resonates well with that of the postcolonial era. Concerns have been highlighted by countries such as the UK and US'. As U.S. Senators Chris Coons et al (2018) have stated, "[A]s members of the Senate Foreign Relations Committee, we are gravely concerned about the continued deterioration of democracy, human rights, and fundamental freedoms in Uganda. We are extremely troubled by the beating and arrest". Such statements have not resonated well with the President and he has resorted into abusing the western countries for intruding his political affairs. It is not clear yet if the situation will change after the swearing in of the President on 14 May 2021.

Police brutality in Uganda is far beyond beating, slapping, and kicking per se (Muhumuza, 2018). Recently there are reports of custodial torture (Foundation for Human Rights, 2005), castration and nail plucking while in police or prison custody (Ojambo, 2021). These claims have continued to emerge on television stations, social media, and informal storytelling. However, not much has been done by the legislators to discontinue the behavior and investigate the issue. Other forms of custodial brutality include forcing the victim to lie face up with their mouth open while water from a tap gashes into their mouth (Redress Trust (n.d)). In all this, opposition youth have been the main victims. Such acts continue to exist despite article 24 of the Constitution, CAT and the African Charter all prohibiting any form of torture, cruel, inhuman, and degrading treatment or punishment. Arguably, the Constitution alone may not apparently deter such acts, but the public should continue holding government accountable of gross human rights abuses.

Other forms of brutality include the destruction of women's sensitive parts such as the cutting off nipples (Madaada, a youth NUP mobilizer, was a victim of this during a police scuffle in Arua (Muhumuza, 2018). While human rights activists have condemned such acts of brutality, Parliament is disempowered to carry out their mandate. As Gooloba (2008) rightly states, parliament is rubber stamped, and legislators cannot execute their mandate without intimidations or interference by the state (Chris Coons et al, (2018). Unfortunately, parliament is a key player in the challenges that Uganda is facing; legislators were part and partial of the age limit which has contributed to current political instability in this country.

While the law requires that any person found guilty of torture may obtain a sentence of 15 years of jail and/or a penalty of 7.2 million Uganda shillings (about $1,920), in practice this cannot work because the implementers of torture are regime's state machinery. Democracy, rule of law and human rights protection in Uganda are undermined by the regime itself; therefore, it is difficult for justice to prevail. Although there are many who have lost lives, the worst and grievous

act was the killings of opposition supporters (who are mainly youth) and Wine's diehards, such as Wine's bodyguard who was brutally murdered in December, 2020 in Kyengera Kampala suburb (Daily Monitor, January, 2021) and a driver who was deliberately shot in August 2018 in Arua. Despite the demand for redress and justice over these two state killings, nothing has so far been done to punish the killers. While taking over power, Museveni in his ten points program enlisted democracy and security as key for Uganda's restoration. Yet after 35 years of his rule, extrajudicial killings, kidnapping, unlawful arrests and detention are the order of the day. In other words, the regime itself has fallen short of its ideology. This article cannot exhaust cases of police brutality for the past three years; however, police brutality continues to exist amidst international, regional, and national criticism.

Conclusion and Lessons for Future Politics

Since 2017, the youth political struggles for government transition have left a global landmark for the future politics. It is still too early to tell whether any of the youth efforts through the People Power, Our Power Movement signifies the creation of a new future revolution in the country, but the youth's tenacity offers hope for political transition. The massive police brutality has prompted the youth's willpower for political change in Uganda. Following trends of the youth political struggle, government should not contest youth's political struggles through brutality. Instead, the government should enhance youth's civic education to enable them to participate in meaningful politics in Uganda. The following lessons can be useful for youth future engagement in politics:

- The youth should remain politically focused, build strong networks and work towards gaining relevant civic skills significant to meaningfully engage with the dominant political elites.
- While the youth are targeted for elections by the political elites, the youth should know that politics is "a game of win or lose". Therefore, the youth should not be swayed by state powers.
- It is important that the youth should invest in support systems and seek to dissolve personal anxieties that may compromise the political move for change in power.
- To be more effective, the youth should forge greater bonds with prospective allies within political systems of power.
- Finally, the youth should become part of the political systems for change and should assess their own standing without being propagated by political groups or leaders.

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WELL-BEING AND HEALTH CASES: DOCTORAL STUDENT SUBMISSIONS

20. Recommendations for the Unmet Needs of Jurors in Canada

LISA DANIELLE KYLE

Abstract

Research on jurors and juror symptomatology has been conducted for many years; however, little research has occurred in Canada. What little research was conducted in Canada was now several years ago. Further, there is sufficient anecdotal evidence to suggest PTSD can and does occur as a result of serving jury duty. As such, this research sought to explore that relationship, as described by participants.

This research is qualitative and involved two stages. First, participants were asked to complete an online demographic survey that included a self-report measures for PTSD, the PCL-5. Second, respondents were invited to participate in a semi-structured interview. Findings were analyzed via thematic analysis.

This research found three participants who met the criteria for probable PTSD (when using a PCL-5 cut-off score of 32). Overall, jurors in Canada echo previous research that states sources of symptoms relate to viewing disturbing images, deliberations, sequestering, and fear of making a mistake. New insight indicates fear associated with retaliation may be a major contributing factor for symptomology as may be the age of the accused at the time of the trial.

Primary and secondary policy and practice recommendations are provided.

Keywords: posttraumatic stress disorder, PTSD, jurors, jury duty, Canada, qualitative, phenomenology.

21. Narrative Inquiry Into Emergency Medical Services Culture and Traumatic Experiences

NINA BERESFORD

Abstract

In recent years, high rates of suicidal behaviour and Post Traumatic Stress Disorder (PTSD) diagnoses have been documented amongst paramedics, both nationally and internationally. Quantitative and mixed methods research has been utilized to understand this issue more fully and has led to the current supposition that PTSD and suicidal behaviours are most likely caused by acute and chronic exposures to traumatic situations. The available research is firmly rooted within distinct disciplines largely excluding the participatory contributions of paramedics themselves. Also, there is little qualitative research available which examines this phenomenon. As a result, current knowledge may be incomplete, lacking vital understanding of how paramedics experience the traumatic situations to which they are exposed and how Emergency Medical Services (EMS) organizational culture influences these experiences. To find new understandings of this phenomenon, I intend on utilizing applied qualitative and interdisciplinary research methodologies, focusing on three-dimensional narrative inquiry as my primary approach, to broaden understanding surrounding the lived experiences of paramedics. Further, my aim is to engage participants as active agents in the research process and to work with participants to codesign recommendations that are relevant and applicable to their lived experiences. Upon completing my research, my intention is to work with senior leaders within the industry to explore findings and discuss research recommendations to determine if any of the limited recommendations could be implemented in the larger environment. Additionally, I intend to expand the research to a larger population with a view to validating generalizability for the overall paramedic community. My findings will also add to limited existing literature and could be used as a starting point for further inquiry.

22. Factors That Help and Factors That Prevent Canadian Military Members' Use of Mental Health Services [Award Winning Paper]

MONICA HINTON

Best Paper Award for Methodology Employed (selected through peer review)

Abstract

In Canada, Canadian Armed Forces (CAF) members are 32% more likely than civilians to have suicidal thoughts and 64% more likely to plan their suicide (Sareen et al, 2016). Depression is the most common mental health diagnosis for CAF members (Pearson et al., 2015) and regular force members report higher prevalence of depression and anxiety over the general Canadian population (Pearson et al., 2015). In spite of these findings, an estimated one-third of CAF members in 2002 did not access treatment-related services despite acknowledging the need for help (Fikretoglu, et al., 2008; Sharp, et al., 2015; Vogt, 2011). Members do access primary care providers first when suffering with symptoms of depression and stigma towards those with a mental illness still exists among health-care providers (Fikretoglu, et al., 2008; Greene-Shortridge et al., 2007; Langston, 2007; Lunasco, et al., 2010; Myerholtz, 2018; Sharp, et al., 2015; Vogt, 2011; Warner, 2008). The purpose of this Participatory Action Research (PAR) dissertation was an exploration of military members' experiences with accessing mental health care, as encountered by service members and clinicians, with a specific focus on the facilitators to this care. Results indicate that culture and identity play a significant role for both military members and clinicians in terms of enabling or impeding the use of mental health care services. Facilitators to mental health care encompassed cultural change in the CAF, higher rank support for use of services, CAF wide education on mental health, time allotted for appointments and confidentiality. Normalizing the use of specialized resources, during cultural indoctrination into the military, and highlighting testimonials by credible CAF leaders may further the cultural shift in the CAF. Also, more than just addressing structural barriers is needed to facilitate mental health care seeking by military members.

Keywords: Canadian Armed Forces, mental health, warrior culture and mental health stigma, clinician culture and stigma, facilitators to accessing mental health care

Statement of Problem and Contextualization of the Research

Depression is the most common mental health issue for Canadian Armed Forces (CAF) members (Pearson, et al., 2015). According to Pearson, et al., (2015), depression is reported more often by regular force CAF members over symptoms of panic, post-traumatic stress, anxiety and alcohol abuse or dependence. There has been no change in the prevalence of depression among regular force members between 2002 and 2013, yet the frequency of panic and post-traumatic stress diagnoses has increased (Pearson, et al., 2015). It is also noted that regular force members report higher prevalence of depression and anxiety over the general Canadian population (Pearson, et al., 2015). According to Sareen et al. (2016), military members are 32% more likely than civilian Canadians to have suicidal thoughts and 64% more likely to plan their suicide.

In response to this dire public health concern, suicide prevention has become a top priority for the Canadian Armed

Forces (CAF) (Government of Canada, 2017; Nock, et al., 2013). Yet, despite the availability of mental health services for soldiers that surpasses the services at the disposal of Canadian civilians (Sareen et al., 2016), a significant percentage of military members are not accessing the plethora of supports that are available to them (Fikretoglu, et al., 2016; Sareen et al., 2016). It is estimated that one-third of CAF members in 2002 did not access treatment-related services despite acknowledging the need for help (Fikretoglu, et al., 2008; Sharp, et al., 2015; Vogt, 2011).

According to Myerholtz (2018), patients access primary care providers first when suffering with symptoms of depression and despite the prevalence of depression in patients seeking treatment, stigma towards those with a mental illness exists among health-care providers (Myerholtz, 2018). Also impacting clinical settings is the privileging of specific disciplines like medical doctors and psychiatrists within a traditional health model which reinforces a silo effect in this model of care (Mueller, 2016). In practice, patient outcomes are negatively impacted by this silo effect of fragmented care (Mueller, 2016). Outcomes for both patients and providers are improved in an integrated and collaborative health care model where care is team driven, population focused, measurement guided and evidence based (Myerholtz, 2018). Best practices in transdisciplinary healthcare integrate participation of the patient, families and communities with a focus on patient informed care, a shared mission, clear vision, a mutual understanding of the goals and enhanced commitment of all involved (Myerholtz, 2018; Van Bewer, 2017). In light of the outcome research on the collaborative health care model as well as this researchers' encounters over the years hearing members' experiences with military health care, exploring the reasons CAF members access or do not access mental health services, via participatory action research (PAR), occurred. PAR's collective intention includes creating a more reasonable, sustainable and inclusive practice, that increases understanding of our practice and the conditions under which we practice (Kemmis, et al., 2014) which aligns with transdisciplinary healthcare best practices.

The purpose of this research was an exploration of military members' experiences with accessing mental health care, as encountered by service members and clinicians, with a specific focus on the facilitators to this care. In exploring these facilitators, the hope is that an increase in utilization of military mental health care can occur. In collaboration with PAR coresearchers, the research questions included: 1. "What's one thing that needs change in order to make it easier to access mental health services for CAF members?" 2. In your mind, what role does culture play (warrior/clinician) in facilitating/creating barriers to accessing care? and 3. "What does the CAF as an organization do to foster active-duty military members' engagement in military mental health services?" Using a pragmatic approach, participatory action research was used to explore medical stigma, warrior identity/hypermasculine ethos and facilitators related to active-duty CAF members' use of military mental health services with the ultimate goal to facilitate change.

Methodology

Participatory Action Research, like the philosophy of pragmatism, includes participants in the process of enhancing their practices and settings and aims at creating a shared language among the advisory team (Kemmis et al., 2014). Investigating facilitators to accessing military mental health care by engaging both providers of mental health care and those members accessing mental health services as coresearchers brings depth to the exploration by involving various stakeholders, perspectives and voices. PAR is considered more of an orientation to investigation that stems from two research approaches including action research (AR) and participatory research (PR) (Khanlou & Peter, 2005). Paulo Freire is considered one of the originators of PAR (Baum et al., 2006). Freire was concerned with marginalized members of society and he stressed the importance of critical reflection for personal and social change (Baum et al., 2006; Maguire, 1987; McIntyre, 2002; Selener, 1997). According to Freire, freeing oppressed individuals requires knowledge of the political, social and economic contradictions in order to act to change the oppressive elements of reality (Baum et al., 2006; Khanlou & Peter, 2005; Khan & Chovanec, 2010). PAR aims to help people recover from the constraints of unjust and unproductive social structures that limit their self-development and self-determination (Kemmis & McTaggart, 2000). It is suggested that prior to the start of any PAR research, it is important to be aware of the politics and the culture

of the community with which one plans to collaborate (Khanlou & Peter, 2005; Khan & Chovanec, 2010). To ignore the politics puts the research and the validity of the analysis at risk (Herr & Anderson, 2015).

A variety of definitions of participatory action research, from several fields of inquiry, exist (MacDonald, 2012). According to Vollman, et al., (2004), the purpose of PAR includes fostering capacity, community development, empowerment, access, social justice, improving well-being and participation (Khanlou & Peter, 2005; Khan & Chovanec, 2010; MacDonald, 2012). It is "a philosophical approach to research that recognizes the need for persons being studied to participate in the design and conduct of all phases of any research that affects them" (Vollman et al., 2004, p. 129) as "multiple or shared realities exist" (Kelly, 2005, p. 66). It is also recognized as a more inclusive form of inquiry (Stringer & Genat, 2004).

In health literature, PAR is seen as transformative (Fals Borda, 2001; Green et al., 1995; Kemmis & Taggart, 2003; MacDonald, 2012). Researchers and participants co-create knowledge as a sense of community is built, meanings and language are negotiated and educating one another occurs (Fals Borda, 2001; Green et al., 1995; Kemmis & Taggart, 2003; MacDonald, 2012). First world countries currently use PAR as an approach to investigate the health programs of those whose health is being promoted (Baum et al., 2004). As a way of doing research, PAR aligns with my values of democracy, building capacity, encouraging self-determination and inclusiveness (Baum et al., 2004; Khanlou & Peter, 2005).

Methods

Members for the PAR advisory team were recruited via flyers placed in mental health waiting rooms in Esquimalt, BC, Edmonton, AB and Trenton, ON. The aim of the advisory team included collaborative discussion and agreement on the nature of the problem, as well as agreement on sources of change to this problem. The recruited advisory team included 3 active-duty CAF members (a social worker, a nurse and an officer) and 4 military mental health clinicians (3 social workers and 1 psychologist). This group initially met virtually and generated the questions to be asked during the focus group/individual interviews and convened quarterly over the year while the research was conducted. This researcher garnered feedback from the advisory team in terms of themes that emerged from the research. This group gave suggestions to this researcher related to the direction of the study, as well as the interventions to create change.

Focus group participants were recruited via flyers placed in the military base mental health waiting rooms in Esquimalt, BC, Edmonton, AB and Trenton, ON, as well as on the Military Minds Facebook page. Focus groups included 1-3 participants and the inquiry team agreed upon open-ended questions were asked. Confidentiality was addressed, participant agreements were signed and protocol for handling, storing and destroying the research was addressed with each group. The audiotaped sessions were transcribed by this researcher and shared with the reference group for collaboration over the emerging themes.

This researcher compiled the emerging themes and met for the last time with the advisory team regarding the findings, the dissertation format and the dissemination mediums. This researcher generated two research articles for publication, developed two infographics, created an online video presentation in the style of a TedTalk with the research findings, presented at a social science themed conference and the results were shared on the Military Minds Facebook page.

Analysis

The focus group data were analyzed in collaboration with the inquiry team. Journal entries by the principal researcher contained observations and initial reactions to the focus group sessions and the focus group transcriptions were discussed with the inquiry team members. Emerging themes were identified in each transcription and consensus on the central themes were recorded. Seven very broad categories of health care in the CAF, barriers, beliefs, biases, gender,

culture, and facilitators were further collapsed into four final agreed upon themes of "those people"/client identity, "old school CAF"/culture of stigma, loss of purpose/belongingness, and facilitators to care. This by hand process was done by printing out each transcription, cutting out all direct quotes from the focus group data and placing the quotes into piles of similar quotes. These broad piles were then further reorganized into specific themes using the words of the participants with the aim of the research in mind.

Results

While analyzing the data from the focus groups, 12 categories were identified. These categories were then grouped into 7 themes, and further collapsed into 4 themes that include "those people": client identity, "old school CAF": culture of mental health stigma, loss of purpose/belongingness and facilitators to care.

"Those People": Client Identity

Through investigating facilitators to care, participants addressed what prevented them from accessing mental health services. When asked what would make it easier to access services, the client identity emerged. Comments related to identity included, "...you are not ostracized, but you are kind of like "those people" and "I think services were available, but when I joined 20 years ago, it was really...you were ostracized for going to mental health" (Hanson et al., 2019, p. 2; Member, 2020, p. 1). Many mentioned taking months and years to come forward after trying to manage on their own (Hanson et al., 2019, p. 6). The indoctrination into unit cohesion and warrior culture is so pervasive, one member explained that he was "brainwashed" into believing that he was weak if he got help (Member, 2020). "I got so brainwashed that if you go to the MIR because you hurt yourself that you are weak and are whatever else, that I...it took me a while to change that for myself...for myself, I couldn't, I don't know, it's weird to explain...because I don't lead that way...I tell others to get help when you need it" (Member, 2020, p. 2). Another member with over 30 years' experience stated that "self-stigmatization" still exists and commented that no professional wants to struggle (Cossar & Umbrico, 2019).19 "People are getting the message that it's ok to get help...still self-stigmatization (*still exists*) in that there is no professional that doesn't want to be able to do their job...there are still people that resist coming in" (Cossar & Umbrico, 2019, p. 3). Others also referenced special treatment centres for professionals and how clinicians access mental health care probably less than military people (Cossar & Umbrico, 2019; Ducros, 2019). "It's kind of like how we have special treatment centres for doctors and pharmacists and professionals" (Cossar & Umbrico, 2019, p. 10).

"Old School CAF": Culture of Mental Health Stigma

Many participants spoke of how culture plays a role in both facilitating and creating barriers to care. "There was a stigma attached to mental health and I think that even now we are still trying to change the culture of that stigma" (Hanson et al., 2019, p. 1). "Stigma from society and the old guard mentality is still very much alive (*in the CAF*)...unit level care would not be beneficial...things have to happen more at a higher level, not lip service forced down but implemented...the old guard needs to be weeded out and get the new thought process in" (Hanson et al., 2019, p. 3). The impact of language, the difference in the CAF elements and the past vs present military perspective was discussed, which highlights change over time, as well as the change that is still needed (Cossar & Umbrico, 2019; Hanson et al., 2019; Member, 2020).

One member with over 20 collective years in the CAF, 8 years combat arms service and 12 years in the air force referenced the difference between the army and the air force, as well as the forces from the past (Member, 2020). "I

think we are better because, when I was a younger guy, I would have never told people that I don't feel well, on a mental side because then you're weak. Yeah, there is more empathy and less of that, I don't like saying macho but like that toxic mentality that used to have before you know, there used to be that mentality like nothing can break us" (Member, 2020, p. 15). "...in the 90s, people would get kicked out of the CAF for mental health issues, unceremoniously kicked out...we've come a long way...not what we used to be by a long way...we are way better" (Member, 2020, p. 2).

Participants talked about the shift in the CAF culture and many referenced changes over the past 10 years (Cossar & Umbrico, 2019; Hanson et al., 2019; Member, 2020; Bell, 2020; MO, 2020). Participants talked about how, in the past, members would be kicked out of the military for mental health issues and said labels like "crazies" were used by the Chain of Command (Member, 2020). One participant said that he had a "...hard time pointing...like a specific point (*to the shift*) I would say at least 10 years ago, it starts to change at least 10 years ago...2000, we still had lots of the dinosaurs, you know, the dumb people from the late 70s early 80s that, for example, when we were doing a run one morning, it was the fast group, the slow group and the sick, lame and lazy...that was the three groups...if you were not capable of joining PT, you were sick, lame and lazy so you were labelled like that" (Member, 2020, p. 2). Another participant addressed the impact of a clinicians label on "finances, belongingness, identity, rank, my whole life" (Rochelle, 2019, p. 14). "...the main thing, the big points, the leadership culture change, that's the most important, especially if you are a junior rank, if you see your leaders calling people crazies, you're not going to want to be seeking help, so that's changed" (Member, 2020, p. 14). A pivot in the beliefs, as shown in the language used, the leadership styles, and in the treatment of those accessing mental health services has occurred in the forces according to the expressed lived experience of members in these focus groups.

Loss of Purpose/Belongingness

Reinforcing the felt sense that accessing mental health impacts one's purpose and belongingness within the unit, participants talked about their experiences after seeking support. "...it felt like things were against me...(Hanson et al., 2019, p. 19) "... you are already feeling terrible and now let's make you feel insignificant" (Hanson et al., 2019, p. 20). Another participant talked about how, "...worse than getting kicked out or medically released is that you are still at the unit watching all of your friends do what you want to be doing but not able to do it...(Rochelle, 2019, p. 9) "I always use the phrase, the machine will keep moving... you don't have to ostracize these people or us...this impacts postings, adoption, anything else that, outside of deployment...with things like that I really regret coming to mental health but I still would not direct people away from mental health if that makes sense" (Hanson et al., 2019, p. 20). Unit cohesion is the essence of military life from the beginning of one's career starting in basic training. Mental health support is provided for members and the impact on one's career and sense of belonging within the unit can occur.

Facilitators to Care

Overlapping responses, related to what participants thought helps CAF members' access services, included leadership disclosing their own use of services, leadership's knowledge and positive messages and promotion of mental health services, cultural attunement, allowing time for sessions, confidentiality and the availability of services (Ducros, 2019; Cossar & Umbrico, 2019; Hanson et al., 2019; Rochelle, 2019; Member, 2020; MO, 2020). "When a senior leader in the organization self-discloses their positive experience of mental health, it contributes to supporting the member in getting care when they need it" (Rochelle, 2019, p. 3). "A supportive CoC can definitely help let someone access care by telling them that they won't lose their job and won't be shunned or shamed or criticized or punished" (Ducros, 2019, p. 6).

Several participants talked about culture and reported, "I think there's been an improvement in people being more open to go (*to mental health*) because their CoC is promoting it" (Member, 2020, p. 6). "The message coming from

leadership that it's ok to seek services, speaking about services...members are being given the language of the mental health continuum...a common language and we are having conversations about mental health...you are given permission that you can actually talk to your CoC or peers if having an orange moment" (Cossar & Umbrico, 2019, p. 4). "CAF promotes the use of mental health services via the R2MR training, unit training days, leadership not stigmatizing it" (Cossar & Umbrico, 2019, p. 10). "The primary thing is leadership knowing about the resources and referring their people to assistance" (Cossar & Umbrico, 2019, p. 11). "We do a great job of providing multidisciplinary services for our people" (MO, 2020, p. 10).

Discussion

Focus group participants talked about feeling and being seen as "those people", separate from the CAF warrior (Hanson et al., 2019; Member, 2020). These messages infer that warriors do not access support and we know that CAF members sometimes struggle with accessing services even when needed (Fikretoglu, et al., 2008; Sharp, et al., 2015; Vogt, 2011). Although structural stigma is addressed (Ting, 2011), as seen in the facilitators section, internal personal stigma (Ting, 2011) seems to continue to thrive.

The aim of military basic training includes immersing new members in the social norms and essential tasks of the armed forces including how to work as a team (Green et al., 2010). One's civilian identity is stripped, and the warrior identity is donned (Herbert, 1998). Beliefs about warrior conduct, morals, unit cohesion, capabilities and expectations, as well as the ability to cope with high levels of stress exist and are taught (Weiss & Coll, 2011). Members align with their in-group membership beliefs, values and assumptions which, when help seeking, collides with the client/patient out-group (Turner & Haslam, 2001). It seems the client identity is a separate role that does not integrate with the CAF member role. Other research has addressed this insider and outsider or "us" and "them" that separate client/patient/"mad" and the warrior/"non-mad" along with the othering that goes along with it (Burnard, 2007; Kemble, 2014; Tay et al., 2018).

Unit cohesion, paramount to the CAF identity, may be seen as at odds with the individual focus of therapy (Atuel & Castro, 2018; Braswell & Kushner, 2012; King, 2006). Separating oneself from a unit, perceived as an out group member by others and oneself and expressed by the focus group participants (Hanson et al., 2019; Member, 2020; Rochelle, 2019), may be one element of the personal stigma ascribed to the client identity. To align with the client role, there are competing interests between unit cohesion (where the group is the focus not the individual) and therapy (where the focus is on individual processing and building tools). Other research found that with the start of mental illness struggle, a sense of loss of self is felt (Wisdom et al., 2008). In light of the importance of unit cohesion and the internalized qualities of the warrior, a sense of loss would be inevitable once help seeking actions are taken.

Members talked about the "old guard" and about what the CAF was like in the past (Cossar & Umbrico, 2019; Hanson et al., 2019; Member, 2020; MO, 2020). These past beliefs and ideas about mental health continue to linger, as seen in the members' comments on the differences between units, despite the shift in perspective at the national level (Cossar & Umbrico, 2019; Hanson et al., 2019; Bell, 2020; Member, 2020; MO, 2020). The impact of the historical beliefs, language and actions by the CAF, specifically related to mental health, can be seen in the time it took members to access support; especially members with more time served. One member mentioned that he no longer fears career implications, and another said that although he supports his troops in accessing mental health, he did not do so for himself, despite the need (Cossar & Umbrico, 2019; Member, 2020). This emphasizes that more than just structural changes, like providing time to attend sessions and available resources, need to occur to support members in accessing mental health services.

Despite suffering, this researcher has heard members explain that they will ignore their physical and mental concerns for fear of the implications. Although structural changes have occurred over the recent past, the "old school CAF" belief system is apparent. Change over time has happened in the CAF and change is still needed as the disparity between the elements and with primary care and mental health care clinicians remains.

The impact of accessing mental health services was shared by focus group members who referenced various losses (Hanson et al., 2019; Rochelle, 2019; Bell, 2020). The theme, loss of purpose, includes change in identity; once members

identified with the label of client, in their own perception and the perceived perception of others (CoC, family members, and friends) their role as a CAF member changed (Ducros, 2019; Hanson et al., 2019; Bell, 2020; Member, 2020; MO, 2020).

Unit cohesion is a foundational part of the CAF indoctrination. As part of a unit, members function as a group. Once members are ill or injured, their role within that unit changes. The loss of one's role within a team is devastating for most and as Rochelle (2019) explained, to be on unit lines watching your friends do what you trained to do and are unable to, demolishes one's sense of purpose. Clinicians struggle with juggling the role of caregiver with client which can be complicated by wearing a CAF uniform (Ducros, 2019; MO, 2020). Rank and role identity along with unit cohesion clash.

According to Peterson (2016), fundamental for health professionals with a mental illness is identity formation. Threats to identity, for those struggling with mental health concerns, include discrimination, stereotypes and prejudice (Peterson, 2016). Although the focus of Peterson's (2016) research is health professionals, the findings ring true for CAF members. As CAF members, various roles are expected of them, depending on their rank, trade, element and commission. The role of client, if accepted by CAF members, requires a shift in identity (Leshem, 2020) in which members may experience "uncertainty about the identity of self and purpose" (Meyer & Land, 2006 p. 22 in Leshem, 2020).

Similar facilitators to care were identified in the focus groups. Participants referenced culture, time, confidentiality, rapport, the use of services by clinicians and peers, and disclosure of use by senior leaders, as well as that information regarding available services is shared (Cossar & Umbrico, 2019; Ducros, 2019; Hanson et al., 2019; Rochelle, 2019; Member, 2020, MO, 2020). According to Jones et al., (2018), "...senior UK military commanders may be able to influence stigma by encouraging the discussion of mental health among subordinates" and assert that "...combating stigmatising perceptions of weakness and fears of being treated differently should be the central focus of command activity" (Jones et al., 2018, p. 17). Senior leadership disclosing their own use of services seems to give permission to members to seek formal mental health support and reinforces that one can be warrior and client.

Through focus group data, it is apparent that structural barriers to military mental health care are being addressed (Cossar & Umbrico, 2019; Ducros, 2019; Hanson et al., 2019; Rochelle, 2019; Member, 2020, MO, 2020). The CAF provides time for members to attend appointments, resources exist, confidentiality is ensured and testimony by peers and senior leaders during briefings or informally addresses these barriers. Ting (2011) reports that personal reasons rather than structural barriers are more often the cause for not accessing mental health support. Although Ting's (2011) research focused on students in caregiving professions of social work, nursing, psychology and medicine, there seems to be more similarities between the CAF warrior and the caregiver in terms of mental health seeking.

Limitations

Every focus group participant in this research is Caucasian and all, but one, Anglophone. As well, the inquiry team consisted of CAF members from the army and navy and all, but one, is Caucasian which may limit the transferability of these findings. The number of focus group participants and the time allocated to complete the doctoral research are also limitations of this research.

Conclusion

Depression is prevalent and affects CAF members at higher prevalence than the general Canadian population (Pearson, Zamorski, & Janz, 2015). CAF members, however, do not always use the mental health services that exist (Fikretoglu, Liu, Zamorski, & Jetly, 2016; Sareen et al., 2016, although service use did increase between 2002 and 2013 (Fikretoglu et al., 2018). The aim of this research was an exploration of CAF members' experience of military mental health services as well as the bias clinicians may have towards those diagnosed with a mental illness. During this

investigation, the importance of identity and culture, for both military and clinicians, emerged. This research uncovered the strides made in the reduction of CAF structural barriers to mental health care and highlights the facets of personal stigma that continue to act as barriers. To further this cultural shift, normalizing the utilization of specialized resources during the indoctrination into military culture, as well as focusing on personal testimonials by credible CAF leaders, may be of benefit. The promotion of care seeking as part of unit cohesion and health, involving regular annual check-ins similar to dental checkups, may potentially help reduce the personal stigma of accessing mental health support when needed. Military members live with depression and suffer even when help exists. Addressing more than just the structural barriers is needed to continue to facilitate the accessing of services. Clearly, more research is needed to uncover ways of addressing warrior and clinician personal biases and stigma towards use of mental health care services.

Applied Research

This original applied research focused on acquiring new understanding of the experiences of mental health use by those engaged in these services. The experience of clients and those providing services pointed toward a practical aim for change. Participatory action research was the unique perspective used to explore, in a collaborative and participatory way, with the community and for the benefit of the community included in this study and a portfolio approach was used to support the implementation of the findings. PAR aligns with this researcher's belief about knowledge, experience and expertise as well as with the Canadian Association of Social Workers code of ethics regarding the dignity and worth of people and pursuit of social justice (CASW Code of Ethics, 2005). Unit cohesion, a basic tenant in the CAF as well as the warrior mentality lend themselves to the use of a collaborative and action focused research perspective (Weiss et al., 2011). Inclusion of those providing service and those using services is needed to explore and understand the topic of military mental health care services use in order to discover what is working well and what needs change (Balakrishnan & Claiborne, 2017). The Surgeon General's mental health strategic priorities include "optimizing health outcomes, investing in people, increasing partnerships with internal and external agencies, improve the efficiency of the mental health system and expand mental health education and training" (National Defence, 2016, p. 24-26) and this PAR research supports and informs these priorities. Transdisciplinary health care best practices include the users of care, families and the communities within the health care team (Van Bewer, 2017) and stress the importance of patient-informed care. Including various disciplines, sharing knowledge and decision making among participants and a focus on real-world issues, skills from various arenas are developed, improvement in services and innovation can occur and comprehensive services can be provided (Van Bewer, 2017). The focus was participation with various stakeholders to discover the facilitators to care, to ultimately help champion the well-being of members by enhancing those facilitators, by informing others of these aspects of care and highlighting the barriers to care as a way to expose areas in need of attention (change in various ways and more research for example). Improving service delivery and creating change, via collaborative partnership between the academy and National Defence, is one contribution of this dissertation, which speaks to achieving impactful change. Another contribution of this study is the display of the rich perspectives held by members of a specific community, in which multiple themes emerged. These themes enhanced a picture of the barriers and facilitators to mental health care seeking. It can be helpful for clinicians and researchers working and/ or investigating mental health stigma and care seeking and CAF members at all levels to consider in terms of leading by example. Although clinician impartiality was considered as a facilitator to accessing care, this study uncovered the impact that clinician identity and culture can have on help seeking by clinicians, even when support is needed. Finally, this participatory action dissertation research contributes to and extends a small collection of applied research on military culture, warrior identity, mental health stigma and facilitators to mental health care. This research uncovered the importance of testimonials, by those who have accessed mental health services and about their experience of getting support, to other military members as well as the impact of leading by example. This area along with personal stigma as a barrier to care is in need of more exploration. The collaboration of various stakeholders, the academy and the organization facilitate the exploration and use of participatory action research through a pragmatic lens.

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23. Looking at Patient Education Discourse: How the Gift of Life Influences Nonadherence in Renal Transplant Recipients [Award Winning Paper]

KARLY NYGAARD-PETERSEN

*Best Paper Award for Theoretical Approach

Introduction

Since the inception of the transplant era in the 1950s, the gift of life metaphor has dominated discourse in organ transplant (Gerrand, 1994; Barker & Markmann, 2013). Its pervading use is commonly seen in public awareness campaigns – primarily used in support of voluntary organ donation. The gift of life symbolically summons cultural ideals of altruism and moral responsibility that underpin transplant policy and garner positive sentiment towards organ donation with an aim to increase the pool of potential donors (Fox & Swayze, 1992; Sharp & Randhawa, 2014; Siminoff & Chillag, 1999; Shaw, 2010; Vernale & Packard, 1990). Gift of life rhetoric is also seen in the collective lexicon of both healthcare professionals and those personally involved in transplant processes such as donors, recipients, and their respective families. This long-established metaphor centres on Mauss' (2001) theory of gift exchange where he argues that gift-giving is a form of ritual contract characterized by three implicit agreements: the obligation to give, the obligation to receive and the obligation to repay. In this sense gifts are never free, and participants are implicated in a relationship of gift-debt requiring reciprocation (Galasinksi & Sque, 2016). Many scholars have touted the Maussian gift-giving paradigm as a helpful framework in understanding the experiences and motivations of those within the transplant process (Fox & Swayze, 1999; Gill & Lowes, 2008; Vernale & Packard, 1990), highlighting "the act of living organ donation [as] analogous to giving a gift" (Gerrand, 1994, p. 129). In Canada, living organ donation is primarily comprised of kidney transplants, essentially restricting the gifting comparison to living kidney donation (Canadian Institute for Health Information [CIHI], 2019).

As such, this paper exclusively considers the gift of life discourse in the context living kidney donation. The discourse has also been predominantly framed in terms of addressing the issue of organ scarcity, as evidenced in its continued use in promoting altruistic and voluntary donation. This tendency has resulted in a contracted focus around the issue of organ shortage and the primacy of organ donors, to the exclusion of representations of both recipient experiences and other pressing issues in transplant (Kierans, 2011). For instance, the serious issue of adherence, defined as the "extent to which people follow the instructions they are given for prescribed treatments" (Low et al., 2015, p. 752), abound in organ transplant as well over half of renal recipients miss or alter their dose of immunosuppressive medications – a behaviour that carries with it an increased risk of transplant failure (Low et al., 2015).

Therefore, in an attempt to balance the lopsided accounts in extant literature, this paper investigates the gift of life discourse through the lens of the equally problematic issue of adherence among renal transplant recipients. Utilizing critical discourse analysis, this central question is considered: *how does the gift of life discourse in live donation awareness and education literature influence nonadherent behaviour among renal transplant recipients*? Through assessing constructs of the gift of life metaphor implanted in live donation awareness and education literature, it is my position that the inherent morality imbued within the gift of life metaphor enable obligations to give and receive while inhibiting notions of reciprocity. In doing so, the duty of recipients to care for their donated organ is diminished, potentially influencing patient behaviours that result in missed or altered doses of prescribed medication. My argument is organized as follows: i) The role of gift theory and the gift of life discourse within organ donation are outlined. ii) I

discuss how the gift of life discourse, charged with moral values, is used to intensify obligations to give and receive, while hampering notions of reciprocity. iii) I also examine the absence of gift of life discourse in post-transplant contexts. I conclude by describing potential insights and avenues for future research. This paper contributes to the debates surrounding gift of life discourses in transplantation by exploring the underrepresented area of live transplantation, and in addressing important contexts that extend beyond organ scarcity.

Literature Review

The Context of Organ Donation

As the preferred therapeutic option for organ failure, over 2700 transplants were performed in Canada in 2018, however the demand for organ transplants far exceed availability as over 4300 Canadians remained on the waitlist at the end of the same year (CIHI, 2019). Renal transplants are some of the most needed and performed surgeries in Canada – living donation accounts for 20% of all transplants performed in the country, and the vast majority of these are kidney transplants (CIHI, 2019). Living donation is preferred over deceased donation due to superior outcomes – recipients typically do better and have greater organ longevity – as well as being more cost effective for health care systems (BC Transplant, 2015). Given these reasons most healthcare professionals and organ donation agencies favour living donation, investing more in their promotion and education efforts. Regardless, most donor awareness campaigns and materials remain concentrated on the problem of organ shortage, and ignore other vexing issues in transplant medicine, such as renal transplant patients missing or altering their doses of prescribed immunosuppressive medications.

In medicine, adherence is described as the "extent to which people follow the instructions they are given for prescribed treatments" (Low et al., 2015, p. 752). Behaviours that result in missed or altered doses of prescribed medication are commonly referred to as nonadherence (NA) (Curtis, 2009). Put simply, these patients just don't follow doctor's orders. Given that life-long regiments of immunosuppressive medication are prescribed for transplant recipients in order to minimize the risk of rejection (the rare exception being donation from an identical twin), NA behaviours can have a devastating effect on patient outcomes, as well as further stress health care systems by requiring those patients to return to dialysis or experience lengthy hospitalizations associated with such poor outcomes (Low et al., 2015). Low et al. (2015) point out that not taking immunosuppressive medications as prescribed is not only associated "with a 60% increased risk of kidney transplant failure" (p. 752), but also that 52% to 67% of renal transplant patients are NA when it comes to taking their prescribed medications. This is poignantly illuminated in one study of transplant recipients, where nearly 10% of patients died as a result of NA (Whistsett & Levitsky, 2017).

The ubiquitous nature of this issue has resulted in myriad explorations of NA, however these studies primarily focus on assessing NA rates (patients rarely volunteer their NA behaviours to their doctors, or when they do, they often overstate their adherence) (Wang et al., 2004), or were related to drug development, assay and effect (Low et al., 2015). Few studies focus on patient beliefs and expectations, and even less – around 1% of studies included in a systematic review of NA literature – are dedicated to improving medication adherence (Low et al., 2015). This highlights that despite being a well- recognized challenge, relatively little is known about why patients miss or alter their dose of immunosuppressive medications, and that NA continues to be a "poorly managed" (Low et al., 2015, p. 760) problem in transplant medicine.

Giving, Receiving and Repaying in Organ Donation

The dominance of the gift of life discourse within organ donation is widely acknowledged. Distinct aspects of the obligation to give, to receive and to repay have been highlighted by scholars, who note that applying "Mauss' gift-

exchange paradigm to organ transplantation illuminates many of the distinctive psychological and social phenomena that donors, recipients, their families, and the transplant team mutually encounter" (Fox & Swayze, 1999, p. 33).

Vernale and Packard (1990) expand on the shared experiences of such phenomena by highlighting formidable inner and outer pressures that influence the obligation of the donor to give. Normative pressures stemming from societal beliefs that the giving of oneself to others is an ultimate act of giving, is cited as one such example (Fox & Swayze, 1999; Vernale & Packard, 1990). The symbolic meaning of live donation is also identified as a source of complementary pressures on both giver and receiver, where the symbolism of live donation "virtually obliges every family member at least to consider making such a gift" (Fox & Swayze, 1999, p. 33), whereas a refusal to accept a live donation implies a rejection of the donor and the relationship with the recipient. The unique social and cultural pressures involved in organ donation are also observed by Sharp and Randhawa (2014) who assert that altruism in the context of organ donation lies outside traditional theories of altruistic motivations in which no reciprocity is expected, since organ donation is "a unique form of gift exchange with its own set social and cultural norms" (p. 164).

While the obligation to repay has been identified across extant literature, (Fox & Swayze, 1992; Kierans, 2011; Pinter et al., 2017; Sharp & Randhawa, 2014; Siminoff & Chillag, 1999; Shaw, 2010; Vernale & Packard, 1990), debates around both the types of experiences recipients encounter in navigating this obligation, along with what constitutes appropriate forms of reciprocation, are ongoing. For example, Fox and Swayze (1992) acknowledge the multitude of ways the gift exchange and the reciprocation entailed in the exchange can be experienced – while the experience can be emotionally and spiritually enriching for some, the literal and figurative reality that a part of the giver resides in the receiver creates a bond through the act of donation which can be "unbearable" (Kierans, 2011, p. 1475) for others. This unbearable bond is described as the 'tyranny of the gift': a creditor-debtor vise that binds donor and recipient together due to an inherent inability to repay the gift of life (Fox & Swayze, 1992).

A significant challenge compounding how this bond and the related need to reciprocate are reconciled is the fact that appropriate forms of reciprocity are themselves highly debated. Sharp and Randhawa (2014) suggest that reciprocity in living donation could be best understood through forms of direct and indirect exchanges in which the flow of reciprocity can be channeled in a more universal sense if reciprocation to an individual is inappropriate or unfeasible – in this way, "the recipient may 'pay-back' in a general sense to society" (p. 166). Transplant recipients have often been documented as joining transplant support groups, volunteering for donation promotion activities and speaking engagements, as well as engaging in various forms of correspondence with their donor (Fox & Swayze, 1992; Siminoff & Chillag, 1999; Vernale & Packard, 1990). While there may remain feelings that this type of repayment is inadequate, both donor and recipient tend to find these types of reciprocation satisfying (Siminoff & Chillag, 1999). Further, Siminoff and Chillag (1999) observe that recipients make the most of a second chance at life by complying with medical instructions, such as taking immunosuppressive medications as directed. While Siminoff and Chillag (1999) are critical of the gift of life discourse, they illustrate that a direct link between the obligation to reciprocate and adherence to medications within transplant contexts exist.

Discussions of direct financial rewards for organs (such as legalizing the black market, priority systems for registered organ donors, and preferred allocation of organs) are progressing, but remain challenged as a form of acceptable reciprocity given the perceived incongruity with bioethical principles (Sharp & Randhawa, 2014).

Methods

Critical discourse analysis was performed as described by Fairclough (2001), who outlines the method as the "analysis of the dialectical relationships between semiosis (including language) and other elements of social practices" (p. 122) with a particular focus on change. Further, such analysis includes "all forms of meaning making – visual images, body language, as well as language" (Fairclough, 2001, p. 122). As such, this paper critically assesses a breadth of publicly available living donor awareness and education texts, including donor and recipient testimonial videos, images and other written texts (e.g. transplant process guides, live donor outreach letter templates, posters and other outreach materials)

circulated from institutions (hospitals, foundations) and figures of authority (doctors, nurses) in the Canadian health care system. This method was chosen because "it allows symbolic, relational, and structural aspects of health research to be addressed" (Mercado-Martínez et al., 2013, p. 257).

Texts were selected based on content containing symbolism and meanings associated with the gift of life metaphor, and where live kidney donation information and processes were included. The decision to focus on texts relating to live donation, and more specifically live kidney donation, stems from the fact that live donation in Canada occurs almost exclusively in renal transplant (CIHI, 2019). Underpinning this is the understanding that "[g]ift theory has rarely been considered from the perspective of live related transplantation" (Gill & Lowes, 2008, p. 1609) despite a greater degree of similarity between live transplantation and gifting as compared to deceased donation (Gerrand, 1994; Gill & Lowes, 2008). Texts that dealt exclusively with cadaveric donation or transplant and other therapies for kidney failure (e.g. dialysis) were excluded. The texts reviewed were limited to works in English.

Finally, texts included in the study were generated by two of the largest transplant centres in Canada: British Columbia and Ontario. These centres account for the majority of transplants performed in the nation and broadly represent Canadian donation discourse. A preliminary scan of education materials from all provincial agencies indicated that the materials from these two centres captured the essence of similar literature provided in other jurisdictions across the country. Thus, the inclusion of materials from additional Canadian locations would have been redundant.

The data were analyzed for content line-by-line. The ideas and concepts raised in texts were hand coded iteratively, and were thematically analysed for meaning. Themes and concepts were inductively identified and grouped, with emerging concepts able to be classified along themes of morality, giving, receiving and reciprocating. Texts were revisited and re-read numerous times to ensure familiarization with content and to verify findings.

Findings and Discussion

The gift of life metaphor and the Maussian notion of the gift relationship are "ubiquitous in discourse around the donation of body tissues" (Shaw, 2010, p. 611). Omnipresent in Canadian examples of live renal transplant awareness and education literature, it has become so institutionalized that explicit use of the metaphor appears in titling Ontario's government agency responsible for organ donation and transplantation: Trillium Gift of Life Network. Although organ donation has been widely represented by the gift of life metaphor, this has largely ignored key contexts and issues that occur post-transplant, such as high instances of NA behaviour expressed by renal transplant recipients. The under representation of such issues in literature has been acknowledged by Kierans (2011), noting a tendency in research "to focus on problems relating to the supply of organs across the globe [and that which] happens to those who have been transplanted has received much less attention" (p. 1970). Looking at the pervasiveness of the gift of life metaphor from contexts beyond organ shortage has revealed insights informing the four themes discussed below. These insights provide a new perspective in considering how the gift of life discourse enables transplant recipients' sense-making of their obligation to repay, and how this in turn, may influence decisions around adherence to life-sustaining immunosuppressive medications post-transplant.

Organ Donation is Morally Laden

The gift of life discourse is commonly used as "an ethical model for framing the understanding of organ donation and transplantation processes in jurisdictions where the commercialisation of body tissue is prohibited." (Shaw, 2010, p. 609). With the virtually universal promotion of organ donation as altruistic and voluntary, the portrayal of donation as a social good with value placed on human life is underscored (Fox & Swayze, 1992; Gerrand, 1994; Gill & Lowes, 2008; Hansen et al., 2018; Heinemann, 2014). In this view, organ donation discourse is replete with ethical and moral meanings

abounding in biomedical texts in lockstep with the gift of life metaphor. These moral signals are evident in a multitude of ways within live kidney donation awareness and education literature. Some of the strongest examples of this can be found within institutional policies highlighted in transplant process guides. For example, a policy in which donations from those 35 years and under are directed to children showcases this. As children have longer life expectancies, as well as being a particularly vulnerable medical population, this policy exemplifies a philosophy to focus on where the most good can be done. This point is also visible in institutional bodies' displays of symbolic acts such as endorsing the Declaration of Istanbul (a policy both promoting live donation and renouncing the use of organs obtained via commercial transaction) (The Kidney Foundation of Canada, n.d.). Individual accounts from live donors also expressed the view that donation was the right thing to do, a perception that is in accord with evocations of altruism and "cardinal societal principles of voluntarism" (Fox & Swayze, 1992, p. 33) engendered by gift giving discourse.

What is interesting is not that the communal language of the gift of life metaphor exposes moral convictions inherent in the context of organ donation, but rather that these moral convictions are at odds with one another. Sque et al. (2006) point out that the gift of life discourse is not only designed to drive "altruistic donation based on valuing human life" (p. 121) but that this discourse reflects a dominant ethos that "counters commercialism and market-based exchanges" (p. 121). It is this counterpoint to the commercialisation of human organs in which the metaphorical moral friction lies: the emphasis on volunteerism and altruism in live donation awareness and education texts is counterbalanced with strong messages reminding both donor and recipient that "[i]n Canada, it is illegal to buy or sell organs." (BC Transplant, n.d.-a, p. 4). As such, the juxtaposition of altruism in the act of giving with that of moral and legal sanctions on the sale of organs clash with views of repayment in the conjured gift giving framework.

While Maussian notions of reciprocity in organ donation are not necessarily monetary in nature – for example, championing donation initiatives and joining support groups as outlined above – it has been argued that the framework of gift-giving and its inherent obligations as defined by Mauss is now intermingled with contemporary notions of repayment, and that the fungibility of gifts erode the relationships of exchange (Shaw, 2010). Kierans' (2011) discussion of reciprocity includes organ recipients' need "to materially repay the gift in some way or by financially taking responsibility for the donor" (p. 1474). This showcases the challenge for recipients in conceptualizing repayment for the gift of a donated organ outside of financial terms. Given the tendency to put reciprocity into some form of financial exchange, the moral evocation in the gift of life discourse is at variance with itself when it comes to the notion of reciprocity. On one hand, the metaphor is used to elucidate organ donation as a moral act, being portrayed as a "personal responsibility" (Trillium Gift of Life Network, n.d.), while on the other hand, it is morally and legally abhorrent to provide financial compensation for a kidney given. Ultimately, the evocation of moral codes through the gift of life discourse restricts a recipient's ability to repay based on moral principles. Put another way, a very narrow frame of acceptable forms of reciprocation are available to recipients, and as will be discussed below, the opportunity to leverage this has gone largely unheeded.

The polarities innate in the gift giving framework provides a moral backdrop to understand overarching and diverging narratives within live renal transplant awareness and education texts. Drawing on the boundaries of giver and receiver, these narratives serve to both magnify gift ideology and the feelings of indebtedness to reciprocate, and to simultaneously undermine it. It should be noted that while each are discussed separately, they are interwoven with each other intimately.

Giving

Some of the most visible and easily consumed renal transplant awareness and education texts come in the form of media campaigns and outreach, brochures and videos documenting living donor and recipient experiences. The highly visual nature of these texts often relies on symbolic communication in engaging in the gift of life discourse. A recurring and dominant graphic trope includes the superimposition of an illustrated kidney on an anatomically correct position on top of model's (often an actual recipient or donor's) body. This visual provides an easy-to-understand message at a glance, signalling the model as a transplant participant. By drawing attention to the physical location of the transplanted

organ – which, for the recipient, typically sits in the lower abdomen, distinctly further down in the body from where the kidneys we are born with are located – the embodied nature of transplantation is explicitly referenced. The emphasis on the physical body, down to the correct anatomical placement, provides the viewer with a perception of transparency and the ability to look through one's body, however the only thing worth looking at is the organ itself. In this way, donor and recipient have been reduced to their organs, and their identities exist within texts solely as the roles they play in the kidney transplant process. As there is no recipient without a donor, each is discursively positioned in relation to one another. This reductive approach in representing transplant participants functions to place the kidney at the forefront of the message in order to magnify its meaning and importance as the gift of life.

Despite the positioning of recipient and donor as paired, the relationship depicted is not equal. This is evident in videos capturing experiences of common living donation scenarios, where live donors are typically friends, family or co-workers of the recipient. In these videos, and across scenarios, the recipient and donor appear as a dyad, however the videos focus on the experience of the donor, and thus the recipient's story is told through the donor's experience of donation. The donor is provided with the dominant voice, relegating the recipient to the role of passive receiver of their transplanted organ and all the things it enables: career, family, time. In this narrative, through representations that further reduce the recipient, both the magnitude of the gift and the gift-giver are exalted. The centrality of the kidney as a gift highlights the inherently noble role of donor as gifter of life, the implied morality of which places the donor in an elevated position. This subtle arrangement of donor and recipient roles illustrates the pressures of the obligation to give placed on donors to live up to such elevated status.

Recipient accounts reinforce the act of donation a "giant gift" (BC Transplant, 2017c, 1: 47) but also acknowledge the feeling of being "beholden to [the donor] for the rest of [their] life" (BC Transplant, 2017b, 2:22). By focusing on the enormity of the gift and the elevated position of the gift-giver, the notion of the gift becomes inseparable from the tacit obligations of reciprocity it entails. In conflating the recipients' identity with that of the gifted organ, feelings of indebtedness to the donor are intensified. Mauss' (2001) gift-giving framework suggests that the obligation to reciprocate is embedded in societal structures, however the reductive nature of the recipients' identity in live donation texts heightens this need to repay. This is captured by Gill and Lowes (2008) who state that despite the perception that reciprocation is onerous due to the magnitude of the gift of life, that "the inability to properly reciprocate does not eliminate the impulse to attempt to repay." (Gill and Lowes, 2008, p. 1609). The result is that recipients experience a characteristic and complex mix of emotions with regard to reciprocation, ranging from gratitude to guilt (Kierans, 2011). The complexity of the transplant experience is also reflected in notions of receiving.

Receiving

Donor identities and experiences of the transplant process are further contrasted with that of the recipient within live donation awareness and education texts. Donors are portrayed as 'healthy', and 'normal', with one donor even recounting her post-donation experience as relatively easy, engaging in activities like biking and hiking, and returning to life the same as it had been pre-surgery within a month. The focus on the accelerated recovery time and type of physical activities within the donor's account portrays the event of donation as relatively minor. Even if physical recovery is successful, other impacts, such as financial losses due to time off for recovery, are unaccounted in these representations. The focus on donor health and normalcy is further illustrated in an excerpt from a live donation letter template which act as communication guides for recipients actively soliciting a live donor:

> I've learned it's possible for kidney donors to live a normal and healthy life with just one kidney. Donors are carefully medically screened to make sure it is safe for them to donate. The transplant team makes the donor's health and well-being a priority. (BC Transplant, n.d.-b)

Here, the notion of 'normal' and 'healthy' are not only implicitly contrasted with an abnormal pre-transplant life for recipients which often characterized by rounds of dialysis, fatigue and other feelings of ill health, but this excerpt represents a tendency to overemphasize the health and safety of the donor. In turn, this downplays the potential risk of

major abdominal surgery. Even routine surgeries like kidney transplantation carry a .03% risk of death and 1%-2% risk of serious surgical complications, which were observed in only one document in the suite of education and awareness literature analyzed (London Health Sciences Centre, 2017). Living donor accounts are awash with rhetoric around the 'small' risk associated with live donation, supporting the perception that the consequences of donating a kidney are minimal (LHSC Canada, 2012). This, in concert with the repeated affirmations that the donor's health is a 'priority', discursively minimizes the overall impact to the donor and provides a pseudo-guarantee of a 'full and healthy life' that is consistently reinforced through the institutional legitimacy from which the texts originate (hospitals, agencies, health care authorities).

Gill and Lowes (2008) observe this tendency, commenting that the propensity to downplay donor actions or impacts is analogous to etiquette in contemporary gift giving "whereby gift givers often try to lessen the value of their gift" (p. 1615). Phrases such as 'it's nothing special' or a similarly familiar 'its just a little something' illustrate this point. This suggests the minimization of risk to the donor enables the recipient to enact their obligation to receive. When considering the heightened meaning attributed to the kidney as a gift, which encourages donors in performing their obligation to give, the perceived minimal impact to the health and lifestyle of the donor acts as counterbalance in order to allow the exchange to occur.

Reciprocating

The narrow scope of reciprocation engendered by the gift of life metaphor receives little attention in live donation awareness and education texts. Where the language of the gift of life is overt in describing acts of giving and receiving in organ donation, such presence is significantly lacking in contexts discussing acts of reciprocation post-transplant (i.e. when the acts of giving and receiving have been completed). The symbolic meanings, moral references and metaphorical language of the gift of life are supplanted with biomedical dialect; the figurative focus giving way from serving a greater social good to that of individual medical necessity, the need to understand immune system responses, the types and frequency of doctors visits and the general need to "follow the post transplant clinic guidelines" (BC Transplant, 2015, 20:24). Adherence to immunosuppressive medications appears as a component of medical regimes required post-transplant, but lack the social meanings and moral connotations ascribed to activities by the gift of life metaphor. In comparison to portrayals of giving and receiving, the language of the gift of life metaphor is noticeably absent when it comes to repaying.

This fissure in the gift of life rhetoric marks a substantive departure in discourse that may provide insight into why issues of medication nonadherence is plaguing the transplant community. The gift of life, synonymous with an altruistic morality, was shown to dialogically enable donors and recipients in their respective obligations to give and receive. By leaving the element of reciprocity unacknowledged within this line of discourse means that the conflicting feelings of "gratitude and guilt" (Kierans, 2011, p. 1474) associated with giving and receiving remain unreconciled, with the onerous burden of reciprocity persisting in a heightened state.

Extending the gift of life metaphor into notions of reciprocity within live kidney donation education and awareness texts, such as highlighting adherence to prescribed medications as a form of repayment, may help to balance the moral asymmetry across giving and receiving, and repaying, that is conjured within transplant discourse. Displacing monetary conceptions of repayment and positioning adherence to immunosuppressive medications as an inherently moral and acceptable form of reciprocity would "help reduce the feelings of indebtedness the recipient felt" (Sharp & Randhawa, 2014, p. 166) and enable the recipient to enact their obligation to repay.

Ultimately, the discursive disjuncture in the use of the gift of life metaphor provides a potential explanation into why 52% to 67% of renal transplant recipients are missing or altering doses of medications (Low et al., 2015). However, there is an obvious need for more research into how the gift of life metaphor and connotations of giving, receiving and repaying may influence issues of adherence. To deepen the understanding of this phenomenon, future research

should consider these results from an intercultural perspective in order to draw additional comparisons and decipher idiosyncrasies between contexts.

Conclusion

This study provides a nuanced understanding of the gift of life discourse within the context of live kidney donation. By showing that the morally-laden gift of life metaphor enables both donors and recipients in enacting their obligations to give and receive respectively, a confounding relationship with the obligation to repay is exposed. The ways in which the donor and recipient are discursively positioned within live kidney transplant texts serve to simultaneously magnify and undermine notions of reciprocity. Further, this study observes how the symbolic meanings associated with the gift of life are replaced by biomedical language in the post-transplant context (i.e. when the giving and receiving have been completed), leaving the recipient with restricted moral beacons with which to reconcile conflicting feelings of guilt and gratitude around the impulse to repay. Without these guideposts, the recognition and instances of adhering to immunosuppressive medications post-transplant as a form of reciprocity may be diminished. This observation provides a potential explanation of, and a possible avenue to further explore, the high instances of NA among renal transplant recipients.

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INDIGENOUS AND DECOLONIZATION RESEARCH: DOCTORAL STUDENT SUBMISSIONS

24. Postcolonial Theory, its Applicability to Attain a Better Understanding of Modern-Day Problems, Including Lack of Proper Access to Healthcare for Indigenous People and Uninsured Groups in Canada and its Potential for Applied Formulation of Solutions

WALTER ALVAREZ BARDALES

Abstract

Postcolonial theory indicates that in the current era, the absence of foreign nation–state colonizers does not imply that the structures of colonization are a thing of the past. They are very much alive. These structures of power, which are engrained in Canadian institutions, and through the prism of postcolonial theory, may provide a better understanding of social phenomena.

Specifically, the issue of systematic barriers to accessing healthcare by indigenous peoples in Canada, and also by other vulnerable groups, including but not limited to undocumented workers, the poor, immigrant communities, and refugees, can be better understood as a symptom rather than the proverbial disease of systemic inequality, which has foundations in Canada's colonial past.

This understanding at the macro-level of systemic structures of power imbalance, of which barriers to healthcare are only a micro-level representation of the bigger problem, may serve the applied purpose of formulating sustainable and long-lasting solutions to the specific problem of lack of healthcare access by traditionally marginalized groups.

This solution may present itself in the form of listening to those marginalized voices, which have been silent and silenced by epistemic violence even in academic circles, including indigenous, feminist, and immigrant scholars and their knowledge. This approach may prove to be contributory to the scientific pursuit of essential answers not only to the problem of lack of access to healthcare by marginalized groups but also to other scientific questions, as this inclusivity could propel the discovery of new knowledge forward, paradoxically by leveraging old knowledge, in the form of postcolonial theory frameworks.

25. Unsettling Transitions: Investigating Opportunities to Co-Create Spaces for Decolonization in Decarbonization Processes on the Grand River Watershed (Canada)

SCOTT MORTON NINOMIYA

Abstract

This paper maps out the research journey that I am taking in my PhD research project at University of Waterloo. The purpose of this research project is to explore opportunities to co-create opportunities for decolonization on the land that I belong to – the Grand River Watershed in southern Ontario, Canada – within the ongoing process of the decarbonization of local energy systems. This paper outlines my current comprehension of the 'lay of the land', where I stand on it, and how I want to move forward. I expect (and hope) to be surprised and changed by this journey.

I will begin with a brief outline of this paper. First, I lay out the complex Context, spanning global phenomena like climate change and colonialism, how they are interconnected, and how they play out at the local level in my community. I then develop my own Positionality within this complex context. Next, I explain why and how I am pursuing an Applied Research project in the context, and my proposed process for Decolonizing my Methods. Finally, I offer some thoughts on co-creation, transformation and courage in the Conclusion.

26. Indigenization in Nursing Education Programs in Saskatchewan: A Critical Discourse Analysis

DELASI ESSIEN

Abstract

In response to Indigenous health as a priority, educating and graduating Indigenous nurses has been proposed to improve health outcomes and decrease health disparities between Indigenous and non-Indigenous peoples of Canada. However, research has shown that Indigenous students' representation remains low in many Canadian nursing schools as these students face formidable challenges stemming from colonial mechanisms entrenched in education and healthcare environments. The Truth and Reconciliation Commission of Canada (TRC), established in 2008 released a final report in 2015, which contains 94 Calls to Action to all levels of society to redress the historical legacy of cultural assimilation against Indigenous peoples. Since the release of the TRC's Calls to Actions, there has been a push within the nursing academy to indigenize nursing education. Critics have described such indigenization efforts as inherently colonialistic because the nursing profession is based on a colonial system of values. Therefore, for the indigenization of nursing education to have any real impact, it needs to be grounded in the decolonization of the academy. Using critical discourse analysis, this two-phased study aims to explore how indigenization deconstructs the structures of colonialism in nursing education and examines the ideologies and discourses that sustain, reproduce, and transform such structures. From a deconstructive lens, I will also elucidate where nursing education programs are located on the continuum of indigenization as a decolonizing process. Finally, I will situate nursing education's conceptualization of reconciliation and indigenization within the context of the TRC's Calls to Action.

27. Wisdom Seeking, DocuStory, and Impact: A Transdisciplinary Approach to Improving Liver Wellness with Indigenous Communities

GARY W. HAYES AND KATE P. R. DUNN

Abstract

Hepatitis C is a viral blood borne infection that is both preventable and treatable, however rising rates within Indigenous communities across Canada show the current scientific or biomedical approaches are not sufficiently impacting awareness within this demographic (Fayed et al., 2018). Impersonal pharmaceutical cures, disconnection from the land, and a disproportionate impact of harms in part due to disruption of family circles and the traditional generational transfer of knowledge resulting from colonization events have resulted in patterns of abuse and substance misuse as a means of coping with this ongoing and historical trauma (Sylvestre et al., 2019; Tobias et al., 2013; Pearce et al., 2019). When we focus on relationship, respect and reciprocity while bringing Indigenous Ways of Knowing as the framework we create a culturally relevant approach to research. Facilitating health-related research with a transdisciplinary approach combines complimentary applied research methodologies and methods and increases the likelihood of change.

Indigenous Methodologies create a space to focus on meaning within context, relationships, and involvement of the human experience throughout the research process, while reflecting appreciation for the meanings or 'Indigenous Ways of Knowing' within gathered information (Merriam & Tisdell, 2016). By incorporating Indigenous perspectives in building knowledge with a foundation in respectful relationship, supporting wholistic and wellness framed approaches, we can utilize richly layered descriptive techniques in sharing information back to Indigenous communities and create positive impact (Merriam & Tisdell, 2016).

Complementing the use of Indigenous methodologies is Participatory Action Research (PAR). Participatory action research can be transformational; with an emphasis on co-learning, collaborative inquiry, and evidenced based decision-making throughout a systemic approach, stakeholders engage in an intervention process where cycles of co-created knowledge and action create pathways to change (Piggot-Irvine et. al, 2015). Applying both methodologies throughout the development and production of an educational DocuStory offers a unique opportunity to generate knowledge, story, and a strategic campaign for impact. A media practitioner impact framework will be utilized as an intervention within action research; the framework will be developed throughout the research design phase and will be guided by media literature, the DocSociety's field guide (DocSociety, 2020), and leadership principals adopted from Sidle (2005). This approach allows for relationship-building, wholistic involvement, and shared vision when creating a strategic impact campaign. Generating and disseminating knowledge through a transdisciplinary applied research approach can help shift the narrative surrounding a societal issue with a goal of affecting positive social change. Stakeholders involved in the production of a DocuStory developed through Wisdom Seeking provide a unique knowledge environment for cycles of planning, implementation, and reflection through action research to address a local problem.

This paper examines the co-authors' proposed collaborative research projects by contextualizing disciplinary backgrounds and examining a socially engaged transdisciplinary approach that will contribute to solving a complex real-word health issue. By providing an overview of research relevance within health and media disciplines, drawing on multiple methodologies, and exploring the value of transdisciplinarity, this paper demonstrates the potential for collaborative applied research. The resulting DocuStory will be a culturally relevant community based and co-produced awareness message on Hepatitis C accompanied by a co-designed strategic plan for impact.

ORGANIZATIONAL STUDIES: EMERGING THEMES: DOCTORAL STUDENT SUBMISSIONS

28. Co-Creating the Scholar-Practitioner Identity: An Applied Research Project

SYLVIE PLANTE

Abstract

Doctoral programs that enable mid-career professionals to combine academic scholarship with practical applications of knowledge, and to become scholar-practitioners, have seen increasing enrollment in Canada and worldwide. In an interdependent world in crisis, scholar-practitioners apply knowledge from theory to address pressing practical problems. In scholar-practitioner doctoral programs, students discover they must resolve tensions arising from the contrasting values, assumptions, priorities and performance expectations of the two sub-cultures of practice and the academy. The traditional separation of practitioners from researchers has an impact on the ability of today's universities to support the development of a student's scholar-practitioner identity.

This article addresses the work involved in co-creating the scholar-practitioner identity through doctoral education, as a form of applied research on the self. Analytical auto-ethnography as a method of reflexive inquiry is used to examine questions of multiple identities from a theoretical perspective, comparing personal lived experience with documented doctoral journeys of scholar-practitioners from recent literature. The framework of social-symbolic work is applied to describe and analyse the scholar-practitioner identities and careers that are co-created by individuals and institutions together. Social-symbolic work focuses attention on the motivations, practices, resources, and effects of people's efforts to construct the social world, which includes organizations, identities, and careers. Doctoral students, faculty, employers, and social networks are all actors that may be motivated to participate in the co-construction of identities and careers, at the intersection of the self, society, and economy. The data and analysis show how the social-symbolic work perspective can inform an applied research agenda to guide both theory and practice in the co-creation of a scholar-practitioner identity. Further research can benefit doctoral students, as well as the faculty and institutions that support them through scholar-practitioner doctoral programs. Proposed research themes include the use of social networks as multifaceted resources for identity work. More specifically, further empirical examination of the motivations, practices, and resources accessed by doctoral faculty and supervisors in the co-creation of the scholar-practitioner identity can advance applied research, since they represent a key stakeholder group in this creative process.

29. Perspectives on Change: An Exploration of the Synergies Between Organizations, their Internal Practices and their Aspirations for Social Change

JENNIFER BRUCE

Abstract

Social purpose organizations have become an important site of social innovation. These types of organizations possess the ability to influence policy while also contributing to social well-being, community development and other positive outcomes. However, social purpose organizations are facing increasing struggles to sustain themselves, to navigate political, social and environmental uncertainty and complexity. This often contributes to a disconnect between what organizations are trying to accomplish in the world and how staff experience their organizational life. Thus, this research explores how organizations can more consciously align their internal practices with their broader social change goals. The purpose is to uncover practical insights on how organizations can deepen their social impact and to engage more deliberately in their day-to-day practices. This has yet to be explored fulsomely in academic and applied literature and even less so has been transferred to organizational settings. Through a preliminary literature review, this research has identified four approaches that speak to the dynamic between social change and organizational development. Using a social innovation approach to social change, this research critically engages in the opportunities, limitations and tensions within the current literature. It also expands the applied knowledge and practice for social organizations through three themes – the human space, architecture and external relationships. Overall, it argues that a power analysis, intentionality and a holistic practice are key features of organization development and socially innovative processes for organizations.

30. Renewing Competitive Advantage: Lessons from CSL Limited's Transformation into a Global Pharmaceutical Powerhouse

WARD, M. P. AND OSIYEVSKYY, O.

Abstract

Renewing competitive advantage is a challenging managerial task that is particularly difficult to achieve for tiny players in established capital-intensive industries. Yet, CSL Limited, a former 78-year-old Australian loss-making government spin-out, continually renewed its competitive advantage in the hostile and turbulent pharmaceutical industry. We show how CSL's focus on progressive-problem-solving provided the catalyst to overcome organizational inertia and transform itself into a global pharmaceutical powerhouse. Generalizing the findings, we propose a novel business-problem typology and portfolio approach to strategic business problem selection and formulation to discover new value creation opportunities to mitigate the risk of obsolescence.

Keywords: competitive advantage renewal; problem-finding and solving perspective; organizational impediments; progressive-problem-solving; CSL Limited

31. Trust and its Impact on Collaboration in a Local Government Context

SARA AHLSTROM

Abstract

This paper outlines an examination of the impact of trust on willingness to collaborate at the local government level in Alberta. This is a reflection on examining these concepts and how a better understanding of trust by local decision makers and policy makers will help to create more effective supports and tools to encourage collaboration between municipalities. The purpose is to encourage the interest to collaborate to provide quality services to residents who live in the region. The anticipated outcome of this research is to enhance knowledge related to trust and collaboration, its impact on provincial and local policy and to increase capacity in local government to better serve inhabitants.

32. For Better or for Worse: Family Employees' Quest for Role Segmentation in Family Businesses

ANNIE LECOMPTE

Abstract

This article provides a conceptual framework on the segmentation of work-family roles of family employees in family businesses. While the previous literature on work-family interface in family firms mainly focuses on the negative outcomes of managing role boundaries in such a context, I propose that family employees can successfully segment roles, but that the relation is moderated by several factors, namely their level of emotional ownership, the degree of attachment of the family, the presence or absence of border-keepers and the level of organizational role integration.

Keywords: family firms, work boundaries, boundary theory, work/family border theory, three-circle model

33. The Impact of Trust Building on Transaction Activity: A Study of Non-Fungible Token Projects [Award Winning Paper]

ANDREW PARK; JAN KIETZMANN; AND LEYLAND PITT

*Best Paper Award for the Originality of Topic

Abstract

Non-fungible tokens (NFTs), which are digital assets such as art pieces and in-game collectibles secured by the blockchain and traded on decentralized marketplaces, have recently garnered tremendous public interest, highlighted by a digital art piece selling for $69.3 million USD in March 2021. NFTs and related decentralized platforms have significant implications for scholars, practitioners and policymakers whose industries may be affected by its continued emergence. Like traditional online marketplaces, trust plays an important role in whether a consumer decides to participate in the NFT ecosystem. However, existing management trust theory on online marketplaces is inadequately positioned to explain the role of trust in NFT ecosystems, due to the fact that there is no central authority to which a defrauded consumer can appeal, and the disparate transaction dynamics between buyers and sellers. Scraping online databases containing real-time data on global NFT projects and their transactions, we hypothesize, present and empirically test a novel model on the effects of trust building activity on transaction activity. We find that, for NFT projects, trust building activity is positively associated with transaction activity. However, this relationship is moderated by the average transaction size, i.e., the link between trust building activity and transaction activity is more pronounced for NFT projects that have large average transaction sizes. As far as we can ascertain, our study is the first that empirically tests the role of trust in the adoption of novel, decentralized online platforms. Our study has implications for practitioners who wish to successfully commercialize novel NFT or blockchain-based products, and for policymakers who wish to effectively support and regulate the burgeoning blockchain ecosystem.

Keywords: non-fungible token, trust, transaction-cost economics, blockchain, decentralized platform, online marketplace

Statement on Applied Research

This work is an applied research paper that advances current management theory on trust building in online marketplaces. We draw from Gefen & Pavlou's (2012) theory that the relationship between trust and transaction activity is moderated by consumers' perceived effectiveness of institutions. However, we argue that this theory does not adequately explain trust building activities in the context of decentralized marketplaces. We propose and empirically test a new theory using the rapidly rising NFT ecosystem as our context. This is heavily applied research as the NFT sector is a specific decentralized ledger (i.e., blockchain) application, and we test and apply existing and new management theory to derive our conclusions. Our applied study is empirical and quantitative in nature and aims to elucidate the role trust plays in transaction activity in novel, decentralized information systems.

Introduction

Non-fungible tokens (NFTs) are blockchain-backed digital assets that can represent ownership of images, videos, songs, privileges in video games and metaverses and more. It can be even be used to dematerialize and digitally represent physical assets in the real world, for example, to enable a decentralized land registry, which is currently being piloted in Honduras (Lemieux, 2016). While the existence of NFTs can be traced back to early blockchain projects such as CryptoPunks and Cryptokitties, interest in this blockchain application has generally been constrained to cryptocurrency enthusiasts, blockchain researchers and cryptographers. However, since early 2021, NFTs have started to receive much wider attention within broader technology communities and even the mainstream media. It has, in part, renewed general interest in blockchain technologies after a previous lull in the blockchain hype cycle due to declining cryptocurrency asset prices (which have since recovered dramatically) and disillusionment with the oversupply of questionable Initial Coin Offerings (ICOs).

Like predicate blockchain applications such as cryptocurrencies, distributed file storage and democratized personal health information, the adoption of NFTs is heavily reliant on consumer trust. This is consistent with the extensive literature on the importance of trust in the adoption and proliferation of novel information technologies (Komiak & Benbasat, 2006; Chopra & Wallace, 2003; Gefen, Straub & Boudreau, 2000; McKnight, Choudhury & Kaemar, 2002; McKnight, Cummings & Chervany, 1998; Garaus & Treiblmaier, 2021; Yang et al., 2021; Bapna, Qiu & Rice, 2016; Ananthakrishnan, Li & Smith, 2020; Gefen & Pavlou, 2012). The role trust plays in the continued growth of the NFT ecosystem is likely even more salient given the anonymity of the individual participants that secure a large blockchain network. Thus, it is important for firms and industries to understand the role of trust in emerging technology-based ecosystems such as NFTs in order to attract users and increase the adoption of their novel technologies.

NFTs began receiving growing media attention in early 2021 but sparked mass curiosity in March 2021, when an artist named Beeple sold a digital image at Christie's for $69.3 million USD. This was the first instance of a digital asset being sold at such a price without an accompanying digital certificate of authenticity (Crow & Ostroff, 2021). Instead, ownership of Beeple's digital art piece is documented on the Ethereum blockchain, where the record of the art piece is linked to a digital private key, which is owned by the buyer. NFTs need not be restricted to facilitating markets for digital art pieces or collectibles. They can be used to represent and transfer ownership of physical assets such as land parcels, to grant expanded privileges in online games and to enable more efficient transfers of web-based assets such as domain names. The popularity of NFTs has been accelerating rapidly; while the lifetime total traded volume of NFTs is $550 million USD, $200 million of that volume occurred in March 2021 alone (Dowling, 2021a). Other proxies for interest in NFTs exhibit similar patterns: Google Trend data shows little interest in NFTs until January 2021 and news media interest has exhibited similar trends (Dowling, 2021b).

Because of the novelty of NFTs, the literature on their implications to management is limited. Most of the existing research related to NFTs focuses on hypothetical, or proof-of-concept applications of the technology in various industries (Regner, Urbach & Schweizer, 2019; Chevet, 2018; Omar & Basir, 2020), on the technical aspects of NFTs (Hong, Noh & Park, 2019; Park, 2019; Bal & Ner, 2019) or on the relationship between NFTs and the value of cryptocurrencies such as Bitcoin, another closely related, more established blockchain application (Shirole, Darisi & Bhirud, 2020; ElMessiry & ElMessiry, 2019). Little research has been conducted on what factors facilitate the rapid adoption of a little known, highly inventive, distributed information technology. Namely, it is unclear how a technology ecosystem that is predicated on a large, decentralized network of untrusting parties such as NFTs creates and captures value.

If a firm wishes to operate and thrive in a novel, trust-less environment, it is likely that it must engender trust in its potential users and customers. Limited insights from prior literature on how to increase adoption of a novel information technology in trust-less settings leaves managers in the dark about how to develop strategies to accelerate the uptake of the technology. Thus, the relationship between a firm's efforts in establishing trust in a novel, decentralized technology and the resultant value capture from these actions merits deeper investigation. Additionally, this research would be helpful to policymakers who wish to foster the growth of modern, decentralized business models such as NFTs and peer-to-peer asset sharing but also regulate them to ensure consumers are protected when participating in the ecosystem.

The objective of our research is to fill these knowledge gaps by providing novel, empirical insights into the relationship between NFT projects' efforts to improve trust and the uptake of their products, and how the nature of those products affects this relationship. Formally, our research questions are: 1) Is there a relationship between efforts to improve trust and product adoption for NFT projects and firms? and 2) Do the characteristics of the NFT product moderate this relationship?

To address these research questions, we draw from the web-based database nonfungible.com, which is the preeminent and most comprehensive data source for NFT projects. This database aggregates and tracks transactions related to all public NFT projects and updates the data in real-time. The transaction records are sourced from the public ledger; for example, all transactions for the Cryptopunks project are recorded on the Ethereum blockchain, and nonfungible.com filters transactions on the Ethereum blockchain for only the ones related to Cryptopunks. All transactions for the 130 NFT projects listed on nonfungible.com are tracked and published in real-time.

We extract transaction volumes for each of these projects as a natural proxy for product adoption. We further operationalize our research agenda by collecting data on each project's social media activity, specifically the number of Twitter followers as a proxy for the effort the project expends in signalling trust to its existing and future users. The use of social and traditional media platforms is a well-established technique in signalling project awareness and trust in the blockchain ecosystem (Wang & Vergne, 2017; Cheung, Roca & Su, 2015; Kristoufek, 2013; Barford, 2013). Since there is a wide variation in the price of a typical transaction among NFT projects (the previously noted example of an art piece selling for $69.3 million USD is contrasted by transactions within NFT games and virtual worlds, which can be as low as $0.35 USD), we calculate the average price of a transaction for each project to determine if there is a heterogenous treatment effect on the relationship between effort in establishing trust and product adoption.

Our study makes several contributions to management and information systems literature. First, we extend the management literature related to trust in technology product adoption by proposing a new theory explicating why efforts in increasing trust affect product adoption, and how this relationship is moderated by the size of transactions. Second, to support our theory, we examine a highly novel context that is based on a wide, decentralized network of untrusting parties. As far as we can ascertain, we provide the first quantitative, empirical study on NFTs; to date, we were only able to find conceptual studies related to the technical aspects or hypothetical applications of NFTs. This new context encourages further research from the scholarly community on the boundary conditions of existing management trust theories. Third, we inform business managers and policymakers on ways to leverage the increased digitization of numerous industries, specifically with respect to the anticipated growth of sectors based on dematerialized assets (Qi & Tao, 2018; Roquilly, 2011; Animesh, Pinsonneault & Yang, 2011; Chaturvedi, Dolk & Drnevish, 2011; Srivastava & Chandra, 2018). Effectively managing new technologies based on the growing decentralized platform industry can provide innumerable benefits to burgeoning firms in this sector and provide opportunities to grow existing information technology industries and create knowledge-based jobs.

Literature Review

In this section we review the literature from which we draw for our study. We begin by reviewing the management research landscape related to the role of trust in the adoption of novel information technologies. Following that, we review recent research on the role of trust in product adoption, specifically as it relates to blockchain and decentralized technologies. In each subsection, we identify the gaps in these bodies of literature, and how our study addresses them.

Research on Trust Related to Information Systems

There is an existing body of literature in the information systems field that examines the role of trust in internet

and web technologies, ranging from empirical studies to the development of theoretical constructs surrounding the impact of trust on consumer adoption of online platforms. Information systems researchers have often rooted their context-specific theories in the general management trust literature and have noted that it is sometimes a nebulous term that is difficult to define or measure (McKnight, Choudhury & Kacmar, 2002; Ananthakrishnan, Li & Smith, 2020; Gefen & Pavlou, 2012). Much of the early empirical research related to trust in information systems centered on online transactions in the e-commerce and retail domain (Brynjolfsson & Smith, 2000; Gefen, 2000; Gefen, 2002) which is justified given the growing presence of marketplaces such as eBay and Amazon at the time.

Since then, some additional contexts have been studied, such as those related to virtual worlds (Charturvedi, Dolk & Drnevich, 2011; Roquilly, 2011), social media (Mallipeddi et al., 2021) and crowdfunding (Gao, Lin & Wu, 2021), however, many contemporary empirical information systems research on trust are still centered on long-established, traditional technology platforms such as online marketplaces and those that facilitate consumer reviews (Mejia, Gopal & Trusov, 2020; Saifee, 2020; Ke, Liu & Brass, 2020). We did not find any recent empirical papers that developed theories on trust based on highly novel and uncertain technologies such as decentralized networks and NFTs, though we did find a theoretical trust-based study on peer-to-peer lending (Wu et al., 2021). The lack of empirical studies on highly novel technologies limits the external validity of the existing information systems theories on trust. We aim to introduce a novel context to the body of literature on trust to better elucidate the boundary conditions of the role trust plays in new technology adoption.

We draw inspiration from Gefen & Pavlou's (2012) theory that buyers' perceived effectiveness of institutional structures (PEIS) moderates the relationship between trust and transaction activity. The authors argue that the relationship between trust and transaction activity is significantly moderated by the buyer's perception, namely PEIS, of whether the institutional structures in the marketplace of interest are sufficiently protective of consumers and conducive to reliable transaction activity. The authors go so far as to say that if buyers' PEIS is so low and they feel highly vulnerable to the potential downsides of the transaction, they will be unwilling to transact at all and the relationship between trust and transaction activity is invalidated. If the buyer has full confidence in the institutional structures of the specified marketplace, the relationship between trust and transaction activity is similarly invalidated since the buyer faces no risk in the transaction.

This model is somewhat context dependent, however, as Pavlou & Geffen (2004) note that in online marketplaces, buyers rarely transact with the same seller more than once, which is not the case in our research context. Furthermore, the authors' empirical work was focused on eBay and Amazon's online marketplaces. Buyers in these marketplaces have contingencies in the event their transactions go awry, namely, they can escalate their issues to the customer service representatives at each of these companies and request refunds. While the PEIS framework is largely appropriate in this traditional online marketplace context, it is not extensible to NFT ecosystems, where because of their decentralized nature, many NFT projects do not have centralized authorities to which buyers can appeal. Moreover, buyers often transaction with the same seller repeatedly, for example, in the case of microtransactions within NFT games and metaverses, potentially changing the trust dynamic between buyers and sellers. Thus, we propose a new theory on trust and transaction activity in the subsequent Hypothesis Development section.

Research on Trust Related to Blockchain

While the amount of research on trust in the traditional management literature is robust, and some theoretical and conceptual research related to highly novel information technologies such as decentralized platforms (e.g., blockchain and NFTs) exists, empirical research in this context is scarce. In this subsection we present the available literature on trust as it relates to blockchain technologies, of which NFTs are a subset. Ransbotham et al. (2016) write in general terms about the importance of embracing blockchain technologies while also dissuading or deterring nefarious actors from participating in blockchain-based ecosystems. Similarly, Brynjolfsson, Wang & Zhang (2021) write about the potential of blockchain to create new markets and note the need for scholars to study ways in which ecosystems can prevent

unwanted side effects such as social inequality and balkanization, but do not further investigate trust issues in this context. There are numerous other papers that study the role of trust in blockchain from a philosophical and conceptual standpoint (Werbach, 2018; Anjum Sporny & Sill, 2017; Casey & Vigna, 2018; Hammi et al, 2018), which is unsurprising given the core strength of the technology is its ability to support an efficient and fluid transactional network among a large, decentralized group of untrusting parties (Nakamoto, 2008). However, we were not able to identify any notable papers that test the role of trust in a decentralized network that are empirical in nature.

Papers theorizing on the application of blockchain to various industries are numerous, and in the information systems field, perhaps the most commonly studied context related to trust and blockchains is the sharing economy. Hawlitschek, Notheisen & Teubner (2018) conduct a literature review on blockchain and trust, specifically on the sharing economy. Again, it is notable that none of the 62 articles identified in the literature review are empirical in nature. We address the gap in the blockchain, management and trust literature by conducting the first quantitative, empirical study in this field. We do this by specifically focusing on NFTs, a novel and rapidly emerging subset of blockchain technology.

Theoretical Framework and Hypotheses Development

In this section, we present two hypotheses that lead to the development of a novel theoretical framework linking trust generating efforts and product uptake and the moderating role transaction size plays in this relationship. We test these hypotheses empirically to support our framework.

Our novel framework draws upon the work described previously by Gefen & Pavlou (2012). We believe their argument that perceived institutional effectiveness moderates trust and transaction activity lacks external validity in the NFT ecosystem for several reasons. First, the very decentralized nature of the NFT ecosystem is incompatible with the conditions of the authors' study, which was based on the eBay and Amazon marketplaces. These marketplaces are governed by a central authority and any buyer who feels they have been shortchanged in a transaction can begin an appeals process to the marketplace's customer service departments. An arbiter, who is an employee of one of these central authorities, will ultimately determine the validity of the appeal and will enact punitive or corrective measures to the offending seller or provide a refund to the buyer. In the NFT ecosystem, there is no central authority. Records of digital ownership are recorded on a distributed ledger, which is itself secured by a large group of anonymous miners. There is no central authority to which a buyer can appeal and thus all transactions are effectively final, placing even more importance on an NFT project's ability to signal trust before or early in its formation to attract users.

Second, the authors note that in their study, buyers seldom transact with the same seller more than once. This is not true within the NFT ecosystem. Particularly in the case of NFT-based games and metaverses, the same vendor may sell digital assets to the same buyer dozens or hundreds of times. In this manner, the amount of due diligence a buyer conducts prior to participating in the NFT ecosystem plays a much greater role in the level of user activity in a given NFT project than for a buyer making a single purchase on eBay.

Third, transaction size in unaccounted for in the authors' model. Regardless of the PEIS of eBay or Amazon for a given buyer, the relationship between trust and transaction activity is likely going to look very different given the size of the transaction. For example, a user who is purchasing a big-ticket item such as a car will likely conduct much more due diligence on the seller than if the user was purchasing a cheap, consumer good. The effect of transaction size, and the potential level of harm in a deal gone awry on trust and transaction completion has been studied in detail in the transaction-cost economics literature (e.g., Chiles & McMackin, 1996) and we believe it plays an important role in trust and information systems product adoption. Because of the fundamentally different preconditions between Gefen & Pavlou's (2012) study and ours, we believe a new model is required to better elucidate the relationship between trust and transaction activity for decentralized technology ecosystems.

Our first hypothesis suggests a relationship between an NFT project or firm's trust building activities and transaction activity, or usage, of their product. It is common practice for blockchain projects to invest significantly in trust building prior to the launch of their platforms, mostly through marketing efforts (Sharma & Zhu, 2020). The use of social media

as a trust building tool for firms has been extensively studied and supported in numerous industries (e.g., Hakansson & Witmer, 2015; Monforti & Marichal, 2014; Liss, 2011; Valenzuela, Park, & Kee, 2019). Because of the decentralized nature of blockchain products, consumers are well conditioned to conduct significant due diligence on the trustworthiness of a product prior to purchasing it or participating in its ecosystem. Trust building activities by blockchain projects are mostly marketing driven, taking the form of social media engagement, wide distribution of a project whitepaper, and bounty programs for pre-participants to trial products, identify bugs and co-promote the project. These efforts are mostly conducted to increase transaction activity on the prospective blockchain project platform, which ultimately raises the aggregate value of the project (Sockin & Xiong, 2018; Li & Mann, 2017; Bakos & Halaburda, 2018). Therefore, we hypothesize that NFT projects or firms that engage in more trust building activity have higher levels of transaction activity on their platforms.

Hypothesis 1: Trust building activity has a positive effect on NFT transaction activity, i.e., NFT projects that engage in more trust building activities exhibit higher value capture than projects that engage in less trust building activities.

Our second hypothesis addresses the potential moderating effect of transaction size (i.e., transaction price, or product price) has on the relationship between trust building activity and transaction activity in NFT projects. Previous literature has shown that consumers engage in more due diligence prior to a transaction if the price of the transaction is high (Venkatesan, Mehta & Bapna, 2007; Ma & Seidmann, 2015; Ba & Pavlou, 2002). Conversely, when transaction costs are low, i.e., the punitive effect of not conducting adequate due diligence is low (e.g., the consumer is comfortable with the prospect of writing the deal off), the level of due diligence prior to the transaction decreases. We believe this behavior also takes place in the NFT ecosystem, given the lack of a central authority and the fact that a shortchanged consumer has little to no ability to appeal if their perceived outcome of the transaction is unfair. Therefore, we hypothesize that transaction size has a moderating effect on the link between trust building activity and transaction activity: the greater the transaction size, the stronger the link.

Hypothesis 2: The effect of trust building activity on NFT transaction activity is heterogenous across NFT projects with large and small average transaction sizes, such that it is stronger for projects with large transaction sizes compared to projects with small transaction sizes.

We capture these hypotheses in a novel, theoretical framework on trust in decentralized ecosystems, such as NFTs, and present it in Figure 1.

Figure 1 *Trust Building Activity -> Transaction Activity Model*
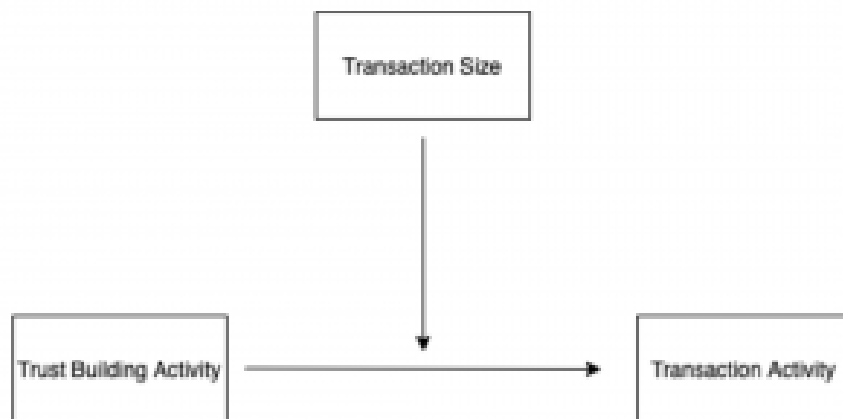
Methodology

In this section we describe the data sources, methods we used to collect the data, proxy variables chosen, characteristics of our dataset and the approach of our analysis.

Data

In order to create a comprehensive dataset containing existing NFT projects, we built a custom web scraper to track and pull data from nonfungible.com. Nonfungible.com is the largest and most prominent web-based database of global NFT projects and is the database most blockchain enthusiasts first consult to learn more about existing or forthcoming NFT projects. It operates by tracking the transaction ledgers of the major blockchain networks that house NFT projects through third party APIs and websites such as Etherscan, OpenSea, CoinGecko and Parity Ethereum (nonfungible.com, 2021) and publishing any new data in real-time. All data fields that are made available in this database were scraped, which include project name, project description, seven-day trading volume in US dollars, seven-day trading volume in number of transactions, all time trading volume in US dollars, all time trading volume in number of transactions, NFT type (e.g., art, game, utility, metaverse) and links to social media accounts. The most commonly available social media account was Twitter, and we followed each project's Twitter link to extract the number of Twitter followers. We also followed the link to each project's Github repository and collected the number of publicly published repositories; however, few projects had publicly published repositories so Github data did not factor into our final analysis. 130 total NFT projects were scraped from nonfungible.com. Out of these, 13 projects had missing or incomplete data and were discarded from our analysis, leading to a final sample size of 117 projects. A summary of the data fields collected on each NFT project is provided in Table 1. A table of ten sample projects, ordered by the highest seven-day trading volume in number of transactions is presented in Table 2.

Table 1 *NFT Project Data Collected*

Field Name	Description	Data Type
Name	NFT project name	Text
Seven Day Trading Volume (US dollars)	Aggregate US dollar amount of all transactions in the past seven days	Integer
Seven Day Trading Volume (transactions)	Total number of transactions in the past seven days	Integer
All Time Trading Volume (US dollars)	Aggregate US dollar amount of all transactions	Integer
All Time Trading Volume (transactions)	Total number of transactions	Integer
Type	Type of NFT project (e.g., art)	Text
Twitter Followers	Number of followers on project's Twitter account	Integer
Github Repositories	Number of publicly listed code repositories on project's Github account	Integer

Table 2 *Top 10 NFT Projects by Trailing Seven Day Transaction Volume*

Name	SevenDayVolume	Type	TwitterFollowers	GithubRepositorie
CryptoPunks	13,133,226	Collectible	30,300	27
Meebits	5,419,573	Collectible	30,300	27
SuperRare	3,270,648	Art	1,256	
Hashmasks	342,806	Art	23,300	
Decentraland	787,061	Metaverse	133,300	156
Sorare	2,343,813	Collectible	29,500	
CryptoKitties	69,958	Collectible	38,700	87
Art Blocks	1,429,962	Art	13,200	
Gods Unchained	14,127	Game	19,000	
The Sandbox	340,019	Metaverse	116,300	

Proxy Variables

Our objective is to identify the impact of trust building activity for each NFT project on its transaction activity, so we choose the total number of transactions for each project as the dependent variable. We choose the aggregate number of transactions all time instead of the trailing seven-day number of transactions because it is more representative of total transaction activity of the NFT project and given the very young age of the ecosystem, there is little variability in project founding date among NFT projects. Since there is no concrete measure of trust building activity, we operationalize our research objective by using each project's number of Twitter followers as a proxy to measure trust building activity. This proxy is supported by previous literature that indicates that most blockchain projects invest a significant amount of effort in social media marketing prior to, or early in a product launch (Cong & He, 2019; Sharma & Zhu, 2020; Sockin & Xiong, 2018; Li & Mann, 2018; Bakos & Halaburda, 2018), minimizing the effect of reverse causality (which is already mitigated by the fact that if our first hypothesis is supported, it will likely continue to be supported as the project matures) and that social media marketing in itself is an appropriate metric for measuring trust building efforts (Li & Mann, 2018; Hakansson & Witmer, 2015; Monforti & Marichal, 2014; Liss, 2011; Valenzuela, Park, & Kee, 2019).

Lastly, to examine the effect of transaction size as a moderator, we calculate the US dollar value of the average transaction size of an NFT project by dividing its all-time trading volume in US dollars by its all-time trading volume in number of transactions. To operationalize our research agenda, we wish to determine if there are interaction effects based on high dollar value transactions and low dollar value transaction, thus, we categorize the resultant average transaction sizes into large and small transactions in a dummy variable, using a cut-off of $50, which is a typical gas fee for an NFT asset transfer (Nftwars, 2021). A gas fee is paid on top of the price of the transaction by the buyer and is pooled by the blockchain network to incentivize miners to keep the network secure; this gas fee is not included in the average transaction size. We dichotomize the transaction size variable because of the likely psychological effect of the gas fee. The gas fee serves as a psychological benchmark for what a blockchain ecosystem participant may consider to be a small vs. large transaction size, as a transaction price lower than the gas fee is likely to be viewed as inexpensive.

59 of the 117 projects in our filtered sample were determined to be large transaction size projects and the remaining 58 projects were determined to be small transaction size projects.

Analysis

We conduct our analyses based on our filtered sample of 117 NFT projects, which is derived from the total sample of 130 projects, with 13 projects removed due to missing or incomplete data. We conduct an OLS regression to determine the relationship between trust building activity (operationalized as the natural log transformed number of Twitter followers) and transaction activity (operationalized as the natural log transformed total number of transactions). Our dependent variable, total number of transactions, and our independent variable, Twitter followers, are continuous variables. Our moderator variable, transaction size, is a dummy variable that indicates whether the project exhibits large or small transaction sizes. We conduct a moderator analysis to determine whether transaction size moderates the relationship between trust building activity and transaction activity by examining the statistical significance of the interaction term. We conduct post hoc probing by running separate regressions for NFT projects that have large transaction sizes and NFT projects that have small transactions sizes. Therefore, we model the dependent variable, transaction activity as follows:

transaction_activity = β0 + β1trust_building_activity + β2transaction_size + β3trust_building_activity *transaction_size

Results

In this section we present the results of our OLS regression to determine the relationship between trust building activity and transaction activity. We also present the results of our moderator analysis to determine the effect of transaction size on this relationship. We conclude by conducting post hoc analyses on our OLS regression, by conducting separate regression analyses for large and small transaction size NFT projects.

Table 3 shows descriptive statistics on the variables in our database and includes results of Pearson correlations. We observe significant and positive correlations between several of the variables that are tested in our OLS regression. For example, we see notable correlations between *lnTF* (natural log transformed number of Twitter followers) and *lnATS* (natural log transformed number of transactions) (r(117) = .427, p < 0.01) and *lnTF* and ASP (average selling price, or average transaction size) (r(117) = .223, p < 0.05).

Table 3 *Descriptive Statistics*

	AllTimeVolume	AllTimeSales	Twitter Followers	GithubRepositories	lnTF	lnATS	ASP	Mean	SD
AllTimeVolume	1.00							8,260,451.24	35,440,393.80
AllTimeSales	.124	1.00						47,913.69	272,855.79
Twitter Followers	.218*	.157	1.00					12,016.89	24,862.49
GithubRepositories	.077	.295	.667**	1.00				35.05	43.21
lnTF	.276**	.206*	.656**	.551**	1.00			7.91	1.88
lnATS	.247**	.392**	.329**	.371	.427**	1.00		7.64	2.59
ASP	.930**	-.034	.105	-.072	.223*	.052	1.00	669.49	2,582.02

N = 117
** p < 0.01; * p < 0.05

Table 4 shows the results of our OLS regression with *lnTF* as our regressor and *lnATS* as our dependent variable. Referring to our model, we find the coefficient of *trust_building_activity* is positive (.751) and significant ($p < 0.01$), providing support for Hypothesis 1. In other words, the results suggest that an NFT project or firm efforts in building trust are positively associated with the usage of its platform. In order to draw inferences with respect to Hypothesis 2, we run a second regression model, with *lnTF* and *DummyASP* as an interaction term, i.e., we test whether or not the NFT project has large transaction sizes has a moderating effect on the relationship between *trust_building_activity* and *transaction_activity*. The results are presented in Table 5.

Again, referring to our mode, we find that the interaction between *trust_building_activity* and *transaction_size* has a positive coefficient (.520) and is significant ($p < 0.05$) for the effect of *trust_building_activity* on *transaction_activity*, hence whether or not the NFT project has large transaction sizes indeed has a moderating effect, and the direction of the moderation is positive. In other words, NFT projects with large transaction sizes enjoy a greater benefit of trust building activity on transaction activity than NFT projects with low transaction sizes. Hypothesis 2 is supported.

Table 4 *OLS regression*

	lnATS
lnTF	.751**
	(.116)

N=117. Standard errors in parentheses.
  ** p < 0.01; * p < 0.05

Table 5 *OLS regression with interaction term*

	lnATS
lnTF	.487**
	(.162)
DummyASP	–5.878**
	(1.847)
lnTF_x_Dumm yASP	.520*
	(.228)

N=117. Standard errors in parentheses.
  ** p < 0.01; * p < 0.05

We conduct post hoc probing to further investigate the moderating effect of large transaction sizes. We conduct separate regressions for NFT projects with large transaction sizes and NFT projects with small transactions sizes. The results are shown in Tables 6a and 6b, respectively. We note that NFT projects with large transaction sizes have a larger coefficient for *lnTF* (1.008) than NFT projects with small transaction sizes (.487), further supporting our observations related to Hypothesis 2. Namely, large transaction size NFT projects enjoy the benefits of trust building activities disproportionately compared to low transaction size NFT projects.

Table 6a *OLS regression – large transaction size*

	lnATS
lnTF	1.008**
	(.150)

N=59. Standard errors in parentheses.
   ** $p < 0.01$; * $p < 0.05$

Table 6b *OLS regression – small transaction size*

	lnATS
lnTF	.487**
	(.172)

N=58. Standard errors in parentheses.
   ** $p < 0.01$; * $p < 0.05$

Discussion

NFTs have been drawing considerable media attention in early 2021, and blockchain enthusiasts and speculators have noted the potential for NFTs to revolutionize the way we create digital assets and dematerialize existing physical assets. Because NFTs are an application of blockchain technologies, it enjoys significant advantages over traditional marketplaces and platforms for the exchange of goods, as it is secured by an immutable shared ledger, is not subject to the whims of any central authority, and it allows for instant verification of asset ownership through the use of cryptographically secure private keys. However, decentralization comes at a cost; because there is no central authority to which a defrauded buyer can appeal, as there is in the case of traditional online marketplaces such as eBay and Amazon, the consumer must conduct significantly more due diligence on the seller and the platform itself, before they feel comfortable engaging in a transaction and participating in the ecosystem.

In order for an emerging NFT project, or even an incumbent firm in a traditionally non- decentralized industry who wishes to participate in the blockchain ecosystem, to increase product adoption, it is evident that it must build trust in its prospective consumer base. Because of the newness of the NFT ecosystem, and even the blockchain ecosystem, there is very little empirical or quantitative scholarly work on trust models in decentralized platforms. The traditional trust literature in the management field offers a start to understanding the dynamics of trust in online marketplaces.

We draw on Gefen & Pavlou's (2012) model to inform our initial framework building efforts that are specific to our context. They suggest that buyers' perceptions on the effectiveness of the institutions on which they're relying (e.g., the policies and practices of eBay and Amazon) moderate the relationship between trust and transaction activity. However, we note that this theory is not extensible to NFTs, and decentralized marketplaces, for multiple reasons, including a) the fact that there is no institution, or central authority, to which a buyer can appeal and b) there are many repeated transactions between the same seller and buyer in decentralized marketplaces, especially for games (Gefen & Pavlou assume buyers rarely transact with the same seller). Therefore, one of our key contributions is the development of a new theory explicating the relationship between trust building activity and transaction activity, moderated by transaction size.

We further contribute to the trust literature by conducting one of the few quantitative, empirical studies on trust in blockchain applications, and likely the first on NFTs. We collect our data by scraping the most prominent web-based database tracking NFT projects and their associated transaction data. We augment the data with social media metrics such as the number of Twitter followers and the number of Github repositories to better understand the link between trust building activity and product adoption and usage. We also test the moderating effect of the average transaction size on each NFT project platform to determine if there is a heterogenous effect of trust building activity on transaction activity. We find that trust building activity is positively associated with transaction activity, but that this relationship is more pronounced for NFT projects that have large transaction sizes. Our work offers more clarity into the boundary conditions of management trust theory as it relates to online marketplaces; trust building activities in decentralized marketplaces have idiosyncratic effects on transaction activity based on transaction sizes and thus existing trust theory may not be universally applied to such ecosystems.

As our final contribution, we inform business managers and policymakers on how to effectively structure their decisions around the anticipated rise of decentralized technologies and the increased digitization of a swath of industries (Qi & Tao, 2018; Roquilly, 2011; Animesh, Pinsonneault & Yang, 2011; Chaturvedi, Dolk & Drnevish, 2011; Srivastava & Chandra, 2018). While NFTs are currently mostly associated with digital art pieces and collectibles, there are numerous pilot projects underway that are dematerializing physical assets, potential upending the way they are currently tracked. Some of these include replacing central land registries with blockchain-based records systems (Lemieux, 2016) and replacing and federating existing supply chain records with NFT-based certification systems (Ge et al., 2017). Managers who wish to participate in these burgeoning industries should recognize the importance of early trust building and realize that implementing even low-cost methods of engendering trust, such as having a consistent and active social media presence, may lead to competitive advantages in product adoption. Policymakers may create procedural infrastructures to ensure regulatory compliance by NFT projects and firms, which has the potential by-product of increasing consumer confidence and trust. Effective policy could encourage the creation of an efficiently regulated and rapidly growing new technology ecosystem, leading to public benefits and knowledge-based jobs. Early, facilitative government involvement in other technology-based industries such as biotechnology has been shown to be important in creating a vibrant ecosystem that disproportionately attracts highly skilled, knowledge-based workers and ecosystem participants such as venture capitalists and technology incubators (Etzkowitz & Zhou, 2019; Leih & Teece, 2016; Stern 2020).

Conclusion

Through examination of the emergence of a novel NFT ecosystem and the trust building and product adoption patterns and strategies of the firms within it, we find evidence of the importance of trust building activity conducted by NFT projects on product adoption and usage. We advance the conversation related to trust in the management literature by offering a new model on the relationship between trust building activity and transaction activity, and the moderating effect of transaction size. This model addresses some of the limitations on existing trust theory on traditional online marketplaces and is designed for novel and emerging contexts involving decentralized platforms. We observe that while

trust building activity is positively associated with transaction activity, this link is more pronounced for NFT projects that have large transaction sizes.

In addition to our scholarly contributions and the fact that our study is one of the few quantitative, empirical studies on the role trust plays in blockchain, NFT and other decentralized platforms, our findings have important implications for practitioners and policymakers. Emerging decentralized platforms have significant economic potential and could spur the creation of completely new industries. In the case of NFTs, while their use is currently restricted to trading digital art, assets within games and other collectibles, it is already being piloted in large industries where the dematerialization of assets provides significant value, such as centralized land and property registries. The growth of these industries has significant potential for improved social and economic outcomes through more knowledge-based jobs and heightened interest from global researchers and technology industry participants. If our argument that trust building activity is positively associated with transaction activity, moderated by transaction size, is indeed important to the growth of the decentralized platform industry, then creating the conditions under which consumers can feel adequately protected when participating in new blockchain and NFT ecosystem should be a serious consideration for managers and policymakers alike.

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34. Beyond a Leap of Faith: Fostering Leadership Spirituality in the Workplace [full paper]

SHELLY LYONS AND CAROLIN REKAR MUNRO

Abstract

Leadership spirituality fosters workplace engagement and organizational vitality and prosperity, and it can play a salient role in guiding organizations through the maze of changes in the work world. Despite the growing body of literature about the positive outcomes of spiritual leadership, this topic – from how it is defined to how it can be nurtured – has garnered its share of controversy and is fraught with misunderstanding. This has resulted in organizational tentativeness to adapt a spiritually grounded approach to leadership. This paper will examine: the literature on spiritual leadership, underscoring the organizational benefits; the gap between leadership spirituality theory and organizational practice; and, propose ways to foster leadership spirituality in the workplace, starting with self.

Keywords: spirituality, leadership spirituality, spiritual leadership development, spiritual leader, workplace spirituality, leadership

Introduction

Scholarship in the area of spirituality in the workplace has gained traction over two decades. Specifically, fostering spirituality in leadership is noted as being the birthplace of organizational commitment, fulfilling and engaging work relationships, work and life satisfaction, peak performance and productivity (Astuti & Haryani, 2021; Efferin & Hutomo, 2021; James, 2021; Widodo & Suryosukmono, 2021; Samul, 2020a; Yang & Fry, 2018; Fry et al., 2017). As compelling and legitimizing as the findings are for cultivating spirituality in leadership, there remains a collective organizational hesitancy to position spirituality as a pillar of necessity in the leadership competency framework that informs leadership development and practice. Spirituality and its application to leadership practice remain controversial and fraught with misunderstanding; its efficacy in contributing to organization performance and productivity is questioned.

At a time of profound and sweeping change in the social, political, economic, and environmental fabric of our work world, spiritual leadership can play an instrumental role in helping organizations lean into and navigate through change (Samul, 2020b). The purpose of this paper is three-fold: 1) to examine the literature pertaining to spirituality as fundamental to leadership, with specific focus on the implications for organizations; 2) to examine the disconnect between what the literature says about spirituality in leadership as being important and what is practiced in the workplace; and, 3) to discuss ways to center spirituality in the leadership competency architecture as a leadership imperative.

Applied Scope of Paper

This paper is within the scope of applied research as per the guidelines for Royal Roads University's Doctoral Conference 2021 entitled *Socially Engaged Applied Doctoral Research in Canada: Approaches to Contemporary Social and Management Opportunities and Challenges*. This paper investigates a context-specific application; specifically, it explores the pervasive gap between the scholarly theories, frameworks and models of spirituality in leadership and the

application of the aforementioned to leadership practice in the workplace. Discussed in the paper are approaches that can be taken to anchor spirituality in leadership practice; specifically, the work to be done by leaders themselves in order to position spirituality as the focal point of the work they do. The intent is to offer the first steps on the pathway to integrating spirituality into leadership so that it resides with synchronicity alongside other prevailing core leadership attributes that contribute to leadership effectiveness.

Contextualization of Spirituality at Work

Over the years, the definition of spirituality at work has morphed in new directions. Ashmos and Duchon (2000) lead the charge with their definition of spirituality at work as "recognition of an inner life that nourishes and is nourished by meaningful work that takes place in the context of community" (p. 139). Dubey et al. (2020) created a table listing a sample of these definitions and Houghton et al. (2016) did the same by analyzing the common themes of inner life, meaningful work, and sense of community. These themes assist in understanding this term and reflect back to the definition as stated by Ashmos and Duchon (2000).

Fry and Slocum Jr. (2007) discuss the difference between religion and spirituality. They posit that while religion is a formalized system of rituals and beliefs, spirituality is instead focused on the human spirit and its qualities. Following their analysis of both terms, they concluded that workplace spirituality can include religion or not. Other researchers before and after have debated the religion and spirituality argument. Scheitle and Ecklund (2017) found that there was a positive relationship between how often religion was discussed at work and the perceptions of religious discrimination. Therefore, for the purposes of this paper, religion will not be specifically examined, except to mention certain studies which had a particular religious bias. Instead, the earlier definition of Ashmos and Duchon (2000) will be used and built upon.

Search Strategy

A blended search strategy was used for the sources included in this paper. In researching another paper on spirituality and business, the subject of spiritual leadership began to emerge and invited further study. Google Scholar was searched with the key terms Spirituality, Workplace Spirituality, Spiritual Leadership, Religion, and Religiosity. What began as a search under Spirituality and Workplace Spirituality widened as further terms were discovered from scanning the articles. Each search used the terms individually or in various combinations. Each source's abstract was examined and, if deemed relevant, the document saved to Mendeley.

After deciding upon the topic area for this paper, Google Scholar was again employed to search using the key term Spiritual Leadership. The decision to refine all sources to 2017 and newer was made in order to ensure that only the most recent studies were included. This search resulted in over 51,000 sources. The search was further refined by sorting by relevance, which resulted in 9,190 sources. The topics of Spiritual Leadership and Workplace Spirituality were combined in the final search, refined to 2017 and newer, sorted by relevance, and resulted in 44 sources. Each of the abstracts for these sources were scanned and eight were saved to Mendeley. Then, each of these eight articles were read and the decision was made to retain seven of the most relevant and represented a diverse sample of studies. After a review of the originally saved sources, three more were added using the same criteria.

The criteria used for retaining these sources were that they were no older than 2017 and had Spiritual Leadership as the focus. The articles were then sorted by conceptual models or literature reviews and studies, with the intention to focus on the former first. The studies were then sorted by geographical location, covering the United States first, followed by Malaysia, Poland, and Indonesia. However, the sequence was changed as grouping by related content seemed to provide a more organized structure. The studies also included a variety of religious perspectives: Muslim,

Buddhist, Christian, and unspecified. Most of the sources were articles from a variety of journals that emphasize management, human resources, supply chain management, accounting, or spirituality. One source was a doctoral dissertation from a United States university and another was from conference proceedings.

Please note some articles that predate 2017 were included in this paper. They were included because their leadership messages are applicable to the exploration of spirituality in the current workplace landscape.

Literature Review

Pioneering Model of Workplace Spirituality

The article by Fry et al. (2017) should begin this discussion as it outlines some of the seminal work of Fry (2003). This quantitative study had a sample of 652 participants from 27 American organizations that were recipients of the Baldrige Performance Excellence Program award (Fry et al., 2017). This study used a revised version of the spiritual leadership model (Figure 1) originally introduced by Fry (2003). In this model, the researchers hypothesized that inner life or mindfulness informs spiritual leadership, which consists of three elements: hope/faith, vision, and altruistic love (Fry et al., 2017). Spiritual leadership, when these three elements are effectively utilized, can create a sense of calling and membership in followers, which, in turn, can produce organizational commitment and productivity, and life satisfaction. The findings of this study confirmed their hypotheses and gave the researchers cause to believe that spiritual leadership positively affects workplace spirituality and "produces beneficial personal and organizational outcomes" (p. 37). The components of the spiritual leadership model and the relationship between them are given further legitimacy through the findings of this study. In particular, two linkages were confirmed between: 1) a leader's ability to create and communicate the vision of hope/faith to their followers and a follower's sense of calling or purpose; and 2) altruistic love exhibited by the leader and a follower's feeling of membership or belonging. These two linkages present in the workplace, either alone or together, positively affect a follower's organizational commitment and productivity, and life satisfaction. The study also highlighted the importance of inner life as the well from which spiritual leadership springs. Based on these findings, the relevance and applicability of the spiritual leadership model is affirmed and the reason for its popularity in many other studies since its creation is realized.

Figure 1
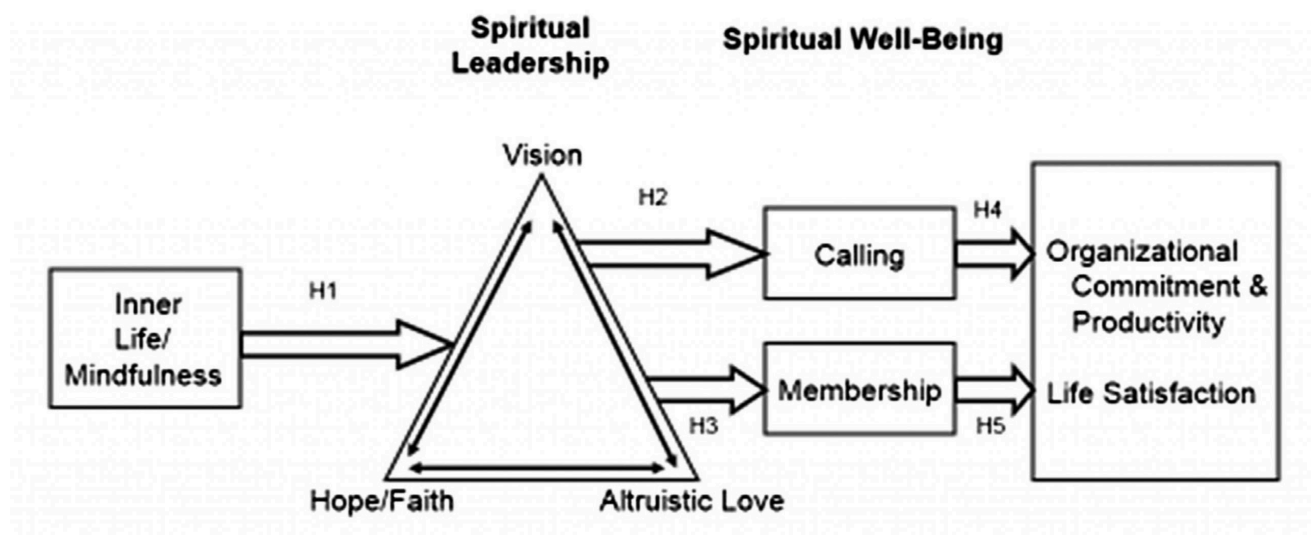
Another quantitative study, this time by Yang and Fry (2018) on the impact of spiritual leadership on burnout in 235 medical laboratory employees in the United States, again uses the spiritual leadership model. This study was the first to examine the relationship between the spiritual leadership model and burnout. Their findings confirmed those of Fry et al. (2017), with a few variations. However, the groundbreaking finding was that "membership fully mediated the relationship between spiritual and burnout" (p. 318). According to the spiritual leadership model, membership is a direct result of spiritual leadership. Membership, also described as belonging, can mitigate the feeling of isolation and fulfill the need to be understood and accepted. Therefore, spiritual leaders must be aware of the workplace environment they are creating, as well as reflect carefully on decisions that will affect their followers. One potential challenge highlighted by the researchers is that the term 'spiritual' may be misunderstood and they suggest that a neutral term may need to be developed to mitigate the negative reaction from followers that could impede the creation of spiritual leadership within an organization.

Benefits of Fostering Spiritual Leadership

Workplace inclusion is posited as having a connection to spiritual leadership in a literature review of these two subject areas (Gotsis & Grimani, 2017). Using subjectivism as their epistemology, the researchers designed their study to determine how spiritual leadership can foster a more inclusive workplace. The researchers introduce an integrative framework which uses, as its starting point, the spiritual leadership model outlined in the two previously discussed articles. Their findings pointed toward a positive relationship between spiritual leadership and inclusive workplaces and harken back to the linkages outlined in Fry et al. (2017) between altruistic love and membership. They posit that, in their model, "spiritual leaders are exhibiting behaviors embedded in values of altruistic love that will in turn address followers' needs for uniqueness and belongingness through calling and membership of both leaders and followers" (p. 922). As a result, inclusion can be created for their employees, the organization in which they work, and the society in which they live.

Spiritual leadership is linked to organizational performance in yet another quantitative study by Elias et al. (2017). This study focussed on 278 small and medium-sized businesses located in Malaysia. These businesses were all part of the halal food and beverage industry. This study differentiated itself by highlighting the Islamic Shariah based entrepreneurial orientation as a mediating factor. The proposed framework was simplistic: spiritual leadership has a direct, positive relationship on organizational performance, mediated by Shariah based entrepreneurial orientation. In contrast to other studies on spiritual leadership, the researchers focussed on organizational performance, with no mention of the employees or their well-being. Although spiritual leadership was used as a major component of their framework, the inherent meaning appeared to be based on religion and not the broader meaning of spirituality.

Widodo and Suryosukmono (2021) researched the relationship between spiritual leadership and workplace spirituality in their quantitative study of government employees in Indonesia. Their sample was 150 people from 10 different organizations. Their research framework showed spiritual leadership and workplace spirituality as having a positive direct effect on self-transcendence and, as a result, on meaningful work. When describing self-transcendence, they referred to Maslow's hierarchy of needs with self-transcendence being at the pinnacle of the triangle above self-actualization. Maslow posits that "at this stage humans desire to be in a consciousness that is beyond human capacity and to experience the whole One Godhead, the highest power holder, in whatever form it is" (p. 2118). Meaningful work is described on two levels: 1) the worker's perception that their work is significant; and, 2) the worker's recognition that their work brings a deeper meaning to their lives. The link between these two concepts can be realized in that self-transcendence is about placing the needs of others above one's own personal interests, which then creates greater meaning in both work and life. Although this paper does not use the spiritual leadership model developed by Fry et al. (2017), one of their measurement tools was the Spiritual Leadership Theory (SLT) questionnaire which is grounded in this model (Fry et al., 2005).

One of the few qualitative studies highlighted in this paper is one by Efferin and Hutomo (2021). The researchers used case study analysis with 12 senior auditors and managers in an Indonesian accounting firm. As noted in this paper, these participants were in jobs with high stress and long hours. This study explored workplace spirituality from a Buddhist perspective. The framework presented the findings that one of the major contributors to workplace spirituality is spiritual leadership based in altruistic love. The description of the leader who exemplified altruistic love in this organization, showed him as "a role model based on caring and understanding, fulfilling auditors' needs beyond work technicalities, close relationships, flexibility, autonomy and personal development" (Section 5.2, para. 8). Interestingly, this same leader was unfamiliar with the term spirituality, although he was exhibiting the concept in his leadership style. Another important note is the effect that individual spirituality has on workplace spirituality, both that of the leader and the followers. Although different from the spiritual leadership model (Fry el al., 2017), Efferin and Hutomo's (2021) model also shows spiritual leadership as the major driver for the creation and sustaining of workplace spirituality. However, they posit that the interplay between spirituality on an organizational level and an individual level is what comprises workplace spirituality. Extrapolating further, one can assume that both the individual spirituality of the followers and leader(s) can either inspire or inhibit the growth of workplace spirituality.

Astuti and Haryani (2021) use quantitative methodology to explore the effect of spiritual leadership and workplace spirituality on employee commitment. "Organizational commitment is the level at which a worker identifies the organization, its goals, and expectations to remain a member" (p. 72). Their study was conducted in Indonesia with 71 hospital employees. They found that spiritual leadership has a positive effect on both workplace spirituality and affective commitment, and workplace spirituality has a positive effect on affective commitment as well. Additionally, workplace spirituality has a mediating effect on the relationship between spiritual leadership and affective commitment. Again, the terminology from the spiritual leadership model (Fry et al., 2017) was reflected in the discussion of the findings where the researchers compare their study with other studies which have similar findings (Astuti & Haryani, 2021).

Lean and Ganster (2017) identified 39 essential behaviours for spiritual leaders in their mixed methods study of 26 academics and practitioners. This study, with its pragmatic approach, was based in the United States and sought to determine a common understanding of spiritual leadership behaviours. The researchers posit that certain behaviours could be identified that were unique to spiritual leaders and that their findings could produce a list of behaviours that are based in both theory and practice. The 39 essential behaviours identified by the researchers were grouped together into four categories based on the spiritual leadership model: 1) inner life – "make decisions based on their spiritual values or beliefs, are guided by their spiritual values, and practice what they preach" (p. 311); 2) the components of spiritual leadership (hope/faith, vision, altruistic love) – "appeal to people's spirits, value others as much as they value themselves, and show kindness and compassion" (p. 311); 3) calling – "find ways to make work personally meaningful for each employee and help employees see how the work they are doing is serving their customers, community, etc." (p. 311); and, 4) membership – "create a context for employees to experience a form of community and create an environment where employees enjoy coming to work" (p. 311). Although this list is not exhaustive, it can serve as a sample of the benefits spiritual leaders bring to the workplace.

Using similar terminology as that which appears in the spiritual leadership model (Fry et al., 2017), Samul (2020a) explores the relationship between managers' perceptions of work and their spiritual intelligence; that is, the processing of spiritual knowledge. The sample was 69 managers from various organizations and sectors in Poland using quantitative study methodology. Samul (2020a) found that having a high level of spiritual intelligence positively affected a manager's perspective on workplace spirituality. "Spiritual intelligence is related to the abilities of using spiritual aspects to facilitate everyday activities" (p. 703). The research also found that manager's spiritual intelligence positively impacts workplace spirituality and its related components: sense of meaning, membership, vision, commitment, and performance, which correlates to some aspects of the study by Widodo and Suryosukmono (2021).

The final paper explored was a doctoral dissertation by James (2021). This paper was included because the focus was on the impact of human resource (HR) practices on workplace spirituality, which provides an alternative viewpoint from the other articles in this paper. This qualitative study was conducted in the United States with seven HR managers with at least 10 years of experience. Among the findings were two of interest: 1) the individual spirituality of a leader and their sense of duty and responsibility had a positive impact on workplace spirituality, and 2) the HR managers interviewed

were inclined to let their own spiritual values guide how they lead and make decisions within their organizations. Embedded in both of these findings is the idea of spiritual integration in which one's "spiritual beliefs, practices, and experiences are organized into a coherent whole" (p. 187). Spiritual integration can be beneficial for the leader's well-being, as well as model spirituality to their followers. The emphasis on the individual spirituality of leaders and, by extension, the value of their role in modelling spirituality, is similar to the findings of Efferin and Hutomo (2021). An interesting point to note is the difference in their theological basis despite their similar findings. James (2021) focused on participants who ascribe to Christianity, while Efferin and Hutomo (2021) wrote from a Buddhist perspective.

The Disconnect Between Scholarship and Application

Several scholars advocate for greater integration of spirituality into workplace discourse about leadership and practice (van der Walt, 2018; Daniel & Jardon, 2015; Fry & Cohen, 2009; Smith & Rayment, 2007; Reave, 2005). Despite the body of literature on the benefits of anchoring organizations in spirituality, for the most part, spirituality does not show up in how an organization defines itself, promotes itself, and charts its pathway for success (van der Walt, 2018; Daniel & Jardon, 2015; Porter & Kramer, 2011, Saks, 2011). There are pockets of organizations that promote a spiritual orientation, yet these are exceptions. For example, multinational companies such as Google, Maruti Suzuki India and Apple, promote spirituality through the following: quiet rooms for discernment, meditation or prayer; seminars on work-life balance; access to reference books, podcasts and videos on spirituality; on-site yoga and meditation; paying suppliers in developing countries fair price for their goods in order to facilitate growth and development of community (Devendhiran & Wesley, 2017, van der Walt, 2018; Anthony, 2015).

Business Plans and KPIs at the Forefront

At the forefront of organizational identity and planning for its future is a meticulously crafted business plan rooted in strategic priorities, action strategies, tactics, budgets, financial projections, and metrification. Success in executing on the business plan is based on a number of key performance indicators (KPIs), grounded in trackable, quantifiable measures. According to Kaplan and Norton's (1996) seminal work on the balanced scorecard, these dashboard indicators cover the gamut of organizational functionality housed as four perspectives: financial, customer, internal business process, and learning and growth.

Absent from KPIs are references to an organization's spiritual health and well-being, which have been found to contribute to "values congruence throughout the workplace, employee commitment, financial performance, and social responsibility" (Fry & Cohen, 2009, p. 266). Exclusion of spiritual health and well-being from organizational report cards means organizations are missing out on critical intelligence to ascertain whether they are earning high grades – or failing grades – in their ability to foster a workplace climate that inspires employees to soar to their full potential, and ultimately, contribute to organizational goals. In a work world characterized by multiple diversities, understanding the lens through which the workforce perceives and experiences their workplace is imperative; it may not be the same lens through which the leadership team views the organization.

When an organization does not earn a passing grade in nurturing and protecting the health and well-being of its workforce, a chain reaction is set in motion: employees feel undervalued and disrespected; they are prone to burnout, mental health and physical illnesses; they lose confidence in their organization; and, eventually, they submit their resignation (Rekar Munro, 2014). The organization then finds itself in a vicious and perilous cycle of resignations and replacements, which results in an inflated amount of an organization's financial and non-financial resources needed to manage the logistics of staffing. Specifically, the organization finds itself in the spin of the following: recruitment and selection; training new staff to reach performance standards; coaching new staff through the learning curve until they

are acclimatized to new accountabilities; and, correcting employee errors enroute to reaching performance standards. Managing the logistics of staffing detracts from time needed for strategic planning and execution, which can put an organization's competitive advantage at risk. High performance and productivity are reliant on a stable and reliable workforce that is fully functional and meeting performance standards (Rekar Munro, 2014).

By creating a spot on the organization's report card to report on spiritual health and well being, an organization minimizes the probability of being in the resignation-replacement cyclone. The organization can monitor the degree to which their workforce perceives the workplace as healthy and thriving; hence, the organization can intervene early with approaches to mitigate any issues that threaten the viability of the organization.

Spirituality's Silence in the Leadership Competency Architecture

In most organizations, the leadership competencies which serve as the foundation for leadership development, evaluation of leadership performance, and succession planning do not include an explicit domain called spirituality. There is a spiritual tone in the competency architecture with reference to: authenticity, self-awareness, emotions, intrinsic motivation, and leading from a place of values, honesty, integrity, and morality (Daniel & Jardon, 2015; Hicks, 2002); however, the competency profile falls short of naming these attributes as spiritual in nature. For the most part, leaders are not held accountable for spiritual growth and development in their training and performance, nor are their career trajectories dependent on honing a spiritual disposition.

A select number of contributors in the massive field of leadership research are presented to support the aforementioned claim. Their contributions, including leadership attributes, styles, frameworks, models, and practices are the most frequently cited by organizations in their leadership development programs, performance evaluation approaches, and succession planning decisions (Jackson & Parry, 2018).

Global Reach of Competencies

Scholarly works in leadership have a global span most notably with the work of Kouzes & Posner (2016) and House et al. (2002). Kouzes and Posner's (2016) international study, spanning six continents, uncovered the top twenty universal attributes of admired leaders. Leading the charge were the following attributes: honesty, forward looking, competency, inspiring, and intelligent. House et al. (2004) led the Global Leadership and Organizational Behaviour Effectiveness (GLOBE) research project which was an offshoot of Hofstede's (1980, 1991) seminal cross-culture work. The GLOBE study is arguably the most ambitious leadership project documenting followers' perceptions of leaders and identifying global leadership behaviours in 62 countries. Some of the qualities viewed positively worldwide include the following: trustworthy, positive, dynamic, effective communicator of values and vision, and a confidence builder.

Leadership Styles and Pathways

Added into the mix is an array of scholarly works pertaining to leadership styles and pathways for leading effectively. Hersey and Blanchard (2007) invite leaders to hone their situational leadership skills; that is, develop fluency in a range of leadership styles – selling, telling, participating, and delegating – and adapt one's style based on followers' willingness and ability to complete a task and the situation at hand. Rooke and Torbert (2005) argue that action logic – how a leader acts and reacts when their safety or power is challenged – is a stronger determinant of leadership effectiveness than style or personality. They classify leaders into seven action logic categories ranging from low to high performers: opportunist, diplomat, expert, achiever, individualist, strategist, and alchemist. Covey (1990), in his paradigm-shifting book Seven Habits of Highly Effective People, presents a principle-centered approach to leading effectively: being proactive, beginning with the end in mind, putting first things first, think win-win, seeking first to

understand, synergize, and sharpen the saw. Boal and Hoojiberg (2000) chart the pathway for becoming a strategic leader by building bench strength in the following areas: absorptive capacity, capacity to change, managerial wisdom, and tuning into strategic inflection points through discernment and social intelligence as the signature strength for leaders who aspire to trailblaze in competitive markets. Bass (1998) advocates that leadership effectiveness involves the coupling of transformation and transaction. Transformational leadership creates a climate of autonomous exploration where teams can skyrocket as high performers toward unimaginable heights in delivering on their organization's vision for the future, and transactional leadership focuses on having processes, systems, and structures in place. Conger and Kanungo (1988) chart the pathway for charismatic leadership, with its flair for dramatic and captivating stage presence, charm, storytelling finesse, and powers to uplift and persuade others. Mumford and Van Doorn (2001) flag the limitations of charismatic, transactional, and transformational leadership, and they advocate for pragmatic leadership. This approach is grounded in: identifying root cause problems; working with stakeholders and systems to craft proactive solution strategies and supporting structures; and, demonstrating the return on investment of solutions.

Leadership Attributes

A number of scholarly works address the attributes of leadership effectiveness, hinting at a spiritual element. Yukl (2013) proposes four prerequisites for leadership effectiveness: high internal locus of control, high achievement orientation, emotional maturity, and deriving fulfilment from influencing others for altruistic rather than self-serving reasons. Goleman's (1995) ground swell work moved emotional intelligence from the world of psychology into the world of work, with its focus on five composites: self awareness, self expression, relationship management, decision making, and stress management. Collins (2001) in his seminal book on Good to Great inspires leaders to stretch toward Level 5 leadership with its blend of humility and professional will. According to Collins (2001), Level 5 leaders are "a study in duality: they are modest and willful, shy and fearless. They act with quiet, calm determination and they rely principally on inspired standards, not inspiring charisma, to motivate." (Collins, p. 73).

Authentic leadership has also gained traction, yet remains contested as to where the line in the sand is for the right amount of transparency and revealing of self to others. George et al. (2007) position authenticity as one of the jewels of leadership effectiveness, yet Ibarra (2015) cautions about the authenticity paradox; that is, too much authenticity can hinder personal growth and development and can negatively affect followers' perception of one's leadership effectiveness. Staying within the domain of authenticity, sociologist Brown (2012), offers her milestone research on vulnerability with its paradigm-shifting findings about vulnerability being a strength and at the heart of unleashing experiences that bring purpose and meaning to life. Barrett (2006) presents a full spectrum values consciousness model that leaders and their organizations can use to build a values-driven organization. The model encourages leaders to develop full spectrum values consciousness in seven levels: survival, relationships, self esteem, transformation, internal cohesion, making a difference, and service.

Spirituality Breaking Barriers

There are a few leadership path seekers whose work aims to close the gap between the fields of spirituality and leadership in the workplace. Honourable mention goes to Greenleaf (1977) for coining the term servant leadership, which underscores the importance of service to followers and community as the primary responsibility of leaders. Servant leaders are encouraged to hone the following characteristics: accept wholeheartedly the stewardship of one's followers; put the holistic needs of employees and community ahead of self-interest and self-pursuits; strive to heal themselves and others when faced with suffering and failure; nurture the personal, professional, and spiritual growth of followers; and, advocate for social justice and equality, even when it is not aligned with the organization's financial plan (Greenleaf, 1977).

Equally noteworthy, is the work by Maxwell, a pastor, author, and speaker, who has written extensively about leadership. Within his work, is a distinct infusion of spirituality making explicit the inherent benefits of leading with

a spiritual presence. His books have sold more than twenty million copies, and they have been translated into fifty languages (Maxwell, 2021). He reminds us that "life doesn't do anything to you; it only reveals your spirit" (Maxwell, 1998), "an intentional life embraces only the things that will add to the mission of significance" (Maxwell, 2019) and he pushes the envelope with references to the divine, such as, "Question for God every morning: What is the main event today? What do you want me to focus on today" (Maxwell, 2012).

If Not Now, When?

Business plans, key performance indicators, and leadership competency frameworks are arguably important blueprints for organizations as they envision and execute their futures; there is no intent to disparage their salience. The intent is to bring into conscious awareness that spiritual leadership is a simpatico partner in the quest for organizational high performance and productivity that positions organizations for viability and competitive advantage. Given the literature on spirituality in the workplace spanning two decades and attesting to the organizational benefits of leading from a spiritual base, the question, in the words of Primo Levi, becomes "if not now, when"? (Levi, 1986).

Our Changing World

Our world is in an unsettled and precarious state, crying out for care and compassion. It is a world overwhelmed by: the perils of climate change and erosion of the ecosystem; political polarization; food, health care and education insecurities; racial tensions; social injustice and divisions; and, global economic and social recovery from the pandemic (Tsalis, et al., 2020). Additionally, there are new work world realities that beg for organizational accountability. At the forefront, amongst many pressing issues, is the expectation that organizational leaders will re-examine their diversity, equity, and inclusion (DEI) initiatives and embed DEI throughout their policies, procedures, practices, and employee experiences (Grieser et al., 2019; Thiederman, 2019). Specifically, this means lifting the vow of silence on difficult and unexamined topics that have been entrenched deeply in the psyche of organizations: implicit and unconscious bias, system disparities, microaggressions, privilege, gender identity and expression, discrimination, harassment, and bullying (Fuller et al., 2020; Fogarty & Zheng, 2018; Brown, 2017; Winters, 2017; Meyers, 2014).

Tackling the aforementioned challenges, which can seem daunting and completely intractable, requires a recalibration of leadership; that is, pressing the pause button and reflecting on new perspectives and practices for leading, which may be more appropriate for the times. This does not mean replacing one's leadership with an exclusively spiritual approach, but exploring how one's approach to leading can be augmented with a spiritual intentionality and purposefulness. Additionally, it does not mean that spiritual leadership is the sole and primary path to that which perplexes and ails the world; spiritual leadership is a partner in the work ahead.

The signature attributes of spiritual leadership, grounded in giving rise to the human spirit and unified humanity (Fry & Slocum, 2007) and recognizing and nourishing inner life (Ashmos & Duchon, 2000), have the power to heal a distressed world and a world that is in the churn of trying to find answers to complex issues. Specifically, spiritual leadership has a special blend of: creating a climate where care, compassion, and sanctity for human life flourish in community; fostering epic empathetic and generative relationships that communicate the importance of everyone and that the injustice that happens to one person is deeply felt by everyone in community; and, incorporating fully the spiritual bedrocks of authenticity, justice, fairness, and equality (Hicks, 2002). Leaders, who are grounded in spirituality, empower brave, resilient, and strong communities who chart pathways which inevitably lead to harmony, balance and solutions to complex organizational and global issues (Daniel & Jardon, 2015).

Discussion: Pathway to Integrating Spirituality into Leadership

Positioning spirituality in leadership and organizations requires more than a leap of faith; it requires personal commitment, perseverance and intentionality to champion a paradigm shift and a shift in actions. As Mintzberg (2015) noted, rebalancing our democracies, our planet, or ourselves will not come from the leadership within private and public sectors, but it will come from the pluralist sector; that is, "you, and me and we, acting together" (Mintzberg, p. 11). This leaves on the table a germane question stemming from the exploration of leadership spirituality – How can leaders foster spirituality in the workplace?

The answers to this question gleaned from these articles are varied, but two main categories can be seen: leading self and leading others. Although quite a few of the articles outlined in this paper focus on leading others (Efferin & Hutomo, 2021; Elias et al., 2017; Fry et al., 2017; Gotsis & Grimani, 2017; James, 2021; Lean & Ganster, 2017; Samul, 2020a), this discussion will emphasize the importance of leading self. There are three starting points for the journey toward spiritual leadership.

Beginning with One's Own Spiritual Discernment

First, is the importance of a leader's own spirituality. If one is to lead spiritually, one must be personally engaged in a spiritual journey. In the spiritual leadership model, inner life is the beginning point of spiritual leadership (Fry et al., 2017; Yang & Fry, 2018). The inner life of a spiritual leader is the impetus for the values of hope/faith, vision, and altruistic love, which a spiritual leader exhibits to create the space needed for spirituality in the workplace. The findings support the fact that leaders must recognize that the spiritual needs of their followers are as important as their physical, emotional, and mental needs (Fry et al., 2017). These spiritual needs, or inner life, must be prioritized not only for the employees, but also for the leaders themselves. "Spiritual leadership can only affect the meaningful work of employees if there is internal motivation and personal passion which is the output of self-transcendence" (Widodo & Suryosukmono, 2021, p. 2123). Leaders can only create for others what has already been created in them. In Samul's (2020a) discussion of the importance of spiritual intelligence, the importance of a leader's awareness of their own spiritual needs is highlighted as a crucial component in the creation of workplace spirituality. Recalling the spiritual leadership model (Fry et al., 2017), effective spiritual leadership through modelling the values of hope/faith, vision, and altruistic love can create a spiritual workplace and instill in their followers a sense of calling, or transcendence, and membership, or belonging. Efferin & Hutomo's (2021) study provided an excellent example of modelling by a senior leader, the result of which was employee retention in the face of long hours and less money. Spiritual integration for leaders, as advocated by James (2021), is an avenue which not only models spirituality to their followers, but also provides space for their own spiritual well-being. In order for leaders to lead spiritually, they must also be spiritually healthy themselves.

Beginning with one's own spiritual journey invites leaders to carve out time for discernment and to protect this time as sacred and immovable from one's daily schedule. Specifically, it means having undisturbed and undistracted time to reflect on inner self and the questions, issues, and goals that are important to one's spiritual awakening, growth, and development. It entails being gentle and non-judgmental with oneself when grappling with questions and concerns that, at first blush, may not have easy, straightforward answers. It involves sitting in the muddiness of uncertainty and confusion and allowing new insights to unfold. As noted by Palmer (1998), "Before you tell your life what you intend to do with it, listen for what it intends to do with you" (p. 87).

Integrating Spiritual Awakening into Workplace Behaviours

The second area of importance is developing behaviours that contribute to workplace spirituality. Based on the findings of their study with medical laboratory employees, Yang and Fry (2018) posit that spiritual leadership in this setting positively affects outcomes of both employees and the organization. They suggest that developing spiritual leadership characteristics may create a workspace conducive to spirituality. Lean and Ganster (2017) reiterate this idea by outlining 39 essential behaviours common to effective spiritual leadership. Although the knowledge of these behaviours could be helpful in defining spiritual leadership, this lengthy list may be overwhelming for practitioners attempting to develop their capacity as spiritual leaders. As outlined earlier in this paper, these 39 behaviours could be categorized into themes drawn from the spiritual leadership model. Doing so could make this list more manageable and allow practitioners areas in which to focus.

For those who are new to the spiritual journey, beginning with the theme around their own inner life would allow them to lead and model spirituality from personal experience. Modelling of one's personal spirituality (Fry et al., 2017) and exhibiting these behaviours could stimulate one's followers to explore their own spirituality and contribution to workplace spirituality (Lean & Ganster, 2017). Astuti and Haryani (2021) encourage spiritual leaders to exercise values, attitudes, and behaviours that will motivate themselves intrinsically, and to make the aforementioned explicit in conversations. Furthermore, this exercise may also serve to motivate one's followers towards realizing their own spirituality. The development of a leader into a spiritual leader is a journey. In order to develop new skills and make changes in one's leadership style, a leader needs to be intentional and, in turn, encourage others to be the same (James, 2021).

Accountability for the Spiritual Journey

The third area of importance is evaluation. Of the articles reviewed, only one specifically highlighted evaluation as an integral part of the growth of spiritual leaders (Widodo & Suryosukmono, 2021). The researchers suggested that leaders should be evaluated as part of their performance appraisal on their success as a spiritual leader. They posited that metrics should be developed by the organization to better measure their effectiveness. While this idea could be commended for its desire to reinforce the importance of creating a spiritual workplace, formalizing it in this way may have negative effects on a leader's motivation and authenticity. However, as suggested earlier, including workplace spirituality as part of the organizational KPIs could provide vital information about the spiritual well-being of the organization and its employees. Consequently, including spiritual evaluation as part of a leader's personal developmental strategy and as part of an organization's scorecard may provide valuable feedback. Perhaps this could be a discretionary addition to a leader's performance evaluation; that is, a performance factor added to a leader's performance evaluation, should this be of interest to their personal and professional growth and development.

Further Research

All of the articles, except two (Astuti & Haryani, 2021; Elias et al., 2017), gave suggestions for further research. Some called for similar exploration in different organizations or departments (Efferin & Hutomo, 2021; Fry et al., 2017; Samul, 2020a; Widodo & Suryosukmono, 2021) or in other countries (Yang & Fry, 2018) or in different religious frameworks (James, 2021). Others called for further development of their theories (Lean & Ganster, 2017) or examination of alternate areas of resistance (Gotsis & Grimani, 2017). Regardless of their recommendations, the need for more research in the

area of spiritual leadership will only advance this body of knowledge and bring positive change to our organizations, leaders, and employees.

Conclusion

Despite the literature on workplace spirituality and spiritual leadership, many still misunderstand or refuse to acknowledge the value added both to employees, leaders, and organizations (Lean & Ganster, 2017). However, the greater challenge may lie in translating this knowledge to actual workplace practice. The landscape of leadership continues to change. Our organizations are becoming more diverse, employees are seeking more meaning in their work, and discrimination and inclusion continue to create difficult situations. Leading spiritually may not be the complete answer to these challenges, but it may create a space for leaders and followers alike to live more authentically and be more connected to each other and the world.

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35. Community-Based Research for Food Systems Change: A Collaborative Praxis [Award Winning Paper]

VANESSA L. DAETHER

*Best Paper Award For Contribution to Practice

Abstract

Organizations that operate community food initiatives (CFIs), such as community gardens, farmer training workshops, and food literacy projects, are challenged to provide evidence of the tangible contributions they make towards advancing food security, food sovereignty and/or just and healthy local food systems. Critiqued within the literature for failing to address income as a root cause of food insecurity (Martin, 2018, p. 116), acknowledge how they reinforce inequitable systems of power (Guthman, 2008, pp. 434–436), and offer meaningful alternatives to the neoliberal economic system (Moragues-Faus, 2017, p. 471), academic and community stakeholders have called for more focused and robust evaluation practices for CFIs (Knight, 2013, p. 30; Levkoe & Blay-Palmer, 2018, p. 50; Loopstraw & Tarasuk, 2013, p. 55).

Unfortunately, for many organizations, addressing these critiques through evaluation remains elusive due to a lack of conceptual frameworks, financial supports, and literature (Barbour, Ho, Davidson, & Palermo, 2016, p. 128). Accordingly, this reflective paper reviews the results of an applied doctoral research project investigating how organizations operating CFIs within Central Vancouver Island can evaluate their impacts from a food systems perspective. Structured through community-based research methodology and framed by the food regime analysis and food sovereignty theoretical frameworks, this qualitative study employed semi-structured interviews, document analysis, and an analysis of food systems definitions to identify the evaluation method and indicators required to revaluate CFIs' food systems impacts. The findings supported the drafting of a food systems-focused evaluation framework for the study's community research partners, including an evaluation logic model, matrix, and plans. In addition, the process of conducting community-university research revealed avenues for improving the application of CBR and social sciences theory within applied, collaborative doctoral research.

Keywords: community-based research; community food initiatives; evaluation

Introduction

This reflective research paper summarizes the conduct and results of an applied, collaborative doctoral research project that studied how organizations operating community food initiatives (CFIs) within Central Vancouver Island can evaluate their impacts from a food systems perspective. First, an outline of the project's applied context opens the paper to reveal the study's purpose, site, and research partners and describe how the community-university research collaboration was founded, nurtured, and maintained through community-based research (CBR) methodology. Second, the study's theoretical framework is addressed to define the rationale and tensions associated with the application of social science theory in an applied research setting. Third, the presentation of findings describes how the research team (also referred to as the CBR Team) and I applied the results to inform the drafting of a food systems-focused

evaluation framework (i.e., the evaluation logic model, matrix, and plans). Fourth, this paper closes with a discussion of the challenges and opportunities the CBR Team and I faced in balancing our distinct expectations (me as a doctoral candidate and the research partners as grassroots community organizations interested in actionable results) with the epistemological demands of CBR and offers recommendations to the academy pertinent to how best prepare students and community stakeholders for collaborative research.

Applied Research Context

This research project grew from an operational challenge my colleagues and I faced while working at the Cowichan Green Community (CGC), a registered not-for-profit organization whose mission is to "cultivate food, community, and resilience" (CGC, 2021, para. 2) within the Cowichan Region of Central Vancouver Island. As program staff responsible for organizing community-based food events, initiatives, research projects, and workshops, our jobs frequently entailed evaluation. As we faced high staff turnover rates, limited evaluation expertise and resources, overambitious workloads, and restrictive funding, our evaluation practices mainly consisted of funder-driven evaluations that often failed to deliver meaningful data to our organization. For example, such evaluations required our team to gather generalized program metrics, including details on outputs, participation rates, program activities, and program expenditures. Few, if any, asked or supported our team to gather data on the broader, systems-level impacts of our work or contemplate how our initiatives met our organization's mission statement. Although we recognized that funders did not wish to burden CGC with unrealistic evaluation processes and also needed to collect data to evaluate the merits of their funding opportunities, we felt that when organizations direct vital energy to evaluation, the results needed to be impactful.

Consequently, our team sought to develop an evaluation framework that would assist us to evaluate our work in relation to the systems-level critiques we faced, namely: (a) can CFIs genuinely tackle the root causes of food insecurity?; (b) can CFIs present democratic alternatives to neoliberalism?; and (c) can CFIs amend social injustices? Further, we hoped to use the results of such an evaluation framework to communicate our impacts (and limits) to funders and local governments, who, in our experience, failed to recognize that the impacts of our CFIs evolved over a project's lifespan and occurred outside the scope of our place of work. Thus, aware that CGC had a responsibility to progress our field of practice by addressing this knowledge gap, our staff began to explore how we might evaluate our work's impacts on our local food system. In pursuit of this goal, we applied (unsuccessfully) for funding to support evaluation, discussed and defined food-based evaluation matrices, partnered with a local university to engage students on the idea of evaluating CFIs, and recruited interns to develop evaluation concepts. With each activity, we made small steps towards our goal. Unfortunately, without dedicated evaluation funding, we were unable to actualize any one idea.

Fortuitously, our investigation into evaluation practices surfaced in tandem with my acceptance to Royal Roads University's (RRU) Doctor of Social Sciences (DSocSci) program, where I chose to dedicate my research to this applied problem. With CGC willing to form a community-university research partnership, we commenced a five-year, multi-stakeholder research collaboration with the Cowichan Food Security Coalition, which served as an advisory team, and the Nanaimo Foodshare Society, a registered charity in Nanaimo, BC, that also faced barriers to evaluating their CFIs. In November 2017, we formalized our working relationship and designed a research project to answer: "How can the impacts of CFIs on Central Vancouver Island be evaluated from a food systems perspective?"

Methodological Framework

Due to the collaborative nature of this study, our methodological selection rested upon eight requirements, including: (a) the interdisciplinary trajectory of food studies and food systems research in Canada (Koç, Bancerz, & Speakman, 2017, pp. 3–6); (b) the growing body of literature calling for more community-university research collaborations in the area of

food systems and evaluation (Barbour et al., 2016, p. 128; Barton, Wrieden, & Anderson., 2011, p. 593); (c) the inter/trans-disciplinary focus of RRU's DSocSci program (RRU, 2014, pp. 3–4); (d) my axiological and epistemological outlook which favoured applied, inter/trans-disciplinary research that fosters an equitable sharing of power, relationship-building, and reciprocity; (e) the boundaries and expectations of doctoral research that defined our timeline and matters such as intellectual property; (f) the collaborative nature of this study; (g) CGC and NFS's need for a flexible participation model; and (h) CGC and NFS's desire for action-oriented results.

To meet these demands, we selected CBR, a branch of action-oriented and participatory research that offers an alternative approach to positivist epistemology and knowledge creation. By dispelling research hierarchies and the notion that the academy is the custodian of knowledge, CBR encourages the active collaboration and participation of academic and community partners to co-design knowledge creation instruments and meaningfully share data collection, analysis, and knowledge mobilization processes. Inspired by the writings of Etmanski, Hall, and Dawson (2014), Israel, Schulz, Parker, and Becker (1998), Ochocka and Janzen (2014), Smith (2008), and previous CBR research within food studies (Andrée et al., 2014; Rojas, Black, Orrego, Chapman, & Valley, 2017), we designed a qualitative study consisting of three data collection methods. Specifically, throughout 2018, we conducted 17 semi-structured interviews with leaders of CFIs operating on Vancouver Island and Coast, a document analysis of six academic and 19 community-published reports on the evaluation of CFIs, and an analysis of 45 definitions to food systems terms (e.g., food justice, food literacy, food security, food sovereignty, Indigenous food sovereignty, and the right to food) retrieved from the public websites and/or social media channels (e.g., Facebook and Twitter) of 27 organizations in British Columbia that operate CFIs.

Though I was an emerging scholar new to CBR, and CGC and NFS felt our research methodology was too fluid or unbound (concerned by CBR's broad interpretations and lack of defined protocols), we established procedures to guide our working relationship and our implementation of CBR. First, we agreed to adapt Kemmis, McTaggart, and Nixon's (2014) Action Research Cycle (planning, action, observation, and reflection) (p. 18) as part of our methodology. In doing so, we applied the Action Research Cycle to ensure we consistently reviewed our research steps and took the necessary time to plan the study's subsequent stages. Second, we agreed to formalize the working relationship between CGC, NFS, and me through a voluntary Memorandum of Understanding (MOU). The MOU defined our research team's operational norms relevant to communication, document and resource sharing, inducements, meeting schedules, project scope, and responsibilities, as well as policies and procedures on anonymity and information use, confidentiality, conflicts of interest, conflict resolution, disclosure and retention of information, knowledge mobilization, possible negative effects, and the right to withdraw. With the support of RRU's Office of Research Ethics and faculty, the drafting of the MOU required our team to unpack the tenants of RRUs ethics application and review process, discuss the minutia of our collaboration, define how to operationalize CBR within the context of a doctoral study, and grapple with issues sensitive to research collaborations, including the delineation and sharing of intellectual property. Although not without its contentions, the MOU served as a beacon to remind ourselves of our individual and shared responsibilities to the research project and each other and as a reference point to inform our collective decisions.

Theoretical Framework

In drawing from Powers' (2010) description of a theory's role in research—to outline what society currently knows of a phenomenon, elicit questions for future inquiry, and change and advance to indicate a progression in what is known of a phenomenon (p. 5)—the CBR Team and I searched for a theoretical framework to account for both the historical events that resulted in CFIs and the current circumstances requiring their further evaluation. In consultation with the CBR Team, I met these requirements by pairing food regime analysis and food sovereignty. Equally rooted in political-economic discourse, food regime analysis frames the development of the global, industrial food system as part of the colonial and neocolonial agendas (Friedmann & McMichael, 1989, pp. 93–95; Friedmann, 2009, p. 336), and food sovereignty offers a critique of the historical and contemporary economic and political systems, or regimes, that

disenfranchise local or small-scale food producers and consumers (Gürcan, 2018, pp. 324–326, Wiebe & Wipf, 2011, pp. 3–8). Together, they frame the evolution and future trajectory of market-based food systems and offer a historical yet modern lens to analyze local to global food systems and their discontents.

In practice, I applied the theoretical framework post-analysis to contextualize this project's findings and identify gaps within the evaluation framework. From a myopic focus on agrarian food systems (over aquatic, Indigenous, or non-market food systems) to issues of power that perpetuate food insecurity, I applied theory to reveal the evaluation framework's limitations and identify opportunities for change. While a positive outcome, the use of theory within this study proved an area of contention as the CBR Team found the theoretical application burdensome. Faced with action-oriented mandates and a lack of time, neither organization possessed the resources to explore the theoretical literature, contemplate Powers' articulation of theory, or assess how theory could inform our evaluation framework. To this, CGC and NFS acknowledged and respected the need for theory within an academic context and understood why I believed that it was critical to review our findings and the evaluation framework through the perspectives of food regime analysis and food sovereignty. Still, the use of theory distanced both research partners from my analysis and, equally so, our findings—an outcome counter to our understanding of CBR's tenants. Consequently, as we prepare to close our study, the experience leaves me questioning how I could have improved the implementation of theory within this research context and how academia can make social sciences theory more accessible to community stakeholders.

Results

The analysis generated seven key findings that challenged and broadened our research team's understanding of evaluation. We drew upon each theme within the design of our evaluation framework, including our approach to the evaluation method and indicator development. These findings included:

1. *The evaluation should be cost-effective, accessible to a broad audience, quick to administer, and accompanied by supports.* Should our evaluation framework fail to account for the operational landscape of CFIs and prove too technical to implement, the evaluation would not become a part of CGC or NFS's work culture.
2. *The evaluation must be culturally safe.* As clearly identified in the literature (Blanchet-Cohen, Geoffroy, & Hoyos, 2018, pp. 21–29; Hanberger, 2018, pp. 114–119; Patton, 2011, p. 247; Patton, 2012, p. 76), evaluations must guarantee respect for culture. However, the interview data revealed that many staff of CFIs on Vancouver Island and Coast felt ill-equipped to evaluate from a culturally informed lens. This data, linked to concepts of anti-racism, decolonization, food justice, and Indigenous food sovereignty, suggested that staff require further resources or training to conduct culturally safe evaluations and that organizations bear a responsibility to prepare staff to take on this essential yet sensitive work.
3. *The evaluation should empower staff in their work.* The evaluation framework must operate from a position of appreciative inquiry or evaluative inquiry (Preskill & Torres, 1999, p. 44), whereby the process and results are not an exercise focused on deficits but a process of ongoing exploration and learning dedicated to evolving and improving CFIs. Such a focus may increase staff willingness to evaluate and the value they place over their work.
4. *The evaluation should be adaptive to evolving food discourses.* One of the most impactful outcomes of this study was a discussion of the breadth of food terms employed to define CFIs. From food justice, food literacy, food sovereignty, food systems, and more, there are a multitude of terms and countless definitions to describe a CFI's purpose and proposed impacts. As such, this evaluation framework needs to contend with food discourse and the ever-changing lexicon employed in food studies and food systems work while remaining accessible to a general audience. Thus, the evaluation framework needs to tacitly connect to key food terms without burdening the process in technical language.
5. *The evaluation needs to reflect the scaled impacts of CFIs.* In order to recognize the numerous actors and arenas that CFIs interact with or impact, the evaluation framework needs to account for the various sub-systems (within a

local food system) that CFIs intersect, including the participant, organization, community, and local food system. This finding confirmed our systems approach to the evaluation framework.

6. *The evaluation should support organizations to evaluate the intangible systems-level impacts of CFIs.* The findings indicated that we could not alone evaluate the food systems impacts of CFIs. Instead, we also need to evaluate their broader, interdependent systems- level impacts. From decolonization to emergency preparedness, the evaluation framework needs to facilitate a process to capture both food systems and the broader systems indicators that equally affect the attainment of just and healthy local food systems. As identified in Table 1 (Preliminary Logic Model Template), the Indicator Themes and the four Indicator Levels (e.g., participant, organization, community and local food system) represent this perspective. Likewise, in Table 2 (Preliminary Evaluation Matrix Template), the systems-informed evaluation questions mirror this outlook.

7. *The community evaluated should develop the evaluation.* While our interview data revealed that many staff of CFIs would appreciate access to standardized food systems evaluation frameworks, interviewees also described that it is best practice to develop evaluations directly with those engaged or impacted. A sentiment mirrored in the collaborative and participatory evaluative literature (Cousins & Chouinard, 2012, p. 10; Fetterman, Rodriguez-Campos, Wandersman, & O'Sullivan, 2014, p. 145; Schones, Murphy-Berman, & Chambers, 2000, p. 55), a collaborative approach to evaluation may increase buy-in from all stakeholders and the implementation of evaluation results. For interview participants, this was a critical demand of evaluation within an Indigenous or cross-cultural context and/or with vulnerable populations. In practice, this indicated that the evaluation framework should not offer prescriptive evaluation indicators. Instead, the framework should offer indicator themes related to a food system and the broader systems that CFIs intersect. Users of the evaluation framework are, accordingly, encouraged to draft their initiative-specific indicators through the lens of the diverse indicator themes presented in Table 1.

In summary, the findings of this project informed not only the method that this study's evaluation framework for CFIs required but the types of indicators relevant to a food systems-focused evaluation. As a result, this study produced a draft evaluation framework for CGC and NFS that we hope will support each organization to design and evaluate their work in a manner reflective of the scaled impacts of their work and the various stakeholders they engage. However, as this study approaches completion, we have additional plans for our findings and research collaboration. First, the evaluation framework possesses gaps and shortcomings that we need to amend. As highlighted in the above outline to the theoretical framework, our evaluation framework is data-driven and is missing several viewpoints, including anti-racist, gendered, non-agrarian, and non-market perspectives. Second, we need to test the evaluation framework for its efficacy. Although our initial research plan was to test the evaluation framework, our ambitious research goals conflicted with busy work schedules and the onset of the COVID-19 pandemic. This test will now likely take place outside the confines of this dissertation. Third, we need to reimagine the evaluation framework. As exhibited by Tables 1 and 2, the evaluation framework, despite our best efforts, does not fully align with our first finding's demand for an easy-to-use framework. While the logic model format was selected as this approach speaks to funders and is congruent with best practices in the evaluation field, CGC, NFS, and the Cowichan Food Security Coalition believe it is overly complicated. Therefore, our future work may look to how we can repurpose our data to generate other equally useful expressions of program measurement or assessment. One option is to develop an online assessment tool for organizations to identify where and how their proposed initiatives intend to impact their local food system.

Table 1 *Preliminary Logic Model Template*

Program Purpose:					
Program Outputs:					
Inputs / Activities / Participants	Indicator Themes[1]	Participant Level Indicators	Organization Level Indicators	Community Level Indicators	Systems Level Indicators
Inputs: Activities: Participants	Accessibility Adequacy Agency Availability Area Food and Culture Food Economy Food Justice Food Literacy Food Sovereignty Indigenous Food Sovereignty				
	Administration Capacity Building Collaboration/ Teamwork Communication Community Building Decolonization Emergency Preparedness Health Social Connections Sustainability				

1 As the findings from my analysis (a) identified over 2,000 unique indicators for the evaluation of CFIs and (b) cautioned against the use of a prescriptive approach or indicators, Indicator Themes were developed to capture the essence of the 2,000 indicators identified. Within the full evaluation framework, each Indicator Theme is accompanied by a definition to help users develop their initiative-specific indicators. In practice, in recognition that not all CFIs propose to offer impacts pertinent to each indicator theme, users of this evaluation framework are encouraged to select the most relevant indicator themes for an evaluation.

Table 2 *Preliminary Evaluation Matrix Template*

Evaluation Questions	Intended Results	Participant Level Indicators	Organization Level Indicators	Community Level Indicators	Systems Level Indicators	Data Source	Data Collection Method	Analysis Procedures
Who/how has this CFI impacted/ engaged within the local food system?								
How has this CFI contributed to a just and resilient local food system?								
What other impacts did this initiative have?								
What impacts are missing?								
What systemic barriers impede the achievement of intended impacts, and who holds power to affect change?								

Discussion

In addition to the evaluation framework, the applied nature of this collaborative study generated significant learnings and recommendations for the academy pertinent to the application of CBR and social science theory within an applied,

collaborative doctoral project. As documented previously by scholars who explored the challenges and merits of community-university research (see Jansson, Benoit, Casey, Phillips, & Burns, 2010; Klocker, 2012; Lewis et al., 2015; Paré, 2019; Shore, 2007; Travers, Pyne, Bauer, Munro, Giambrone, Hammond, & Scanlon, 2013; Warren, Calderón, Kupscznk, Squires, & Su, 2018), the doctoral process (or at least my comprehension of it) appeared to place my needs ahead of the community partners and, therefore, limited our full implementation of CBR. For our research team, we witnessed this on numerous occasions, including: (a) my academic timeline that directed the pace of the research project, a speed that admittedly was too slow for the CBR Team who wanted timely actionable results; (b) my ethics application whose technical language prevented CGC and NFS's fulsome review of the document; (c) the purpose and design of the theoretical framework whose language alienated the research partners and prevented their direct connection to theory, despite its benefits to the study; and (d) my requirement, as the primary investigator, to independently publish original work, a process that excluded CGC and NFS from elements of the analysis and reporting of findings and recommendations.

To address some of these concerns, I made an effort throughout our study to reflect on the purpose of CBR and transfer power from me to the research partners. While inevitably imperfect, five examples are worth highlighting. First, CGC and NFS requested a definition of participation rooted in flexibility, and that would allow each organization to autonomously adjust their level of engagement in the project as it unfolded. As our research took over four years to complete, they required a means to participate that would support varying levels of engagement and adapt to staff turnover and fluid work schedules. Accordingly, in recognizing that CGC and NFS's participation throughout the project would be more successful if we built flexibility into its definition, we developed a model of collective engagement suited to everyone's shifting capacities. As a student, this required me to be responsive to CGC and NFS's participation in the project and adapt my role as the situation required.

Second, during data collection, NFS and I shared the responsibility of conducting the semi-structured interviews. Looking back, I was, perhaps naively, concerned that our unique interview styles would complicate our data and findings. Regardless, NFS's staffs' interview style and the rapport they built with their interviewees drew out data and themes that my interviews did not. Instead, our findings benefited from their participation as an interviewer. Equally so, NFS benefited by building new relationships with future community partners—a result that aligns well with the intent of CBR.

Third, between November 2017 and November 2018, the CBR Team and I met once per month to advance the project's objectives. These meetings typically followed a ridge one-hour agenda that I prepared. However, before the meetings turned to our research project, they typically commenced with more casual conversations related to CGC and NFS's upcoming grant applications and other projects. Though unrelated to our research question, these discussions served an important CBR function—relationship building which "means seeing the relationships and the vision, rather than the project, at the heart of the work" (Andrée et al., 2014, p. 50).

Fourth, the project's timeline and associated expectations required flexibility. In designing this study, we intended to both develop and test the evaluation framework. Instead, in 2019, as I completed the analysis and we drafted the evaluation framework, both organizations faced busy funding cycles, and I was about to start maternity leave. Again, in 2020, the onset of COVID-19 redirected CGC and NFS's energies, as each organization found itself awash with new projects and demands presented by the pandemic. These circumstances, while challenging, resulted in our collective decision not to pursue a test of the evaluation framework within my doctoral timeline. Instead, I took this period to analyze how the pandemic exposed the broader systemic injustices ubiquitous to food systems and CFIs, re-apply theory to our evaluation framework, review the literature, and revise what we had created. This additional time permitted better results for CGC and NFS and allowed our research team to maintain our mutually supportive relationship.

Fifth, I wrote the dissertation in a manner that attempted to be inclusive of the expertise and voices of my research partners. Although the dissertation is an original work, we selected two processes to bring CGC and NFS's voices to my knowledge translation. First, I followed Klocker's (2012, p. 156) decision to write their doctoral dissertation through collective pronouns, a practice readers can see reflected in this paper. Despite this practice leaving me feeling uncomfortable and exposed, having been trained within disciplines that discredit first-person narratives, this act allowed me to give much due credit to CGC and NFS. Second, in alignment with the CBR protocol standards

"developed in 1994 by a committee of the Oakland Community-Based Public Health Initiative" (as cited in Brown & Vega, 2008, p. 395), I asked CGC and NFS to review my dissertation and confirm that I accurately and fairly represented their organizations, perspectives, and work. I also sought their feedback on the evaluation framework and the final recommendations.

Overall, while I am content with the work we completed, this collaborative research experience highlighted four strategies for improving the application of CBR and social sciences theory within applied, collaborative doctoral research, including: (a) developing ethics applications for collaborative, community-centred research—ones written in accessible language and focused on the research team's collective responsibilities to research and each other; (b) creating resources for community partners that deconstruct the technical processes of an ethics review, methodological and theoretical selection, methods selection, data collection, analysis, and reporting; (c) offering a clearer means or more explicit rules for how community research partners can have their authentic voices represented in a doctoral dissertation (without compromising the students' need to publish original work); and (d) designing a new approach to how universities teach CBR to graduate students—one which draws upon literature published by students using CBR over academic staff who might not face the same barriers to adequately fulfilling the tenants of the methodology.

Conclusion

As this study and research partnership prepares to close, the parallels between the role of CBR in food studies research and evaluation in CFIs become more transparent. In practice, collaboration takes many forms. However, within this study, collaboration through CBR allowed our research team to delineate our participation needs and address uneven power dynamics. Although imperfect, by defining our collaborative praxis, we demonstrated how applied research could contribute to grassroots food systems change. For this project, this change is presented in a new approach to evaluating CFIs and a deeper understanding of how to form community-doctoral research partnerships. From this, I take away that the realization that positive outcomes associated with both community-university research and CFIs rest in part upon the capacity of individuals and institutions (whether an organization or university) to embrace the uncertainty and immense freedom that results from sharing power. In doing so, those engaged in applied food studies research may contribute equally to an erosion of the barriers between academic and community stakeholders while contending with the critiques of CFIs and their future trajectories.

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Author Note

SUSTAINABILITY, HUMAN AND BUILT ENVIRONMENT: DOCTORAL STUDENT SUBMISSIONS

36. Assemblage Thinking for Urban Design Research Planning and Adapting Methods for Studying International Immigrants in Toronto's Modernist Suburbs

GIACOMO VALZANIA

Abstract

This paper proposes a discussion on the application of Assemblage Thinking (AT) in research methods for urban design. It does so by extracting three AT key concepts and translating them into methodological principles emerging in previous works. Both are tested for a Ph.D. research project on the spatial adaptation and desire for change of international immigrants in Toronto's modernist suburbs. The usefulness of AT as guiding framework is exposed in the planning of preparatory activities, recruitment strategies, and research activities with human participants, and their transfer to online settings due to the advent of the Covid-19 pandemic. This experience suggests the efficacy and resilience of an AT-inspired approach in adapting to unpredictable events, without diminishing the quality and depth of the research findings. At the same time, it exposes the importance of accepting temporal compromises and turns of direction along the way. The paper concludes with a call for further exploring combined research methods in which in-person and remote activities, as well as individual and collective ones, are joint to generate heterogeneous research data and cope with future unpredictable events.

Keywords: assemblage thinking, research methods, urban design, online research, adaptation, human participants

37. Is There an Affinity Between Terrorism and Norbert Elias' Process of Civilization?

VALARIE FINDLAY

Abstract

Terrorism has been studied across many disciplines – from history to criminology and sociology with inferences from psychology and psychoanalysis – with a primary objective of concluding what causes terrorism? Generally, the attempt to explain terrorism has been causality from singular notions – political and economic implications, such as destabilization, democratization or where pacifism fails. Other research has examined causality from the individual experience, where a perceived injustice or inaccessibility to equitable processes forms the basis for rejecting social arrangements, creating a shift to an alternate ideology.

Norbert Elias' process theory, The Civilising Process, resonates from perspectives on social bonding and grouping and how these interactions influence social figurations. Elias' non-normative characterization of human behaviour reflects on the fluid nature and will of humans with transformative compliance at the behavioural level. These fluid transformations, with no known goal or objective, void of value or cultural judgement, are described as civilizing. In this, Elias views two central themes – the long term social connections through power, behaviour, emotions and politics and the evolving networks of interdependent humans – as crucial in understanding grouping and bonding of individuals and what constrains them.

Where dynamic interfaces of the prevailing power balances influence people's social existence, social changes cause the ebb and flow within accepted social values. Therefore, formed on the parallels of terror activity from existing quantitative data and the qualitative data from identifiable social features, this research will focus on these directional changes emerging from unconscious, learned interactions that become the social standards of groups.

38. Transcending from Structural Functionalism to Theoretical Pluralism in Disaster Research [Award Winning Paper]

PAOLO FRESNOZA

*Best Paper Award for the Contribution to Theory

Abstract

Climate change-exacerbated disasters and its rapidly evolving multi-dimensional complexities render structural functionalism, the most common theory in understanding the social roles, functionality, and resiliency nexus, as incommensurate. Employing multiple theories, rather than solely relying on structural functionalism, is a more robust and effective approach. Theoretical pluralism borrows from the epistemological tenet of interdisciplinarity, where climate change complexities can be more effectively analyzed upon fusing diverse disciplinary lenses, or theories in this case, than elucidating with only structural functionalism on hand. Praxis principles in interdisciplinarity, as espoused in theoretical pluralism, also prescribes disaster research to adopt pragmatic, practitioner-centric imperatives to effect change. Featuring the research context of Indigenous peoples in typhoon-prevalent Batanes Province in the Philippines, the complex dynamics of Indigenous resiliencies in light of new uncertainties of climate change require more novel elucidatory approaches through theoretical pluralism. For its advancement and operationalization, a research design framework that features nuances of Indigenous contextualization and engendering, positioning structural functionalism as a heuristic, and evaluating and selecting complementary theories to interface, among others has been proposed.

Introduction

Mid-20th century theoretical developments that elucidate the society-environment nexus in disasters ought to have been advancements, yet remain fixated with Parsons-reminiscent structural functionalism (Kreps & Drabek, 1996; Alexander, 2000). As the gold standard theory for contextualizing disasters in its sociological dimensions (Alexander, 2000; Aguirre, 2019), functionalism's dominance has diluted opportunities to employ integrative, multiple theoretical approaches responsive to new normals and complexities like climate change. This paper posits that heterogenous and applied theoretical interfaces are the new, 21st century shift in disaster studies and transcends the predominating, often singular approach of functionalism.

Researching climate change-exacerbated disasters' sheer impacts and disruptions no longer affords studies entrenched in traditional and uni-theoretical silos that merely explain with little to no thrust for praxis (Clark & Wallace, 2015; Davidson, 2015; Fresnoza, 2021). To reconcile, rich learnings in diversifying theoretical utilization and its actionability can be learned from inter- and transdiciplinarity. Interdisciplinarity principles inform us that meaning construction from diffused rather than solitary concentrated perspectives is key (Frodeman & Mitcham, 2007). This stems from the rationale that disasters are not only environmental problems, but economic (Etkin, 2004), operational (Rodriguez-Espindola, Albores, & Brewster, 2018), technological (Rose, 2014), and social justice (Sillitoe, 2004) conundrums as well. In parallel, transdisicplinarity also informs us that effectivity is not only rooted from offering credible explanation using a multiplex of paradigmatic and disciplinary purviews, but from a moral duty to effect positive

change, engage in action, and formulate solutions to reduce harm (Meyer, 2007). Thus, this paper will also attempt to transpose the epistemological diversity and utilitarian frameworks from both inter- and transdisciplinarity respectively into theories used in disaster research.

Much of the propositions in this discourse are relatable to the instances of typhoon-prevalent Batanes Province in the Philippines. While functionalist approaches produce novel explanations how social, technological, and Indigenous agencies impact disaster resiliencies of the Ivatans (Fresnoza, 2021), the province's Indigenous peoples, such outcomes remain superficial. This paper therefore proposes how climate change complexities combined with Indigenous contexts justify the use of polytheoretical orientations. This is justified since singular theory reliance hardly unravels deeper, more sophisticated societal problems nor engages into problem solving. It is the aim of this study to foster dialogue and advance multi-theoretical explorations in disaster research as a more robust means to examine complex social configurations and expose critical issues. Social science researchers of all levels are likewise encouraged to reap insights from the proposed and expanded theoretical articulations posited in this paper.

Examining the Batanes Context and Ivatan Disaster Resiliency

Batanes provides a context that illustrates a complex social-climatological-environmental-Indigenous interrelationship. Deeply understanding these interwoven elements within the geo-cultural milieu prescribes theoretical directions and approaches to be discussed later in this paper.

Located in the northernmost region of the Philippines, Batanes is a 10-island province that sits along the pathway of the planet's strongest meteorological disturbances (Provincial Government of Batanes, 2017; Warren, n.d.). Among the Philippines' average of twenty strongest typhoons (Hiwasaki, Luna, Syamsidik, & Shaw, 2014; "Philippines", n.d.; Valenzuela, 2014), between five to twelve traverse Batanes annually (Provincial Government of Batanes, 2017; Warren, n.d.). Other than its prevalent exposure to typhoons, Batanes is also highly vulnerable to typhoon epiphenomena such as landslides, storm surges, and flash floods (Provincial Government of Batanes, 2017).

As an all-encompassing and ubiquitous global disruption, climate change pressures the Ivatans to face exceptional threats. While the Swiss NGO Disaster Risk Reduction Platform (2014) forecasts more frequent and intense meteorological disturbances in the Philippines, various sources detail Batanes' specific impacts of lessened frequency but greater typhoon ferocity (De Guzman, Zamora, Talubo, & Hostallero, 2014; Fresnoza, 2021; Rappler, 2017; Villanueva, 2014). Yet, climate change and its impacts have induced monolithic shifts in the agricultural, economic, and social landscapes of Batanes, such as altered farming schedules (De Guzman et al., 2014), decreased agricultural productivity (Cadiogan, 2017), and increased dependency to post-disaster external aid (Fresnoza, 2021).

Despite Batanes' distinct typhoon endemism, generations of Ivatans have normalized climatological threats, created localized storm-proofing practices, and vernacularized these resiliencies as part of Indigenous psyche and identity (Hornedo, 2000; Valenzuela, 2014). Fresnoza (2021, p. 165) similarly asserts, "full immersion and incubation through multiple generations has allowed enculturation and deep infiltration of knowledge into the Ivatan social fabric and identity that enabled resiliency from the harsh climate." Ivatans today take pride in their contemporary use of Indigenous resiliency practices such as wind and cloud observations for weather prognostication (*maychakawan*), use of Indigenous typhoon-resilient architecture (*sinadumparan*), and voluntary cooperative assistance to the community (*yaru*) (Hornedo, 2000; Fresnoza, 2021).

Ivatan Resiliency as a Projection from Structural Functionalist Lenses

The theoretical premise of structural functionalism, or simply functionalism is the sociological explication that each component that structure society has assigned roles and functionalities (Gingrich, 1999), is interdependent from

each other (Holmwood, n.d.), and contributes to overall functionality and stability (Crossman, 2000; Gingrich, 1999). Functionalism frames how social roles and foundations such as common values, beliefs, customs, education, laws, and language explain social structure. Moreso, functionalism also rationalizes the fundamental precepts of normalcy and social order (Crossman, 2000; Gingrich, 1999; Holmwood, n.d.). It is this social equilibrium and its elucidations that disaster risk management studies find relative and purposeful, especially in seeking order within an otherwise chaotic environment. Lozano-Gotor (2013) and Bogard (1988) buttress this argument of functionalism's normalcy reversions when external shocks, such as disasters, disturb social equilibrium.

Fresnoza (2021) explicitly relates Ivatan resiliency with functionalism. While turbulent weather is instability for others, it becomes the function for Ivatan survival; intense typhoon prevalence tend to repel individuals to less tempestuous settings, as opposed to Ivatan settlement, driven by their inherent homeostatic and adaptive propensities (Fresnoza, 2021; Rede-Blolong, 1996). For Ivatans, normalizing volatile and violent weather is axiomatic, prompting thriving conditions for creativity, innovation, camaraderie, and the development of social capital in a benevolent yet dangerous environment. Fresnoza (2021, p. 161) supports this:

> When sheer weather activates and justifies the creation of social roles and responsibilities for preparation, the reduction of social risks are realized. Social order and stability are therefore maintained and are reinforced especially with the continuous recurrences of such physical and social phenomena for generations. Establishing this commonplace practice of maintaining stability ultimately strengthens resiliency, demonstrated by constant casualty-free reportage following the onslaught of typhoons. Where others view typhoon prevalence as pestilent disruptors, the normalization of threat created by the stability of established social functions and reinforcement of social roles contributed to Ivatan views of typhoons merely as "another windy day," as stated by a resident.

For generations, the Ivatans have developed an acuity in understanding the relationship between environmental changes and impending weather threats. Few instances including the out-of-season colour changes of the *aryus* (*Podocarpus costalis*) plant, or the unseasonal steady blowing of the north wind (*idaud*), or the unusually long and unbroken set of ocean waves have been typical observational markers for weather prognosis (Provincial Government of Batanes, 2019; see Table 7 from Fresnoza, 2021). Epistemologically, the common understanding of these instances and their purpose have been so vernacularized to the point of being part of Ivatan Indigenous knowledge.

Explicating the social production of Ivatan resiliency also makes sense under Mertonian functionalist lenses. Merton provides further distinctions of manifest and latent functions, defined as the direct consequences and the unintended outcomes of social actions respectively (Holmwood, n.d.; De Nardis, 2013). Contextualized instances of manifest functions of Ivatan resiliency practices encompass the development of Indigenous means of forecasting inclement weather. Latent functions on the other hand include the accretion of social capital through creating neighbourly relations to identify the nearest point of assistance, and espousal of altruism and cooperativism as an investment in the goodness of helping among Ivatan residents. These become sensible in understanding the social makeup that contributes not only to resiliency but to the essence of Ivatan culture and identity.

Overall, the elucidations of the Ivatan context benefitted from functionalist theoretical lenses. Elucidation in this manner however is still fenced within the boundaries of solitary theoretical employment in light of a world faced with new uncertainties, complex realities, and transcendent morphisms. It is understood that climate change for instance, does not exempt impacts among Ivatans. In consonance, reliance to functionalism alone is inadequate, myopic, and underestimates the systematic sophistication of climate change implications to Ivatan society. Although criticisms of functionalism have been longstanding and antecedent (Holmwood, n.d.; Alexander, 2000), the underpinnings of interdisciplinarity offer out-of-box thinking to move beyond insular, functionalist lenses to new directions in adopting heterogenous approaches in climate change-reflexive (poly)theoretical discourse.

Functionalism: Trapped in the Ivory Tower of Disaster Research Theories

Alexander (2000) concentrates the mid-20th century, between 1950 to 1970, as the golden epoch of rich theoretical

developments of social science models in disaster research. Parallel advancements of functionalism by prominent all-American theorists, notably Talcott Parsons, Kingsley Davis, Wilbert Moore, and Robert Merton (Dillon, 2019; Gingrich, 1999) within this period exerted heavy influence to the point of dominating society-disaster theoretical frameworks. Drabek (1986, as cited in Alexander, 2000) critiqued the Americanist monopoly of functionalism that commanded 80% of human systems research in disasters, thus hegemonizing theoretical orientations to favour rationalist and functionalist ideologies.

Against the backdrop of the post-Second World War and pre-Cold War eras, intellectual communities in the West found great prospects in structural functionalism (Gingrich, 1999; Smith, 2009). American volatility in this period heightened the impetus to idealize theories that sought to comprehend the underpinnings of social foundations as prerequisites in preventing threats, disorder, and upheaval, and as pretexts for achieving social stability (Gould, 1966; Smith, 2009). As functionalism stipulates the framework to which norms, mores, and values are defined, unfamiliar functions such as exogenous influences and foreign principles are easily recognized and isolated. Inheriting this tenet of threat reduction as an imperative for stable societies, structural functionalism found its way into human ecological studies and eventually into disaster-based research (Alexander, 2000).

While American practitioners and academic schools of thought found utility and credit in functionalist discourses in disaster risk management (Alexander, 2000), its etic appropriation to other, typically higher context cultures is suspect. The roots of Western ethnocentrism in functionalism run deep (Gould, 1966), missing cultural subtleties and punctuations in non-American contexts. Gould (1966) and Alexander (2000) articulate how the deterministic and descriptive objective of functional analysis errs on the assumptions that societies steeped in culture act in rational ways to mitigate hazards, identical to the normative of Western societies. Outcomes therefore become skewed interpretations that could not truly capture meanings, symbols, and inner workings that make resiliency in other diverse contexts work.

Typhoon ubiquity in Batanes compels the Philippine Government to intervene as per its constitutional mandate to protect constituents. This becomes functionalist theory at work, rationalized how activated institutional roles prescribed in society ensure its protection and continuity despite anticipated environmental shocks. The Philippine Disaster Risk Reduction and Management Act of 2010 (RA 10121) functions as the country's specified policy that officiates the roles, duties, and responsibilities of the characters in the theatre of disasters.

Although much of the directives in RA 10121 are rational, sensible, and conform to the canons of hazard management, much of these exogenous interventions would likely be dismissed by Ivatans, who are more resigned to use their inherent Indigenous means of coping inculcated across generations (Fresnoza, 2021; Hornedo, 2000); the expectation of patronizing government provision of evacuation centres or relief goods, for instance, finds itself antithetical to Ivatan orthodoxy. Where functionalist lenses ought to view disaster response systems in other contexts as rational means with normative outcomes, the Ivatan case highlights elucidatory inconsistencies of functionalism, amiss of relating cultural nuances as deeper agents of resiliency.

Functionalism, as particularized in the Ivatan experience, is limited in its partial and descriptive utility for justifying social order. Despite resiliency and the reduction of disaster threats as identical intentions by both the Philippine Government and Ivatans, outcomes culminated differently (Fresnoza, 2021). Functionalist lenses are blurred in explaining the discordant role of the state as an exogenous actor responsible for formulating policies meant for stability and order, yet are found to be conflicting in an already traditionally-resilient Indigenous community of the Ivatans. De Nardis (2013) substantiates the criticism of functionalist purviews for failing to adequately distinguish exogenous vis-à-vis endogenous motives and agencies despite similar presuppositions of resiliency and equilibrium.

To be fair, the legitimacy of functionalist theory is attributed to its social equilibrium rationale, to more clearly understand the mechanisms behind properly functioning societies (Bogard, 1988). This legitimacy, however, is confined to Western-centric upbringings and creates limited peripheries for exploring disaster-aligned research questions especially in an epoch most known for increased intensities and disruptions of climate change (Sun & Faas, 2018; Webb, 2018). Functionalism is stunted on the normative of explaining the social-environmental causalities that dictate function and hardly departs into multi-theoretical variabilities and overlaps that create greater collaborative understanding of disasters exacerbated by climate change.

Theoretical Pluralism

As the world plunges in a climate emergency (Guterres, 2019), affirmation of the heightened severity of disasters creates new digressions in disaster studies. The transcendence of climate change pressures and outcomes in Indigenous contexts necessitate disaster research to complement functionalist narratives with deeper cross-disciplinary, multi-theoretical, and intersectional approaches. Mono-theoretical ubiquity in disaster studies is criticized, caused not only by inadequate attention to rapidly evolving and corollary disaster research inquiries but by unaccounted research contexts and social realities. Rather than amassing the disaster study toolbox with functionalist-concentrated theoretical expansions, the employment of theoretical pluralism produces a new, socially-relevant, and more novel coherence in disaster studies (Christopher, 2010; Sun & Faas, 2018; Alexander, 2000).

Utilizing heterogenous theoretical approaches is rationalized by the foundational underpinning that disasters are collisions of social, environmental, technological, political, economic, and organizational agencies (Fiddian-Qasmiyeh, 2019; Sutley, 2018; Davidson, 2015) that are grounded by context (Meyer, 2007; Sillitoe, 2004) and yield imperilling disruptions (Gaillard, 2003). It is the dynamism of context, inherent disaster complexities, and pragmatic necessity to reduce disaster impacts that compel transdisciplinary modes and innovations in disaster research and application. Transdisciplinarity invokes a rich integration of complementary theories (Christopher, 2010) to bridge once-isolated disciplinary and intellectual resources (Meyer, 2007; Godemann, 2008). Beyond social structures, dynamics, and role explications confined within functionalist dimensions, new meanings emerge in diversifying theoretical approaches, informed by a synthesis of disciplinary positionalities.

Alexander (2000) posits the commonality in marrying various often unrelated theories to provide distinct hermeneutical platforms to appropriately address diverse disaster forms. The haphazards of sole reliance on functionalism to address disasters and crises that intersect on social-justice, political, anthropological, technological and other themes inhibit more holistic explanations of complexities and fails to truly capture cross-disciplinary insights. Theoretical integrations revealed new theoretical arguments as well as new brands of theories with only a few listed in Table 1.

Table 1 *Multidisciplinary Integrated Research that Yielded Expanded Theoretical Arguments*

Author	Field of Study/ Sub-Disciplinary Extensions	Theory/Theoretical Argument
Barrows (1923)	Geography and Sociology	Theory of Human Ecology — geography is also attributable as human relationships with the natural, built-up, and social environments. In this premise, disasters are perturbations to human spatial and social systems.
Ulrich (1992)	Environmental Politics	Risk Society Theory — societal transitions and modernization induce risks of environmental impacts and exacerbated hazards that lead to disastrous consequences.
Bolin and Kurtz (2018)	Racial and Disaster Studies	Critical Race Theory — mechanisms to anticipate, cope, resist, and recover from disasters are unjustly impacted due to racial, class, ethnicity, gender, and age disparities.
Krüger, Bankoff, Cannon, Orlowski, and Shipper (2015)	Anthropology	Decision-making in risk-laden societies is attributed through cultural contexts and orthodoxies. Cultural belief systems play crucial roles in disaster risk management and resiliency practices.
Gray, Weal, and Martin (2016)	Mass Communications and Social Media	Risk Communication Theory — accessible and reliable information transmission through social media are determinants to effective risk management in disaster life cycle phases.
Udalov (2019)	Behavioural Economics	Disasters play a role in influencing the choice of an individual from either low- or high-income groups between economic progress and environmental conservation.
Seaberg, Devine, and Zhuang (2017)	Sociology and Disaster Risk Management Studies	Game Theory — social agencies can become collaborative or defensive players in different phases of managing disaster risks.
Dell (2016)	Dramaturgy and Mass Communications	Critical Theory and Goffman's Dramaturgy — people, as audiences, are restricted from their roles in society that at the time of crises, discourse becomes a powerful means to influence audience perceptions and assert power structures.

Theoretical pluralism adopts the interdisciplinarity tenet of fusing diverse schools of thought but with the transdisciplinary nuance of praxis, since practical solutions are imperative requisites in addressing disasters' real-world challenges. Yet, poly-theoretical orientations are celebrations of multiple theoretical complementarity (Cairney, 2013) rather than the wholesale abandonment of functionalism. While there is much to laud in the strengths of functionalist interpretations of Ivatan cultural-environmental stabilities, the sweeping complexities of climate change, its rapid single-generation intensification, its multi-faceted agencies; and Indigenous context among others justify multi-theoretical collaborations. From the hybridized understanding and cross-fertilization of knowledge drawn from theoretical multiplicities, more effective resiliency means to buffer against disasters can be generated.

The multiplex and intricacy of disasters remind that effective mitigation requires the theoretical fusions from urban planning, sociology, geography, meteorology, political science, and other disciplines (Bendito & Barrios, 2016; Hagemeier-Klose, Beichler, Davidse, & Deppisch, 2014). Disciplines provide a unique set of lenses that project a particular reality and provide the basis for theoretical postulations (Repko, Szostak, & Buchberger, 2014). Cairney (2013), Grant and Osanloo (2014) further unpack theories as a set of analytical and a priori propositions designed to frame and structure explanations and observations of the world. Where disciplinary grounding of theories benefits the creation of specialized and focused knowledge (Brandell, 2008), a theory's purpose is partitioned only within a particular disciplinary boundary. Alternatively, assembling a framework that borrows and converges theoretical expertise highlight intentional contextualization of theories to answer distinct research questions, respond to investigations, and properly rationalize the design of disaster mitigation strategies.

Assembling a Framework for Theoretical Pluralism in Disaster Research

Amongst the plentiful disciplines and theories applicable in disaster research, its complexity is rendered more manageably through a framework that maps, guides, and organizes the chain of research processes coherently. Developing this linear framework, as detailed in Figure 1, is a modest attempt in advancing disaster research that eclipses

singular functionalist tendencies to engage with diverse yet complementary theories and further enrich research outcomes. Functionalism and its merits are not shelved but rather positioned as a locus that expands and interfaces with compatible theories. Much contextual modelling of the Ivatan socio-cultural sphere is applied to conjure research within Indigenous settings and reveal richer elucidations from theoretical pluralism.

Figure 1 *Framing the Process for Integrating Multiple Theories in Disaster Research within Indigenous Settings*
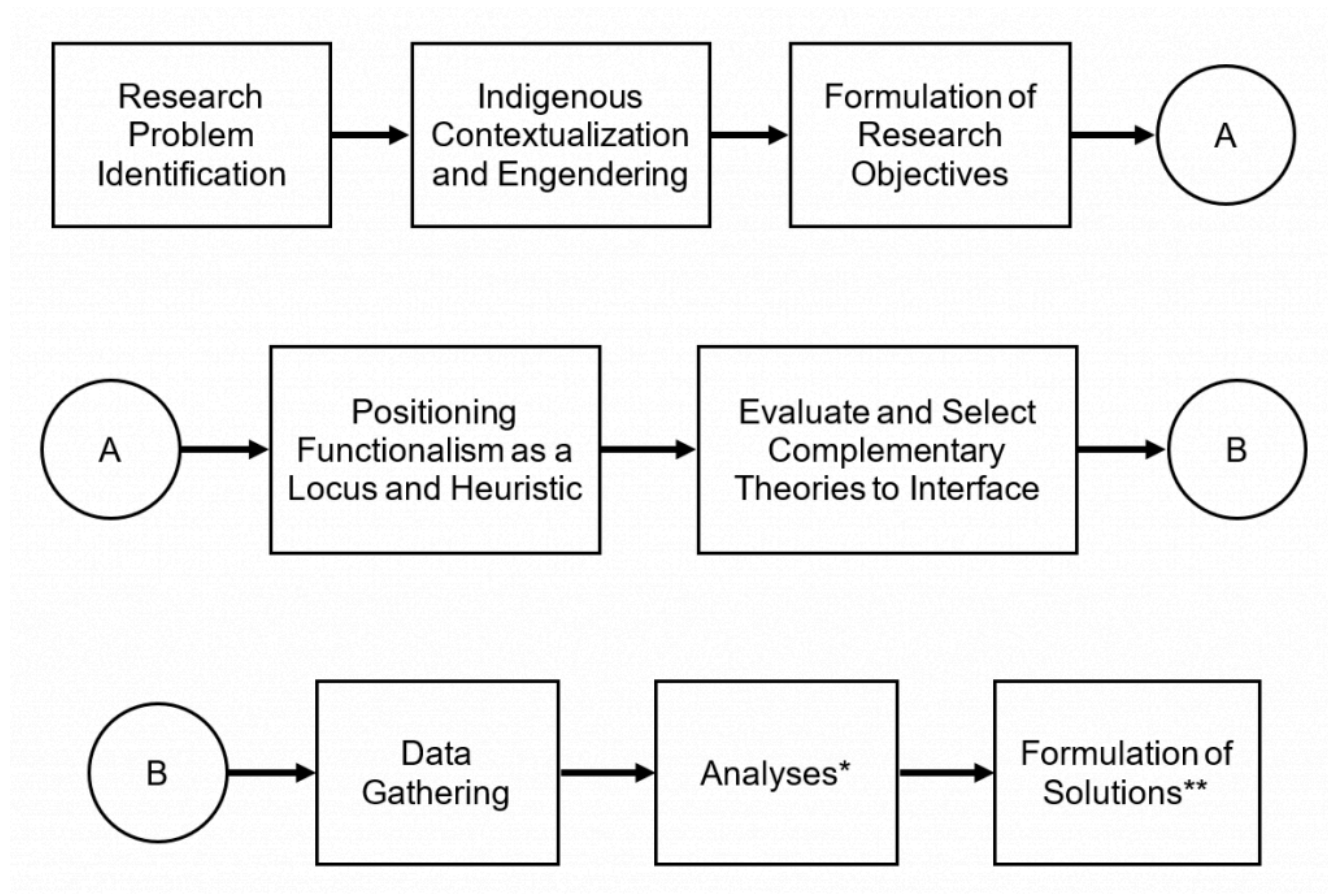
* A separation between Data Gathering and Analyses is distinct in this framework, though both are conjointly explained in one section in this paper.
** This step is augmented with discussion on the importance of applied research.

Numerous caveats are at constant play in the messiness of social science and qualitative research (Bryman, 2015), moreso with engaging Indigenous elements (Kovach, 2020; Mutua and Swadener, as cited in Beeman-Cadwallader, Quigley, & Yazzie-Mintz, 2011). Divergent to the more a priori grounded and inductive research common in qualitative investigations (Glaser & Strauss, 1999), the framework primarily applies ex ante, rationalized deductive reasoning, where theory-driven data validation is employed for novel meaning-making. Functionalism serves as an anchoring theory accessorized by a suite of complementary theories informed by research objectives. While deduction seems at odds with research in Indigenous, more qualitative contexts (O'Reilly, 2009), the framework assumes a post-positivist position where uncovering parallel truths exist through plural ways of knowing and understanding (Miller et al., 2008). Transdisciplinary principles imbued in such research formats also permit methodological flexibility through mixed-methods in data gathering (Miller et al., 2008; Mertens, 2007) yet iterated on Indigenous underpinnings. In this way, the primus inter pares (first among equals) social contract of respecting Indigenous perspectives interpreted under the functionalist lenses are maintained and even augmented.

Research Problem Identification

Consistent with problem solving-oriented research traditions, the genesis of the research inquiry centres on defining the challenges of climate change-exacerbated disasters in Indigenous communities and their state of affairs. The nexus of Indigeneity and disaster concerns sets the foundational and thematic parameters of the research inquiry. While these parameters secure the research scope, the complexity in the nexus also warrants outward extensions, reaching out to multiple and latent disciplinary perspectives that could expose unique problems as new avenues for exploration and analysis. Complex problems that speak interdisciplinarity reveal a multiplicity of problem inquiries, instanced in Fresnoza's (2021) research where modernization of disaster risk management in Indigenous communities yielded questions of concerns pertinent to epistemologies, power structures, policy, social justice, impacts, and processes.

Indigenous Contextualization and Engendering

Research and methodologies with contextualized pivots are made more relevant, inclusive, and attentive to the needs, problems, and values of the community. Not only does contextualization promote the legitimacy of research that upholds fair and ethical representation of involved stakeholders (Belcher, Rasmussen, Kemshaw, & Zornes, 2016) but also provide roots to ground knowledge production without straying away far into different realms and paradigms that interdisciplinarity augmentations may bring. Contextualization is therefore the customization of research to base distinct ontologies, epistemologies, and axiologies of the case setting, which subsequently informs the most appropriate research methodology, recommendation generation, and praxis. Furthermore, contextualization becomes imperative when applying this framework in diverse cultural and Indigenous milieux.

To engender Indigeneity in disaster research is to consider Indigenous peoples not as victims but as agents of change and knowledge-keepers. The United Nations (n.d.) further elaborates, "Indigenous peoples and the role they may play in combating climate change are rarely considered in public discourses on climate change." In parallel, survival through Indigenous knowledge and practices demonstrate effectiveness of Indigenous resiliencies (Mercer, Kelman, Taranis, & Suchet-Pearson, 2010). Accounting such Indigenous paradigm contextualizes disaster research, further enriching and broadening the horizons of theoretical pluralism beyond the narrowed confines of functionalist interpretations.

Formulation of Research Objectives

Research objectives detail pertinent aims expected to be accomplished in the research (Tucker, 2005). Also, objectives entail an assortment of prospective analytical approaches founded from the antecedent construction of variable problem questions and bounded by the more constant context of the research. Defining objectives also lays the foundation for deriving more specific research actions and informing appurtenant theories. These specific actions include, but are not limited to (modified from Sacred Heart University Library, 2020):

- Comparing scenarios — distinguishing similarities and differences among two or more social variables.
- Defining conditions — creating rich meanings associated with a phenomena.
- Describing situations — providing factual attributes, properties, and characteristics to explain a set of circumstances.
- Evaluating actions — assessing the merits and performance of actions against a set of criteria or established system.
- Critiquing decisions — questioning the validity of the decision based on moral and ethical standards.
- Exploring domains — learning and inquiring about less understood concepts and phenomena to generate new

outcomes.

- Interpreting perspectives — explaining points of view based on one or another's comprehension.
- Narrating experiences — relaying stories and lived experiences loaded with particular reflections.
- Persuading positions — arguing positions to prompt agreement.

Positioning Functionalism as a Locus and Heuristic

Posturing functionalism as a locus not only equips disaster research with a theoretical positionality but also serves as a starting point agency in the later creation of hybridized meaning. Despite the dynamism and socio-ecological complexities of disasters, much merit exists in uncovering predictabilities and explicating how social structure, stability, and cultural homeostasis inform resiliency. Ivatan Indigenous resiliencies, tempered by recurrent social practices across generations, substantiate functionalist elucidations how social roles, customs, and values contribute to social equilibrium (Gingrich, 1999). Such rationale justifies the favourability of functionalism as an ad hoc theory sensible for poly-theoretical disaster research in communities where social resiliencies are established by context and Indigenous orthodoxies.

It requires assertion, however, that functionalism is to be used as a heuristic device rather than the predominating theory that commands the logic of subsequent theories to fasten into as a peripheral accompaniment. To endow the functionalist utility as the undergirding authority in explaining how cultural contexts and orthodoxies catalyze social stability is rife with tension (Olsson, Jerneck, Thoren, Persson, & O'Byrne, 2015; Webb, 2018). Merging propositions from Chilcott (1998) and Lim (2018) suggests that as an anchoring heuristic, functionalism simplifies analytical interpretations of the otherwise complex nexus between social roles, cultural agencies, resiliency, and climate change disruptions and how they influence social equilibrium. In this initial step, room is made to accommodate logical infusions from complementary theories and generate richer, more holistic explanations and meaning.

Evaluate and Select Complementary Theories to Interface

Functionalism, as a Parsons-reminiscent theory of equilibrium that ought to explain social resiliency induced from social stability (Crossman, 2000; Gingrich, 1999; Olsson et al., 2015), is incommensurate in deducing new world pressures of rapid flux and disruptive agencies induced by climate change. While the prevalence of change theories such as chaos theory, adaptive systems theory, and prospect theory has immensely contributed to the corpus of knowledge in disaster research (Hilhorst, 2003; Osberghaus, 2013), much potential exists in integrating asymmetric theories of change and stability to create novel hybridized meaning. Doing so is not merely arbitrary and requires a robust criteria for the complementarity of pluralistic theories. Such criteria include:

- Theoretical coherence
- Pragmatic necessity
- Flexibility to accommodate mixed-methods
- Indigenous relevance and legitimacy

Complementarity is about finding the right community of knowledge, where functionalist perspectives integrating with lenses from other theoretical traditions contribute to new understandings that are deep, impactful, and create enhanced or new interpretations. Amid the ocean of social and natural science theories that are often epistemologically and ontologically divergent (Persson, Hornborg, Olsson, & Thorén, 2018), the theoretical selection criteria to interface with functionalism is relative to the capacity for the pair to reciprocate coherent logic. In the analytical discourse how

resiliency is influenced by religion and gender roles, for instance, functionalism and gender fluidity seem variegated due to their independent academic stances and antitheses of stability and change but may find parallels in themes of adaptation and recovery (Hazeleger, 2013).

Transdisciplinarity is the method-driven model for theoretical pluralism that reifies integrated theories and enacts change to solve problems beyond the scope and capacity of single theoretical constructs (Klein, 1990). Despite theoretical integration's promise and potential, climate change's immediacy and intensification hastens the priority shift in translating integrations for the benefit and use of practitioners, particularly in Indigenous communities. In this light, the determination of the practicability, capacity, and theoretical fit in producing socially-relevant and transformative outcomes becomes a vital determinant for interfacing with functionalism. It is acknowledgeable that difficulties transposing from theoretical to practical abound in this process (Godemann, 2008; Bendito & Barrios, 2016), thereby prompting constant iterations of scenario building, contextualizations, technocracy reductions, and practitioner-collaborative deliberations (Popa, Guillermin, & Dedeurwaerdere, 2015) until reaching the confirmability of effective theoretical pragmatism.

While integrative paradigms and their offshoot theories specify proper methodological processes, complementarity will also rely on flexibility to employ mixed modes of quantitative and qualitative methodologies to generate unique insights from complex phenomena. Intersectional research that feature climate change and Indigenous peoples become precarious, however, due to paradigmatic and epistemological divides among the great academic cultures of humanities and natural sciences (Godemann, 2008). Mertens (2007) highlights mixed mode synergies though cautions that even when qualitative and quantitative processes are appropriated from the system of inquiry, mixed mode determinations will require transcending into ontological assumptions, especially when Indigenous contexts are to be accounted for. Yet, flexibility is the emphasis in this criteria, in which the versatility of methodological approaches are appropriately prescribed by the determined research inquiry, objectives, and context.

Complementary theories are those that are protective, respectful, and representative of Indigenous axioms, orthodoxies, and world views. To buttress the engendering of Indigeneity in research stated earlier, theories to connect with Functionalism ought to be privileging rather than disavowing, where theoretical validations stimulate Indigenous participatory collaborations as a gauge of methodological rigour. Beyond inclusive methodologies, triangulating theories are mutually confirmable and acknowledgeable within the gamut of Indigenous positionalities.

Data Gathering and Analyses

The duality of climate change epiphenomena and Indigenous peoples reflect epistemological divergences between natural and social sciences, which therefore calls for rigorous data collection design, strategy, and process that are effective in bridging these epistemological rifts. Responsive to filling this gap, it becomes suggestive to shift into integrative research approaches that call for blended quantitative and qualitative data-gathering processes (Di Pofi, 2002). Mixed-methods, however, are not default nor exclusive approaches in epistemologically and theoretically diverse research, but are rather reliant on the specified goals and objectives of the research; electing singular qualitative or quantitative approaches or the orchestration of both is systematically optimized and is respondent to the research objectives to produce relevant knowledge.

Nuances of Indigenous elements in the research design necessitate distinct ethical and culturally-sensitive protocols to be adhered in data collection and in analyses, whether data gathering orientations are empirical or value-laden. Commencing with the recognition, legitimization, and hallowing of Indigenous knowledge as credible and effective in disaster resiliency, culling data with its subsequent analyses become intentionally collaborative to dismantle outsider technocracy, activate discourse with rather than on people, and involve the community actively in this process (Beeman-Cadwallader et al., 2011). The pro-relational and anti-transactional process of Indigenous-centred methodology is exemplified in the research of Beeman-Cadwallader et al. (2011) and Hiwasaki et al. (2014), where data generation and analysis promote commitment to collaboration rather than conflict of knowledge systems.

As quantitative evidence gathering and examinations have been well-established methods associated in functionalist research traditions by Merton and Davis (Platt, 1986), the more contemporary gauge for methodological effectiveness calls for one that is transcendent. From the conventional often quantitative research styles of the predominant separation of the researcher and the researched, the new gold standard includes methodological repertoires that are interpersonal, ethical, privileging, and are easily reified into action (Bradbury, 2015). Often operationalized in qualitative research through ethnography, participatory action research, photo voice, dramaturgical analysis and others (Given, 2008), locals and Indigenous peoples become active co-generators and validators of knowledge, effectively diagnosing problems and generating interventions that match the needs of the community (Bradbury, 2015).

Formulation of Solutions as the Outcome of Applied Research

Concluding research through the synthesis of data and discourse through theoretical hybridization is a mere penultimate outcome insufficient in addressing social and ecological challenges. Running aground in recursive discourse is paralyzing and unaffordable in contemporary times when disasters' disruptive consequences are further intensified by climate change. Demonstration of research effectiveness through action is demanded since conduct is inseparable from inquiry (Bradbury, 2015). In parallel, Gould (1981) asserts the inanimate nature of data and how it does not speak for itself unless endorsed into action. Disaster research therefore surpasses the creation of cross-fertilized theories as success benchmarks into applications of strategies and operations of solutions in reducing risks and vulnerability. In retrospect, disaster research transcends from poly-theoretical to pragmatic, entailing the ultimate development of actionable processes with the outcome of saving lives, not just the creation of novel propositions.

Research tradition that treats the innovation of produced meanings and knowledge as the convention for effective solutions is normative, though only lauds technocratic ability rather than social utility. Epistemologically, the localization of knowledge and its devolution as the expertise of common folk reconciles the limitations of disaster research as mere concepts, ideas, and theories privileged for researchers and scientists only. The Ivatan context teaches us that resiliency is not just an elitist scientific process but rather a communal social endeavour (Fresnoza, 2021). When technical solutions borne from sophisticated theoretical fusions are humanized and translated into acceptable practice by the community, locals then become expert practitioners empowered to inquire rigorously into the distinct problems within their proximities. The citizenry then creates its own capacity to apply learnings and solutions that best suit their needs, independent from outsider, often incompatible prescriptions.

Bradbury (2015) critiques the Cartesian divorcing of knowledge and practice that resulted in superiority and hegemonic tendencies of scientific intellectualism over praxis. To abet the mobilization of research by grassroots community members, as opposed to endowing responsibility just to academics and scholars is a reclamation of power (Beeman-Cadwallader et al., 2011). Fusing assertions from Beeman-Cadwallader et al. (2011), Kovach (2020), and Loppie (2007), grassroots application of research and the reification of theories is also emancipating and decolonizing, especially within the perspective of Indigenous communities whose traditional resiliency practices were inhibited by intergenerational injustice.

Conclusions from Fresnoza's (2021) dissertation detail how augmentations in Ivatan resiliency extend beyond scientific parley and functionalist discourses but through habituated practice. Intergenerational practice honed through experiential and trial-and-error learnings have enabled Ivatans to survive and thrive despite tempestuous environments (Fresnoza, 2021). While functionalist discourse and even further theoretical innovations are credited to enable deeper understanding of the whys of resiliency (Alexander, 2000), actionability reigns as the ultimate demonstration of theoretical rigour and effectiveness (Beeman-Cadwallader et al., 2011; Bradbury, 2015).

It is crucial to note that actionability is not anti-science but as emancipations from scientific hegemony and as collaborations among competing paradigms. Action research and other methodological shifts that celebrate local knowhow, values, civic participation, and Indigenous knowledge as valid and credible research components have opened avenues for inclusive co-generations of local solutions that tap into Western theoretical foundations and

Indigenous knowledge (Bradbury, 2015). Much promising opportunities exist in converging resident knowledge-keepers, sociologists, elders, emergency managers, meteorologists, and local stakeholders among others to merge diverse paradigmatic expertise and strategize cogent action plans since all share common goals of effecting more robust resiliency transformations in the community.

Limitations

Bridging cross-paradigmatic and theoretical gulfs mirror the romanticism of collaboration that often hits walls as it is actualized into pragmatic applications. How functionalism and other theories ought to work together is a dance with two left feet, understating hit-and-miss compatibilities, incoherences, clashing logic, and even antithetical paradigms expected in the convergence. Despite its laudable response to the climate change imperative, theoretical pluralism exists as an idealism challenged by practicality and is still an experimental means for dilated understanding of disaster phenomena, resilience, and their social nexus. As a prerequisite, the requirement of expertise in the theories of functionalism and others is ambitious, with weightier expectations to co-produce knowledge and apply hybridized solutions that still require leaping into the additional hurdle of contextual fit.

Further melding with Indigenous contexts and ethical reminders, theoretical pluralism becomes a complex ideology with inescapable challenges and long strides before coming to fruition. Operationalizing theoretical pluralism through localization can become limiting, with pressures to become too context-specific, which often hinders research generalizability to model for future research (Belcher et al., 2016). The many moving parts, sophisticated processes, and heavy academic expectations in disaster research within Indigenous contexts do not stray far from both internal and external critique. To reconcile the rigour of scientific theoretical discourse in the academy with the more relational and non-linear Indigenous constructions of truth and reality (Loppie, 2007) is a complicated underestimation of mediating perpetual opposites of constructivist vis-à-vis positivist paradigms that often results in impasse (Sillitoe, 2004). Contention about rightful validity claims then become inevitable when empirical scientific rigour becomes applied in Indigenous resiliency research.

Other than epistemological challenges, integrating theoretical constructs is a demanding feat due to their ontological polarities, especially when theories of equilibrium conflict against theories of change. Reconciling the propositions of functionalism with chaos theory or dynamic systems theory, for instance, is a tall order that attempts to validate paradoxical theoretical arguments. Klenk and Meehan (2015) also maintain that the hybridizing theoretical positions is contentious due to the difficulty in achieving consensus of among radically different theoretical platforms. Rationalizing the designation of functionalism as a locus also questions the seeming subordination of other theories when context may call for opposite or multi-weighted arrangements. No matter the amount of involved theories or their varying degrees of involvement, Midgley (2010) further contends that theoretical pluralism is a paradox in itself when it is expressed as a single theory.

Conclusion

Alexander (2000) explicitly remarks that theoretical underpinnings of disaster risk management is young with its evolution dependent on renewed theoretical developments. This paper attempts to contribute to such theoretical impetus in light of pervasive climate change disruptions and epiphenomena. Rethinking and tilting the discourse of disaster research towards engaging in multi-theoretical application speak to the timeliness of adaptation and innovation in the face of a world in full motion. Singular theory utilization, often employing structural functionalism as a favourite in disaster research, is incommensurate in recognizing wider interdisciplinary agencies and fails to take into account the

true complexity how disasters amplified by climate change impact society, especially in Indigenous settings; theoretical multiplicity unearths problems that uni-theoretical approaches would not have been able to detect.

Functionalist theoretical monopolies require a detachment from ubiquity and pull into new unifications as a means to innovate and become responsive from the rapid accelerations of climate change. While functionalist means for expounding normative societal functions in disaster phenomena is not to be rejected outright, theoretical pluralism offers alternative possibilities to diffuse disaster analysis into multidimensional and multidisciplinary purviews. Modelled after transdisciplinarity tenets, outcomes in the employment of theoretical pluralism not only permits a more holistic understanding of disaster complexities but also invests into actionability and solution co-generation as the calibre of rigour.

There can be much to laud yet also much to critique in advancing theoretical interweaving. Road bumps exist in exploring the viability of theoretical pluralism, ranging from the ontological to the practical. Coherence through complementarity among variable theories is also a challenging necessity, especially as functionalism serves as the anchoring explication of social stability when disaster resiliency is faced with multiple agencies of change. These limitations infer the primacy of theoretical pluralism in disaster research, though like most deductive approaches, viability lies on context and conduct, where acceptability and practicality respectively become key determinants that confirm the utility of fusing functionalism with others.

While postulations in this paper are idiographic to functionalism and the Ivatan context, applied research through the approach of theoretical pluralism could be juxtaposed to other settings since improving resiliency becomes a common denominator. Irrespective where theoretical functionalism is applied, rigour and effectiveness will necessitate a number of expandable criteria such as theoretical coherence, pragmatic necessity, mixed-method flexibility, and Indigenous legitimacy when context demands it. By requiring such conventions, multi-theoretical hybridization as applied elsewhere would effectively transcend not just through its explicative functions of explaining society-environment relationships but through constantly innovating and enhancing disaster resiliencies.

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39. The Role of Informal Housing in Mexico: Applications in Canada [full paper]

MANDY HANSEN

Abstract

This adaptation of a larger research study examines the intersections of the economy, property rights, land use, and housing within a tourism destination context. Housing is a human need, and when neither the public nor the private sectors are providing it, people will provide it for themselves in the form of self-help housing. Accommodation within informal settlements is an important segment of the housing market, and in many developing nations, the majority of housing that is available to the poor and working classes. The question then becomes not how to prevent informal housing but how to manage it.

A substantial component of the housing stock in the study locale of Mazatlán, Mexico originated as informal settlements, and that most of those have now been serviced and incorporated into the community. The study's GIS analysis revealed that housing parcel sizes for the poor and working classes has remained modest over time. This focus on dense housing development and minimal urban streetscape improvements can be considered as part of housing strategies in other locations as they address their burgeoning informal housing crises. Allowing informal settlement, while not ideal, may bridge the gap until such time as formal provision is mobilized to meet the human need for shelter.

Key words: housing, slums, economics, Mexico, Mazatlan, urban planning

This paper is an adaptation of one of the findings from the researcher's Doctoral dissertation (Hansen, 2021). The findings are believed to have widespread relevance to the issues of housing and land use in locations beyond Mazatlán, Mexico. This paper examines the role of informal housing as found in Mazatlán, and the learnings that can be applied towards housing challenges found in Canada.

Housing is a human need, and when neither the public nor the private sectors are providing it, people will provide it for themselves in the form of self-help housing. Informal settlements are defined as dense communities created outside of the legal structures of the state, generally in response to economic realities that hinder participation in the formal housing markets (Alsayyad, 1993). They may have one or more of the following characteristics: lack of legal status, infrastructure deficiencies, no approvals or permits by authorities having jurisdiction, or the dwelling is not built to standards (Siembieda and Moreno, 1997, p. 657).

Informal development, or squatting as Brueckner and Selod (2009) term it, is a component of the housing market in many countries. It is a symptom of a dysfunctional housing market that is not meeting all citizens' needs for a variety of reasons (p. 29). Regardless of its origins, the accommodation within informal settlements is an important segment of the housing market, and in many developing nations, the majority of housing that is available to the poor and working classes. The question then becomes not how to prevent informal housing but how to manage it, including considerations around placement and location.

Mexico's experience with widespread informal housing commenced in the mid-1900s spurred by population growth and urbanization (Bredenoord & Verkonen, 2009). They settled in urban areas creating informal housing developments that are called invasions locally. The majority of Mazatlán's housing stock originated as invasions; however, most have been regularized since their development and now are considered standard neighbourhoods.

The research found that housing in Mazatlán is dense, and land parcels for housing are small, under 200 square meters in size. Streetscape improvements are minimal, as are private yard spaces. Informants indicated that the demand for

housing was met by supply at all economic strata, and informal housing was an important component of the affordable segment of the marketplace. Informal housing was and remains an important component of the housing continuum.

The findings here can help formulate approaches to informal settlement management within Mexico and beyond. Mexico's approach of tacit approval of squatting has helped alleviate pressure on the government for the delivery of affordable housing. The authorities allowed the immediate need for shelter to be addressed at the time, and now are following behind to fill in the missing pieces of infrastructure and paperwork. They also maintain a minimal level of requirements in terms of urban design and streetscape improvements for new developments, which helps maintain affordability. These findings can assist policy makers elsewhere as they address their own housing crises; re-examining their policies and processes regarding housing development in light of the need is necessary, otherwise a rise in informal settlements is inevitable. While the wicked problem of affordable housing is far from solved, the experiences detailed in this research in Mazatlán, Mexico, can offer some insights as to new (old) approaches to housing creation.

Leading Literature

The larger interdisciplinary research project draws on a number of disciplines to inform the research question, the field of inquiry, and the theoretical standing. Leading voices in the interrelated fields of economics, property rights, land use, and housing were all explored for this paper. The exclusionary nature of land allocation is by necessity – land cannot be used by different users at the same time. Choices are made, and this paper examines the impacts to housing allocation or non-allocation as the case may be.

Economics

For this exercise, the researcher draws upon Ratcliff's 1949 volume entitled *Urban Land Economics*. While some of the applications and policy responses to Ratcliff's theories have evolved, the concept definitions stand the test of time. Land is unique as compared to other commodities: it is immobile, scarce, and heterogeneous, meaning each property is individually valued and used relative to the lands around it. As a result, the location is a significant contributor to the desirability of that land: "quality of location or situs is an important determinant of economic value" (Ratcliff, 1949, p. 283).

Ratcliff goes on to say that land is a commodity that is traded in an open market, and that the "urban land market is an integral part of the contemporary private-enterprise system" (1949, p. 280). There are buyers and sellers, just like any other commodity, and the price of that commodity is the specific point where a buyer is willing to buy and a seller is willing to sell. This is an oversimplification that leaves out myriad individual circumstances, but for the purposes of the study it suffices to speak in generalities. If there are more buyers than sellers, the price increases as buyers compete for the asset. If there are more sellers than buyers, then the price declines as sellers compete for purchasers. This is a basic economic concept that applies to land just as any other commodity within a market system.

This study draws on the theories of institutional economics, as opposed to neoclassical or neoliberal economics, in the translation of urban land economic concepts into policy responses. This school of thought aligns well with the ontological and epistemological positions of this study, looking at constructivism and pragmatism within the context of real-world applications. In this sense, institutional economics' principles that the theories be practical, that they draw from a variety of disciplines, that institutions have a significant role to play rather than just the individual as an agent, and that the economies are open and evolving systems, are well suited to the task at hand (Hodgson, 2000). The economy and its elements are not immutable natural forces; rather, they are human constructs that reflect the values, context, and societies that they serve. Economic theory and practice are value-laden, as postulated by Gunnar Myrdal

(Hodgson, 2000, p. 319). Institutional economics also embraces the concept of power, especially the idea of institutions as wielders of structural power.

Property Rights

Property rights are the manifestation of the economy within and upon the land. Rights are a mechanism of the state, established and enforced by laws. Furubotn and Pejovich (1972) define property rights in the community "as the set of economic and social relations defining the position of each individual with respect to the utilization of scarce resource" (p. 1139). They assert that "Roman Law, Common Law, Marx and Engels, and current legal and economic studies basically agree on this definition of property rights" (p. 1139). Ratcliff (1949) notes that real estate markets trade in rights, not property per se, which are subject to the social and legal institutions that define them (p. 6).

Access to lands need not be through property rights, however. Razzaz (1993) outlines a variety of claims on land "based on perceptions of interest, citizenship, justice, history, etc." (p. 341). These claims to property do not need to be based on a traditional holding. They can manifest as protections of entitlements or in the exertion of control over land. Through this, claimants legitimate existing claims to make them rights (p. 342). Indeed, "non-compliance with some aspect of the law (de facto possession in particular) has been one of the few avenues through which disadvantaged groups have been able to gain access to land and housing" (p. 345).

Property rights, or indeed economic structures, are not stagnant. They are social constructs and change and advance in response to pressures from the societies they serve. Land use and urban planning mechanisms allocate property rights based on economic power. This power is often based on existing ownership structures, allowing the landed class to dictate the provision of housing and services to the poor and working class. The economics of property rights are applied on the ground – literally – in land use planning.

Land Use

Land use planning is the articulation of human geography in the form of strategic and tactical plans that guide future development activities. One of the planner's roles is to create a viable environment where citizens can live and work, while achieving equity and efficiency (Chakrabarty, 2001, p. 333). There can be conflict between what citizens view as a desirable environment for them to live and work, and the objectives of equity and efficiency for society on the whole. In particular, the role that property plays in economic advancement behooves rights holders to act in a self-interested manner potentially at the expense of the larger community, predominantly against those who would not have the same economic power (Furubotn and Pejovich, 1972).

Jacobs and Paulsen (2009) expand on this thought: "planning has been used to secure and protect the property right interests of the affluent and influential classes and races" (p. 134). They go further and say, "planning is fundamentally about the allocation, distribution, and alteration of property rights" (p. 135). Planning as a technical skill has attempted to work towards the public good, it is often appropriated for private interests, particularly those with wealth and power. Individual rights holders act in their self-interest, and act to exclude the poor, minorities, and/or immigrants from certain locations using the tools of planning to effect this exclusion (Scally & Tighe, 2015).

The poor and working classes are often left to provide for themselves, resulting in informal housing settlements. In Mexico, and indeed around the world, informal housing has been used by people in an attempt to secure shelter for themselves. These settlements have been called "self-help housing", "slums", or "*vulgo* squatting" in various contexts (Berner, 2001, p. 293). Alsayyad (1993) defines these informal communities as "high-density, widespread, residential communities which have been established… outside of the formal legal and economic structures" (p. 34). In the Mexican

context, one pictures sprawling settlements within or on the outskirts of urban centers with limited or no services offering substandard or even squalid conditions (Berner, 2001, p. 293).

Housing

This brings the discussion back to the relationship of wealth and power as it relates to access to land and development rights. Housing is a human need, and when neither the public nor the private sectors are providing it, people will provide it for themselves in the form of self-help housing. Depending on the context, this housing looks like slums up the hillsides surrounding cities, or tents along street medians and rusty vans in parking lots as seen in Canadian cities (Mauboules, 2020).

Where citizens within a society are excluded from the mechanisms of property rights, they will then turn to their economic rights to satisfy their economic needs that support their life and liberty. This is particularly salient for life-sustaining needs such as shelter. The manifestation of this theory into practice is individuals becoming squatters. Mainstream definitions of squatting and squatters offer a rather narrow definition lacking nuance and humanity. A squatter is defined in the online Merriam-Webster dictionary as "one that settles on property without right or title or payment of rent" or "one that settles on public land under government regulation with the purpose of acquiring title". This study will use more humanistic terms to categorize the individuals who occupy informal settlements.

There is a multitude of practical reasons why people turn to the informal housing market. Brueckner and Selod (2009) outline a series of potential circumstances which may apply: insufficient housing supply, housing supply not targeted to low-income families, underinvestment in infrastructure, monopoly land ownership, regulation, and discrimination. All of these circumstances limit an individual's ability to gain property rights and exercise their economic rights. Through their occupation, settlers enforce their economic rights and take their position as participants in the local economy.

This intersection of economics, land use, and housing is the subject of inquiry for this study in Mexico. Where do property rights align to land use when it relates to housing within an economy. Property rights and land access in this context can be mutually exclusive, as seen in the prevalence of informal housing. Land-use decisions are supposed to balance economic, social, and environmental needs within a community, but this is a delicate balance. Wealth and power influence the direction that the scales tip, and rarely do they tip in the direction of the poor. These influences are all constructs of the social systems within which they operate, and the results play out in the real world, allowing purposeful examination and adjustment.

Methodology and Approach

This interdisciplinary work looks at the intersection of economics, land use, and property rights to examine its impacts on housing. The epistemological foundation is that of pragmatism: seeking the most appropriate avenues to find real-world solutions. This engages both interpretivism and positivism in the study's framework, looking not just at what the data says, but also at what the data means (Patel, 2015). This foundation broadens the suite of methodologies available to the researcher. The study is based on an inductive case study approach, looking in detail at specific examples from the field research. Ethnography was used extensively to contextualize and interpret the findings in the field.

The research process in the field was iterative and opportunistic. The research questions were left quite broad, leaving space for exploration and creation. One of the principles of the research was the co-creation of research with the participants. San Pedro and Kinlock (2017) describe this process of research decolonization referencing the relationship built between the researcher and participants. They encourage researchers to "center the realities, desires, and stories" of the participants so as to not "other" them in an extractive research process (p. 374). This respected the positionality of the researcher as an outsider and allowed Mazatlecos to define what was important to them and what they wanted to

have studied. This was a very fruitful approach that expanded the research findings significantly. It was also an inductive process allowing the research to reveal within its findings answers to unasked questions rather than seeking a singular answer.

A foundational method of research is the examination of existing literature, or archival review, to ascertain the current practices within the land development industry. As the researcher is not native to Mexico, it was important that she be informed regarding the practices around the development process, creation of informal settlements, and land-use decisions. This research was from the point of view of the community as well as from the regulatory bodies.

Semi-structured interviews (SSIs) were used as a tool for this project, targeting individuals familiar with the communities, developments, and industries. This method provides a deeper understanding of issues as compared to a closed question survey, and allows for follow up questions, additional areas of inquiry, and a freer conversation. Luo and Wildemuth (2009) indicate that SSIs are more "organized and well planned" as opposed to casual conversations (p. 248). As Newcomer et al. (2015) indicate, SSIs are "superbly suited" to research where "probing open-ended questions" are necessary to gather the required information (p. 494). The flexibility and adaptability of SSIs were well suited to the research question and the nature of the informants.

The researcher used the 'snowball' method to identify potential informants. The snowball sampling method is described by Cohen and Areili (2011) as one interviewee referring the interviewer to a new interviewee, who then refers on to the next interviewee, and so on so that the "sample group grows like a rolling snowball" (p. 424). This approach to interviewee selection is helpful in conflict situations, although Cohen and Areili do not limit the use of the snowball approach to dangerous circumstances.

A series of public sector agencies, civil society organizations, and business advocates were initially selected as a preliminary canvas of potential informants. The municipal government was contacted for information on economic development, urban planning, and local housing policies. Connections with the Universidad Autonoma de Occidente and UNAM – Universidad Nationale Autonoma de Mexico were established with fellow researchers in this field, which were fruitful relationships in terms of information, history, and context. Lastly, connections within civil society organizations (CSOs) helped to link policies with the experiences of people in the community. While this research is approached from a policy lens to limit interaction with vulnerable citizens, it was important to have an understanding of how those policies impact their daily lives.

Case studies were presented in the larger research study, featuring invasions at Genero Estrada, Alvorada, Andres Manuel Lopez Obrador (AMLO), General Phillipe Angeles, and El Castillo (Hansen, 2021). Each neighbourhood presents a different form of invasion, with differing ages, tenures, and potential for regularization (being serviced with infrastructure and granted formal deed and title). The research findings are based on the information gathered during the course of the tours of these locations, and of the GIS analysis that was undertaken to assess the hypothesis that parcel sizes have remained modest over time and geography.

GIS Methodology

Licker Geospatial Consulting Co was commissioned to undertake the GIS modelling for analysis by the researcher. They used the ESRI 2011. ArcGIS Desktop: Release 10. Redlands, CA: Environmental Systems Research Institute software suite for this analysis. First, seven sites were identified based on the images and descriptions provided by the researcher. Sites consist of census block boundaries, which were used as a proxy to property boundaries. Census block data is also used for later analysis. Next, all non-building areas in the census block are identified with ESRI World Imaging service (multiple satellite platforms, roughly one meter ground resolution).

Then the area of the non-building delineation is joined to census block data, and the building area is calculated as the non-building area subtracted by the census block area. Lastly, variables such as the number of dwellings, census block area, non-building (greenspace) area, and building (foundation) area are summed for each site. The average parcel size

is calculated as the total block area divided by the total number of dwellings. The average foundation area is calculated as the total foundation area divided by the total number of dwellings.

They report that the methodology has a +/- 10% uncertainty. The census contained the number of dwellings, which is used to calculate the average parcel area based on the known size of the census area. This area excludes roadways, parks, and public facilities. The census used was from 2016, and the specific tiles of ESRI's world image service used are from the GeoEye-1 satellite, captured 1/18/2020. This information provided the typical parcel size, site coverage, and housing density, which is used in the research findings of this paper.

Research Findings

Housing is necessary for any economy to function. Employees and their families require shelter in order to be able to participate in their economic sector. Housing options for the poor and working-class in Mazatlán include self-help housing and public housing programs. Pricing for each product type is dictated by the market, although the mechanics of the market are not readily studied.

In Mazatlán, like most other Mexican cities, informal housing made up a significant portion of the housing stock. Much of the older housing stock originated as invasions, with a particular influx in the 1950s (Beraud, 2001). Over time most of them have been regularized with services and titles (Interviewee 2, personal communication, January 27, 2020). Informal housing in Mexico, or at least the subset reviewed for this research, includes housing installed without an official title, usually of limited initial construction and servicing. This segment of the marketplace is still growing, and several examples of invasions were reviewed as part of the larger research project.

Housing in Mazatlán is predominantly designed as single-family homes of relatively small size. Purpose-built apartments are much rarer; however, many homes are divided for full or partial suites for extended family or renters (M. I. Grano-Maldonado, personal communication). Condominium buildings are targeted to the tourist market, either foreigner tourists or Mexican nationals from inland cities (A. Santamaría Gómez, personal communication, January 31, 2020; S. Gamble, personal communication, January 24, 2020).

There are several broad types of housing targeted to Mazatlán citizens: public housing such as those under programs like INFONAVIT, subdivisions (*fraccionamientos*), private subdivisions or gated communities (*privados*), and informal developments areas (*invasions*). Of interest here, homes in each of these areas tend to be of similar size and densities. Homes are placed together with no side yards on lots approximately 7 meters by 20 meters, or approximately 140 square meters (Interviewee 3, personal communication, January 27, 2020). This is a very standard size across the city regardless of the target market aside from tourist product. As a result, densities are very high, with high land utilization rates being standard.

The urban planning documents for the City of Mazatlán do specify zoning requirements for various densities and types of housing, ranging from low density to very high density. Figure 1 – City of Mazatlán Permitted Zoning Densities, Author's Translation is the zoning permissions table from the *Plan Director de Desarrollo Urbano de la Cuidad de Mazatlán, Sinaloa* (IMPLAN, 2015). The highest density is reserved for housing. The informal lots developed at AMLO, for example, at 140 meters squared fall into the single- family H4 zoning requirements. This designation allows for a total of two-story homes with a maximum building intensity (floor space ratio is more commonly used in Canada) of 1.5. This metric means that the home builder can build a house 1.5 times the size of the land. On a 1,500 square foot lot, they could build a 2,250 square foot house. The multi-family designation under the H4 zone allows for a five-story building and a 3.8 floor space ratio.

Figure 1 *City of Mazatlán Permitted Zoning Densities, Author's Translation*

		Housing							Tourist	
		Low Density Housing	Medium-Low Density Housing	Medium Density Housing	Medium-High Density Housing	High Density Housing		Mixed Use	Tourist	Residential Tourist
Classification of Uses	☐ Permitted ☐ Prohibited	H05	H1	H2	H3	H4		Mx	T	TR
Density	Number of Homes per Hectare	6	20	40	63	101	83	67	10	7
	m2 Minimum Home Area									
Minimum Lot	Linear Front Feet									
	Area m2	1,800	500	250	160	99.00	120.00	150	1,000	1,500
	Maximum Number of Single Family Homes per Lot									
	Maximum Number of Multi-Family Homes per Lot									
Minimum Free Area	Minimum Percentage of Green Space per Lot	60	30	30	25	25	25	25	35	50
Maximum Surface Built Area	Percentage of the Total Lot Destined for Construction	40	70	70	75	75	75	75	65	50
Maximum Building Height	Levels	2	3	3	3	2	5	8	15	5
	Linear Meters From the Ground	6.00	9.00	9.00	9.00	6.00	15.00	24.00	45.00	15.00
Maximum Building Intensity	Number Times the Area of the Property	0.8	2.1	2.1	2.3	1.5	3.8	6.0	9.8	2.5
Maximum Building Area	Minimum m2 of Area of Construction per Lot	1,440	1,050	525	360	149	456	900	9,750	3,750

Source: IMPLAN, 2015a, p. 329

Results from the Field

To explore the issue of parcel size standardization further, seven locations were identified for review using several land-use metrics:

- Average lot size
- Building footprints/average site coverage
- Number of dwellings per hectare

These metrics will identify whether the residential parcel planning is consistent across time and geography. Seven neighbourhoods were identified for GIS analysis. Each of these has particular salience for the researcher as communities that she reviewed as part of the case study research in Mazatlán.

1. The Los Portales fraccionamiento where interviewee Hernandez Valle lives.
2. The Real Del Valle privados where an informant of the researcher lives.
3. The El Cid residential tourist golf course community where Interviewee 1 lives.
4. The Benito Juarez neighbourhood, one of the oldest invasions in Mazatlán.
5. The Genaro Estrada invasion case study example.
6. The Pradera Dorada 7 neighbourhood, a recently built specimen of the INFONAVIT housing program.
7. The General Phillipe Angeles invasion case study example.

This analysis demonstrated that single-family housing for Mazatlecos is generally built on very small parcels with very little space between them. Even lots for wealthier citizens are relatively small, and those for residential tourists are also

modest compared to allocations in North American residential tourist destinations. Table 1 – Specimen Location Density shows the results of this analysis, as compared to the allowances under the zoning bylaws.

Table 1 *Specimen Location Density*

Site Number	Site Name	Zoning	Average Lot Size (m2)	Minimum Lot Size (m2)	Dwellings Per Hectare	Maximum Dwellings Per Hectare
1	Los Portales	H4	129	99	77.82	101
2	Real Del Valle	H3	225	160	44.47	63
3	El Cid	H1	626	500	15.97	20
4	Benito Juarez	H3	152	160	65.81	63
5	Genaro Estrada	H3	178	160	56.27	63
6	Pradera Dorada 7	H3	126	160	79.06	63
7	General Phillipe Angeles	H3*	170	160**	58.79	63

Source: Licker Geospatial Consulting, 2021

* This site is in a hazard zone, so technically is unable to be developed

** There is a discrepancy between the GIS results and a provided survey plan. This discrepancy is based on the date of invasion and the fact that as of the 2016 census not many homes had been developed as yet.

Land allocation for single-family homes in Mazatlán varies by wealth and target market, as found by the GIS analysis. Parcels intended for the poor and working class are modest, averaging under 200 meters squared. Developments for wealthier Mazatlecos are slightly larger, averaging 225 meters squared in the example location, and areas for residential tourists are much larger, averaging over 600 meters squared. Wealth affects land allocation, with residential tourists being able to secure the most land for themselves, followed by wealthy Mazatlecos, and then the smallest lots are allocated to the poor and working class.

As was reported by Interviewee 3 (personal communication) in the AMLO case study site, homes are placed together with no side yards on parcels approximately 7 meters by 20 meters, or 140 meters squared (Interviewee 3, personal communication, January 27, 2020). The survey plan provided for the unapproved parcels at the General Phillipe Angeles case study site indicated an average lot size of 7 meters by 15 meters, or 105 meters squared. This size range appeared to be a standard across the city, regardless of the age of the subdivision or the nature of its origins as shown in Figure 2 – Average Parcel Size (M2).

Figure 2 *Average Parcel Size (M2)*

Average Lot Size (m2)
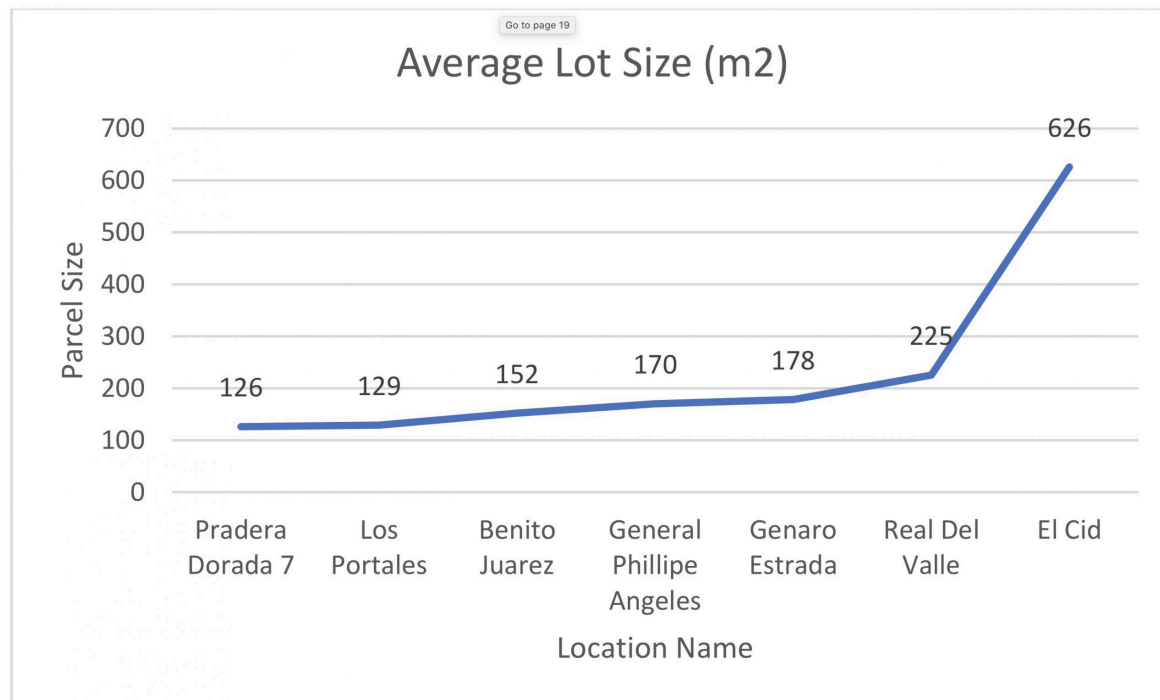
Source: Licker Geospatial Consulting, 2021

The dwellings per hectare for Location 2 – Real Del Valle is slightly lower than 50 units per hectare, with the remainder of citizen housing having higher densities as shown in Figure 3 – Dwellings per Hectare. Location 3 – El Cid is quite low in comparison, at almost 16 units per hectare. The densities found in Mazatlán are very high, using all available lands for housing.

Figure 3 *Dwellings per Hectare*
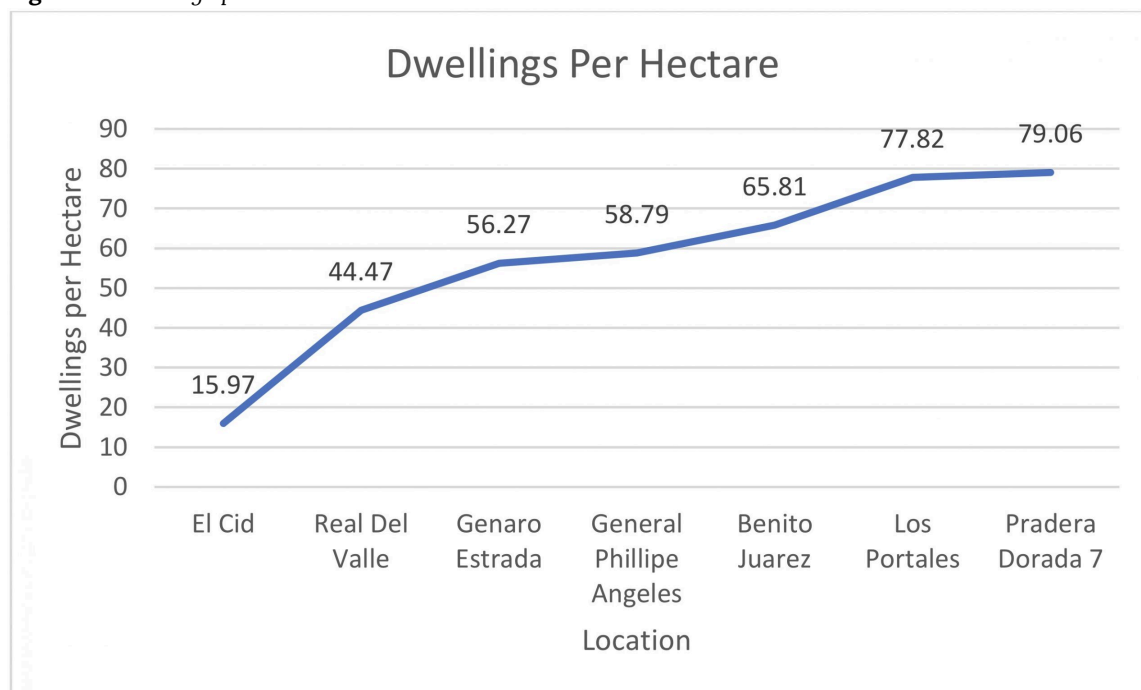
Source: Licker Geospatial Consulting, 2021

Housing markets in all segments have an economic component. The buying power of the market segment dictates the housing type and location available to purchasers in that economic class. Mazatlán has seen success in enabling their market serve all of the segments. Housing typology for the local population generally consists of single-family dwellings consisting of one-to-two-bedroom homes on less than 200 square meter lots and located away from the beachfront. (DataMexico, n.d.; Licker Geospatial Consulting, 2021).

The majority of homes in Mazatlán began as informal housing, moving through the process of regularization over the past decades. There are also areas of public housing provided through programs such as INFONAVIT, and new invasions continue to occur throughout the city. Housing across the spectrum, from informal shelter to luxury residential condominiums continue to be developed in all areas.

Discussion and Analysis

The issue of housing allocation is market based. There is no mandated requirement for developers to provide affordable housing, nor is the land use scheme sufficiently detailed so as to allocate lands for particular populations. Housing inequity is not an issue that informants were familiar with or were concerned about. One made one's home where one could according to one's means. Informants indicate that there is sufficient housing across the income spectrum, such as it may be, for any who wish it. This does not mean that the housing would meet North American standards of housing appropriateness or suitability, but it is a roof over one's head, even if it is but a tarp. As a result, street homelessness is not common.

The examination of informal housing and its role in the market within Mazatlán was iterative, using a case study methodology. Five invasion locations were toured accompanied by informants that could offer insights into its creation and development, and its inhabitants. The five present a range of informal community types, ranging in age, tenure, and level of development. Each presented a unique community building experience, and have arrived at different stages in their development journey.

The site tours provided a deeply contextualized understanding of the role of informal housing as a component of the housing market in Mazatlán. It was this researcher's impression based on media portrayals and even some literature that occupants of squatter settlements are victims of circumstance (Dürr, 2012; Cenecorta & Smolka, 2000). This is visible in the word choices such as slums or squatters, each of which paint negative personal characteristics onto the families that live there. They are often attributed little agency, and are instead positioned as helpless prey of the powerful in order to justify interventions from the developed world (Easterly, 2006).

The findings here show a different side of the situation. Informal housing is a viable source of housing for the poor and working class, and is an integrated component of the housing market. The individuals spoken to were proud of their homes, and had strong hopes for their futures. This is not to say that there are not abuses within the systems, or that this type of housing meets a high standard. Rather the occupants deserve a more prominent role in the narrative about their circumstances than is generally given to them.

It also revealed the integral role that informal communities play in the housing continuum – they exist and are vital to meeting the housing needs and are recognized as such by the authorities. A significant proportion of the housing stock in Mazatlán originated as informal settlements, and the Mexican government have accepted the role this important component of the market plays. They become integrated into the fabric of the communities, and in a few short years after development they are indistinguishable from other types of development. As their major urbanization push has largely been completed, authorities are now looking at regularization, infrastructure, and integration of these neighbourhoods into the larger city.

The field excursions also revealed that land allocation in the form of parcel sizes appeared quite uniform over time and geography. Older invasions appeared to offer similarly sized lots to new invasions, and invasions appeared to offer similarly sized lots to formal developments. This field finding was tested using GIS technology over seven distinct neighbourhoods, which again presented a sampling of ages, locations, tenure types, and market segments. It was found

that parcels for poor and working-class housing are modest, under 200 meters squared, regardless of age and origins. Land parcels of the wealthier Mazatlecos contained within gated communities, privados, were slightly larger at 225 meters squared. Lots for residential tourists were much larger, which was not a surprise; however, they remain relatively small compared to similar developments in other locations in North America.

These findings are important, firstly to Mazatlán and its citizens as they continue to develop their urban planning frameworks. Their commitment to density and infill will continue to increase affordable supply close to employment centers, and maximize existing infrastructure. Their continued support for the informal sector is also encouraged given that this segment serves the poor and working class, markets that are generally underserved by the formal housing developers.

The western world continues to grapple with its own informal housing challenges, and there are lessons to be taken from the experience in Mazatlán. The density of development, the minimalistic urban sphere requirements, and allowing the market to supply the demand have all contributed to housing being available for citizens. There are some learnings to take from this, most importantly the realization that housing is a human right and essential to human life. If the public sector doesn't provide it to citizens, and the private sector isn't able to serve the market, then the citizens will provide housing for themselves in the form of self-help housing.

Research Application

By taking a wider frame, the findings here can be broadened to have applicability in other jurisdictions, particularly in developed nations where the specter of informal housing is becoming unignorable. This researcher's practice area is in affordable housing in Canada, and the lack of supply is a notable hindrance to providing housing to citizens (Perrault, 2021). It is already happening that individuals are turning to self-help housing to meet their shelter needs (Mauboulis, 2020). Without a concerted effort to provide through the public sector or allow the private sector to serve, the current examples of informal housing will be the tip of the iceberg. Perhaps the solution, like in many parts of the developing world, and indeed like most of North America prior to World War II, is to allow individuals to provide for themselves through self-help housing.

The first learning from the field is how dense housing in Mazatlán is. Single-family lots are very small, and they do not require excessive yard spaces. This allows developers to create many more homes on a parcel of land, thus increasing supply. Related to this is the minimalistic urban sphere requirements. Roads are narrow, sidewalks are minimal, and provision for community space is limited. While the Mazatlán standard may not be universally applicable, there are likely opportunities for efficiencies in the design process, both from a space-saving and a cost-saving perspective.

As a comparison, the standard residential RS1 zoning in the City of Coquitlam allows 18 units per hectare, which is exceeded by multiples in Mazatlán. The City of Coquitlam RS1 zoning allows for a minimum lot size of 650 meters squared, which exceeds the size of golf course homes targeted to residential tourists (City of Coquitlam, 1996). The City of Vancouver RS1 zoning allows for a minimum lot size of 334 meters squared, which is double the lot sizes for the majority of housing types in Mazatlán (City of Vancouver, 1997). The trade-off between the aesthetic and the functional needs to be considered in light of the fact that the aesthetic ideal is hindering the supply of housing, which will eventually lead to the creation of informal housing unless supply is created through other avenues.

Mazatlán, and Mexico more generally, allow this segment of the market to proceed based on the principles of supply and demand. If there are customers, there are suppliers. It was also reported that the regulatory and approvals process for more traditional developments were efficient in terms of time and cost. Again, the functional aspects of their processes are not likely transferable, but the principles of being efficient and bringing product to market quickly to meet demand are something that can be replicated in other locations.

In Canada and other locations, there is a mounting housing supply deficit where citizens, especially the poor, are unable to secure housing in the open market (Perrault, 2021). There will be a time, not likely very far in the future, when

informal housing becomes their only option to secure shelter. At that point, the aesthetics of urban design and the sanctity of the public process will fail in the face of human need.

Conclusion

This paper, an adaptation of a larger research project, has explored the role of informal housing in Mazatlán, Mexico. It sought to examine land use and the economy as it relates to housing access for local citizens. It is interdisciplinary in nature, meaning that it has examined the issue from a number of angles. It was also inductive and co-creative, meaning that the research participants had a hand in the advancement of the research questions in the field, and in the execution of the research.

The research is based on case studies of five invasions, each with a different history and trajectory. The information gained from the case studies indicated a further area of inquiry regarding the parcel size allocation of informal lots as compared to formal lots. It appeared from a visual inspection that land parcels had been and remained modest for the poor and working-class populations over time. This assumption was tested using GIS technology, and it was indeed found that parcel sizes had been relatively standardized, and perhaps more importantly, that parcel sizes for informal housing was not markedly smaller than for traditional development for this segment of the population. Parcel sizes in privados and for residential tourists were larger, not unexpectedly, however they remain small by North American standards.

The findings here indicate the important role that informal settlement plays in the housing markets of Mazatlán, Mexico. It is the source of housing for many or most of its citizens over time. Housing is a significant contributor to economic activity, even considering the basic requirement of employees needing a place to live. Without this source of housing for its citizens, it is doubtful that Mazatlán would have been able to develop its economy as it has.

Western economies can consider the role of informal housing as part of the housing continuum, especially as they face rising instances of informal housing in their cities. Where the private sector is hindered in serving the market, and the public sector is unable to provide housing, individual households will turn to self-help housing. Reexamining development densities and the requirements under the banner of urban planning may be required to either accommodate informal housing, or to facilitate private and public provision so that informal housing is unnecessary.

Appendix A *Interview List*

Alias	Role	Organization
Dr. Grano-Maldonado, MI	Researcher	Universidad Autonoma de Occidente
Gamble, S	Real Estate Agent	Keller Williams
Hernandez Valle, A	Teacher	Local High School
Dr Santamaria Gomez, A	Professor	Universidad Nationale Autonoma de Mexico
Interviewee 1	Director	Centro Communitario Familia
Interviewee 2	Elected Official	City of Mazatlán
Interviewee 3	Engineer	City of Mazatlán

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40. Urban Flooding and Changing Landscapes: Incorporating Urban Communities' Experiences, Perceptions, and Knowledge in Environmental Management [full paper]

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Abstract

Flood risk is rising globally due to climate change. It is a disaster that has the capacity of reversing years of development. In developing African countries like Nigeria that suffer perennial flooding, the impacts of flooding are felt even more as the frequency has increased over the years. My research investigates the flooding phenomenon in urban areas that are beginning to experience flooding in recent times. A mixed methodology will be adopted. Residents of these urban areas will be engaged in this research. The goal is to work together to seek sustainable solutions to the flooding problem that will be deployed to effectively manage flood risk. There is the potential for findings to also be deployed in other rapidly urbanizing parts of the globe.

Introduction and Background

Flood risk is set to rise globally due to climate change. It is a disaster with cascading effects and in Africa, flooding constitutes a major environmental issue (Grasham, Korzenevica, & Charles, 2019). The frequency of flooding events has steadily increased over the years especially in the urban areas with attendant disastrous effects (Adelekan, 2016). Nigeria is one country that is consistently ravaged by perennial flooding. The frequency of flooding events in Nigeria has steadily increased over the years especially in the urban areas with attendant disastrous effects (Adelekan, 2016). My work studies the increasing incidence in recent times of pluvial flooding in urban areas which did not experience flooding in the past. I will be engaging with the residents of these urban areas to understand their perceptions on the link between urbanization and climate change to the flooding events and seek ways of mitigating or controlling the problem. It is important to engage with residents who have experience and knowledge about what works in their localities, and what approaches are suited to local terrains to effectively find workable solutions. Local residents will have the opportunity to present flooding issues in ways that are meaningful, directly relevant, and personal and which align with their lived reality in a bid to seek flood control and management strategies.

Flooding, Sustainable Development and the Sustainable Development Goals (SDGs)

Flooding impacts sustainable development (Aderogba, 2012). The Bruntland report proffers the most popular definition of sustainable development which is the development that meets the needs of today without compromising the ability of future generations to meet their own needs (Brundtland, 1987). However, the core concept of sustainability could be said to be as old as humanity and has only appeared on the international political agenda because of human ecological pressure on earth (Echendu, 2020b; Leal Filho et al., 2018). The rising flooding events in Nigerian urban

centers have lasting impacts beyond the immediate into long-term sustainability. The pervasive poverty in the country further exacerbates the disastrous effects of flooding (Hallegatte, Vogt-Schilb, Rozenberg, Bangalore, & Beaudet, 2020). Flooding poses a threat to Nigeria achieving the SDGs which are a set of goals mapped out by the United Nations for all nations to work on towards achieving sustainable development. Of the 17 SDGs, 9 are directly impacted: No poverty; 2: Zero hunger; 3: Good Health and Wellbeing; 4: Quality education; 6: Clean water and Sanitation; 8: Decent work and economic growth; 11: Sustainable cities and communities; 14: Life on water and 15: Life on land (Echendu, 2020a). Just as the SDGs are all interconnected, connections on the impact of flooding can be found in all the goals.

Living with Floods

In the flooding literature, 'living with floods' is a concept gaining widespread traction whereby flooding is viewed as a natural phenomenon that cannot be prevented and efforts should, therefore, move towards adaptation (Forrest, Trell, & Woltjer, 2017). For many researchers, urban flood resilience should be improved by seeking adaptation measures to prevent damage due to flooding while economic and social systems should be strengthened to improve the capability for mobility instead of seeking flood control measures (Hellman, 2015; La Loggia, Puleo, & Freni, 2020; Liao, 2019). This approach has gained support in many parts of the globe including Nigeria. For example, Adekola and Lamond (2018) in their work on media framing analysis of urban flooding found that multilateral organizations champion adaptation strategies and believe that efforts should be channeled at 'living with water', damage reduction, emergency response, and the aftermath even though the narratives of government, local government and businesses align with the premise that flooding can be and should be prevented. The view of these multilaterals could have been shaped by flood response strategies in their funding countries which tilt towards 'living with floods'. I argue that while adaptation strategies may be relevant in some countries, this is not an approach that should be considered in Nigeria due to the abundance of evidence on the main drivers of flooding which can and should be controlled in the majority of the urban areas experiencing flooding. There has been a significant body of work on the causes of flooding in Nigeria and this is categorized in this work as follows: urbanization and poor urban planning, climate change/high rainfalls, inadequate infrastructure, and poor waste management.

Urbanization and Poor Urban Planning

Urbanization has been linked to increasing flooding incidences. It changes the geology of the catchments and subsurface through changes in basin slopes, sediment transport, and soil permeability (O'Donnell & Thorne, 2020). This view is supported by Israel (2017) whose work finds that flooding is induced or exacerbated by man's interference in nature's way of draining its catchments or basins, thereby upsetting the balance. The transformation due to urbanization of rural and undeveloped regions such as forests, green lands, and agricultural lands into urban areas, changes flood patterns. Flooding in urban centers is particularly devastating because of the concentration of human activities. Nigeria is rapidly urbanizing and its urbanization is characterized by an increasing number of suburbs that did not flood in the past beginning to experience annual flooding. G. T. Cirella, Iyalomhe, and Adekola (2019) has also attributed increased flooding in Nigeria to changes to the urban landscape, without equal precautionary measures for flooding, and predicts a worsening situation. Even though urbanization has been attributed to the floods being experienced in Nigeria, it is important to note that many fully urbanized countries of the world do not experience flooding of this nature linked to a rise in informal settlements due to urbanization. This suggests there are ways to better manage urbanisation to prevent issues like flooding.

Climate Change/High Rainfalls

Climate change is a global phenomenon but developing countries of the world are disproportionately suffering the impact (Akeh & Mshelia, 2016; Azadi, Yazdanpanah, & Mahmoudi, 2019). Climate change will steadily and continuously increase flood risk in the coming years by inducing changes in sea levels, an increase in river flows, and heavier, prolonged rainfall durations (Akeh & Mshelia, 2016). Flooding incidents in Nigeria have particularly been caused by increased rainfall events, a climate change effect (Hassan, Kalin, Aladejana, & White, 2020). The most serious flooding events reported in recent times have occurred after bouts of more than normal heavy rainfall. In as much as climate change has changed rainfall patterns, numerous research finds that flooding is caused more by human activities in Nigeria than climate events (Echendu, 2021; M. Magami, Yahaya, & Mohammed, 2014). The issue of rainfall-induced flooding is considered serious because Nigeria lacks the needed infrastructure to conduit and channel rainwater and surface run-off water which exacerbates flooding risk.

Inadequate Infrastructure and Poor Waste Management

The dearth of adequate stormwater management infrastructure and drainage is one of the leading causes of flooding in Nigeria (Salami, von Meding, & Giggins, 2017). Good planning practices incorporate sustainable drainage management to cater to the needs of the population (Adedeji, Odufuwa, & Adebayo, 2012). Poorly constructed and managed drains are hallmarks of Nigerian urban centers (Adeloye & Rustum, 2011; Ndoma et al., 2020). The majority of the storm drains are open and small. Their small size makes them unable to support large volumes of water during heavy rainfall. The absence of covers makes them easy dumping sites by undisciplined citizens. Solid waste contributes significantly to flooding in Nigerian urban centers (Wahab, 2017). It is not uncommon to see drains flood parts of the cities due to poor connectivity and sub-optimization where drainage in one location causes flooding in other parts of the city. The construction of infrastructure lags behind urban development making the existing drainage inadequate to discharge run-off increasing the risk of flooding (G. Cirella & Iyalomhe, 2018). Waste management is a core part of urban governance but this is a problem for developing countries and contributes enormously to flood risk (Lamond, Bhattacharya, & Bloch, 2012).

Research Gap, Aim, and Questions

While research has connected mainly anthropogenic factors like urban planning, poor infrastructural base, and rapid/ unplanned urbanization to the flooding (G. Cirella & Iyalomhe, 2018; Oriaifo, Friday, Faith, Adama, & Augustine, 2020), gaps still abound in the understanding and research on flooding in Nigeria (Nkwunonwo, Whitworth, & Baily, 2020). There has been little research on community experiences and understandings of flooding which can inform solutions in Nigeria. It is critical to investigate the perceptions and experiences of the impacted communities' residents and their opinions on the best way to tackle the problem. This research aims to understand the residents' perceptions of the cause of flooding and their experience of government urban planning and urbanization. A key gap exists in research on the toll that flooding takes on the people and specific local environments. Research on the lived experiences of the flood victims and knowledge of what they perceive to be the cause of the floods and possible solutions is also missing. This is a significant oversight as such research has the potential to hear the voices of the people affected, and to influence public policy around urban expansion and flood control. This research will therefore investigate the link between the flooding and urban processes from the point of view of residents, an area previously unexplored in research. This work will also investigate changes in land use patterns to assess urbanization impacts. My research will seek answers to these questions:

1. What are the perceptions of residents on urbanization, high rainfalls/climate change, and flooding events?
2. How has the flooding impacted ways of living and how best can it be controlled?

Why this Research is Applied Research

The goal of this work is to investigate the link between increasing flooding events and urban processes from the perspectives of community members. Adopting a bottom-up approach will yield insights that could be incorporated in flood control and management plans and policies. This research also seeks empowerment and environmental justice by giving a voice to local residents whose knowledge are usually ignored in environmental management strategies (Mashi, Inkani, Obaro, & Asanarimam, 2020). This has the potential to yield useful knowledge and data that could be deployed in flood control and environmental management processes, as was achieved in the Vietnamese Mekong Delta where collaboration with locals enabled a shared understanding of flooding and led to policy change (Tran, Pittock, & Tuan, 2019; Tran & Rodela, 2019). Local stakeholders have also been involved in flood management research in Europe with positive results (Begg, 2018). Participation by the people affected by the flooding in policy development and its implementation may just drive the needed action, results, and long-term sustainability. Generally, the physical impacts of floods and risk levels have been studied to a greater extent than the socio-economic and environmental aspects. As such, environmental and socio-economic consequences of flooding are not usually included in flood impact estimation models and management policies. This research will provide much-needed knowledge to improve our understanding of the environmental, social, and economic effects of floods and incorporate local knowledge in mitigation strategies. The overall goal of this research is for the findings to be deployed in real-life flood mitigation strategies.

Conceptual Frameworks

To conduct my research. I will be using three conceptual frameworks. The first is sustainability and sustainable development. Environmental justice (EJ) and Flood Risk Management (FRM) are the other relevant frameworks that are embedded within the broader concept of sustainability in my work. The subsequent parts of this work discuss these frameworks in a more in-depth manner.

Sustainability and Sustainable Development

Sustainability has emerged as an important discourse in the face of the many problems facing humanity. Even though it became a buzzing topic in the 70s (Hong, Kweon, Lee, & Kim, 2019), it is not a new concept. The core values of sustainability are recognized and have been practiced in indigenous cultures (Anoliefo, Isikhuemhen, & Ochije, 2003; Magni, 2017). In Western cultures as well, there is evidence of strong advocacy for the co-existence of nature and humans since the mid-nineteenth century (Li, 2017) which is one of the core tenets of sustainability. Working towards sustainability has become prominent on the international political agenda because of human ecological pressure on earth (Echendu, 2020b; Leal Filho et al., 2018). As a response to these ecological problems and also the need for development, new concepts emerged among which sustainable development was one of them seen as a way of overcoming these problems.

The United Nations World Commission on Environment and Development Conference (WCED) in I987 was instrumental in shaping a more global view of the concept of sustainable development. The comprehensive Brundtland report, a product of this global conference and partnership provided a turning point in the sustainable development

discourse. However, Mebratu (1998) posits that just as the WCED conference was not the starting point of the emergence of the concept of sustainable development, it will also not be the end of the finetuning and reframing of the concept. Mebratu (1998) asserts that other significant theoretical precursors shaped WCED's conceptualization of sustainable development and these were in turn shaped by other conceptualization efforts because knowledge is built and grows from prior knowledge. The popularity and wide acceptance of the concept of sustainable development led many skeptics to believe that it is a buzzword that would wane over time but this has not been the case as we have seen its influence grow significantly in policy development at all levels of government, international organizations, and business corporations (Mebratu, 1998). Definitions and understandings vary across disciplines each with different emphasis on social, political, environmental, technological, issues, etc (Gibson, 2006). Meanings accorded to the concept also depend on the context and as such, there is no one specific theory or method, or ways of studying and researching this concept. The lack of uniform understanding and clarity coupled with the growing recognition of the concept and its centrality in national and international agendas had led to a battle of which definition or understanding is most encompassing (Connelly, 2007). There is also a shifting trend whereby human development, social capital, and the dynamics within the natural ecosystem to adapt to and solve problems are considered more and more. We also observe the fluidity of the concept and a move from just environmental preservation or maintenance to social advancement with a cultural context.

The concept of sustainable development is viewed as complex and has been debated extensively by scholars (Gibson, 2006; Mebratu, 1998; Sinakou, Boeve-de Pauw, & Van Petegem, 2019). It has also been critiqued as vague but has achieved broad attention on various levels that other development concepts have failed to garner (Mensah, 2019). Sustainable development aims to foster and protect the socio-ecological system from the smallest family unit to worldwide levels in a durable, dynamic, adaptable, and resilient manner but defining sustainability within the different categories or aspects of politics, society, ecology, culture, and economics leads to fragmentation (Gibson, 2006). Seeking ways to integrate the various understandings and identify interconnections would foster positive holistic actions. It is important to acknowledge and integrate the different viewpoints into development policies and programs to ensure the success and a broader acceptance of the visions and goals of sustainable development because of the complexity of human-environmental interactions and relationships. The social construction of sustainable development and innovative ways of engaging communities is called for (Robinson, 2004). Particularly, a single framework for investigating the human-environmental interface is not feasible and needs to situate and analyze the issue within its context, taking into account the interactions at different levels of decision-making and analysis (Lehtonen, 2004).

While there are many definitions of sustainability (Keivani, 2010), a common understanding is the need for the current generation to factor in the needs of the future generation in the consumption of resources for development and to protect and preserve the environment. There is also a consensus on the existence of an environmental crisis. Sustainability is seen as a development goal with integrated social, economic, and environmental dimensions, which needs to be taken into account while meeting our current needs to ensure the ability of future generations to meet theirs are not compromised (Brundtland, 1987). Humans face the growing challenge of managing the pressure on the environment on which they depend. Such pressures manifest in the form of pollution, resource depletion, mitigation, and adaptation to climate change, etc (Policy, 2018). Despite the emergence of the Sustainable Development Goals (SDGs) in 2015, there is still no consensus over the societal goals that would count as sustainable development. The three bottom-line concepts of sustainability as it relates to social, environmental, and economic development form a context for this work because of the impact of flooding on all three aspects. Framing my research within this context serves the purpose of understanding the problem within a much wider context, and also understanding on the smaller scale the dynamics of flooding as it impacts local communities. The shortcomings of sustainable development to adequately dissect the social bottom line as related to flooding within the context of my study necessitates the incorporation of environmental justice to serve as a complementary framework given its relevance within the sustainability discourse and its ability to focus on the often-overlooked political component of decisions as regards environmental issues.

Environmental Justice

One definition of environmental justice (EJ) is the meaningful involvement and fair treatment of all people regardless of status in the development and execution of environmental policies, regulations, and laws whereby fair treatment ensures that no population disproportionately bears the consequences of negative environmental outcomes due to operations resulting from the executions of government regulations and at any level (Ramirez-Andreotta, 2019). Meaningful involvement entails the engagement, access, and collaboration with decision- makers and the capacity for communities to make well-informed decisions and take action towards achieving environmental justice. Environmental justice means the right to freedom from ecological devastation, having rural and urban environmental policies in place to restore and rebuild our communities in harmony with nature while maintaining the core fabric of our communities (Ramirez-Andreotta, 2019). It is an enveloping concept that brings social-justice considerations into the fore of environmental issues and decision-making and maintains that environmental issues cannot be compartmentalized in silos separate from the political and social (Ali, 2006). It is an interdisciplinary field whose grassroots movement was born in the United States as a lead-up movement after the illegal dumping of polychlorinated biphenyl (PCB) in California in 1978 (Banzhaf, Ma, & Timmins, 2019).

Early work on EJ, therefore, focused on the disproportionate spatial distribution and disposal of environmental waste in predominantly poor and racial minority communities with little political power. The concept has since evolved and been adopted in studies focusing on various socio-environmental issues due to its broadness and the possibility of integrating new theoretical concepts (Svarstad & Benjaminsen, 2020). The concept encapsulated the conditions, injustice, and lived realities experienced by communities which led to its broad acceptance (Schlosberg, 2013). The growing number of people impacted by environmental injustice is also another reason for its growing relevance coupled with the possibility of applying social justice principles to the analysis of environmental concerns within the construct of EJ (Martin & Boersema, 2011). Social justice and environmental issues are politically and conceptually inseparable(Grass, 1995). The increasing occurrences of similar problems in different multiple locations around the globe have reinforced the EJ movement.

EJ entails justice on a precautionary, procedural, distributive, and generational level. Precautionary EJ hinges on the premise that the unknowns in terms of short or long-term environmental impact due to the environmental deterioration in human communities necessitate decisions to prevent harm to humans. Procedural justice is the degree to which the public is empowered and involved in decision-making in environmental processes. Distributive justice entails equitable allocation of both the environmental risks and benefits across geographies and demographics. Generational justice relates to sustainability and refers to the obligation and responsibility of the current generation to maintain and assure a safe and healthy environment for the future generation. Generational environmental justice has become more pertinent in the face of unprecedented urbanization, globalization, climate change, etc. in contemporary times (Bolte, Pauli, & Hornberg, 2011). Despite these separate classifications of EJ, (Martin & Boersema, 2011) argue that distributive justice cannot be separated from procedural justice because the latter is a requirement of the former, although not a guarantee.

In this work, procedural justice which emphasizes democratic involvement, contribution, and fair access in environmental policy-making, and generational justice which relates to fostering sustainability and limiting environmental degradation is most relevant. The absence of procedural justice has been deemed one reason for the unjust distribution of environmental benefits and burdens as the decisions that change the environment are made by the people who enjoy the benefits to the exclusion of those that bear the burden. In many countries of the world, institutions that make decisions have historically excluded marginalized people and glaring inequalities in environmental political systems and policy-making remain the practice today (Menton et al., 2020). This is even more pronounced in Nigeria where current environmental mechanisms and policies are unjust, exclusionary, and do not involve the people in decision-making (Etemire & Uwoh Sobere, 2020). Distributive Justice is also relevant to my study whereby the majority of the communities who suffer flooding have no political capital and do not receive any help from the government. Government action to alleviate flooding in Nigeria is skewed and only known to benefit the elite, politically connected, and powerful who live in the affluent areas of the country. State institutions are known to implicitly or explicitly

accord disparate recognition to different groups (Schlosberg, 2013). This is true for Nigeria where there have been, and are intense efforts to demolish and evict disadvantaged communities who suffer flooding instead of seeking ways to make the settlements more sustainable. For example, in Lagos, a mega-city of over 20 million people where flooding is also a problem, government action to control floods since 1990 has centered on demolitions and evictions in poorer slum communities like the Badia and Makoko settlements (Ajibade & McBean, 2014; Douglas, 2017). Slum clearance is the preferred flood prevention and development action instead of developing co-operative and inclusive strategies with grassroots involvement. This is unjust and does not factor in the complexities surrounding the flooding problem (Douglas, 2017). Some of these complexities include social ties to place, socio-cultural identities, and forced displacements which can lead to homelessness. There have been calls by researchers in Nigeria and elsewhere to embed the core tenets and practical approaches of EJ within evolving sustainable development polity (Agyeman, Bullard, & Evans, 2002; Emejuru & Izzi, 2015).

Flooding threatens the core fabric of society and disproportionately impacts the disadvantaged. As such, environmental justice principles can be applied by involving impacted communities in research. A just approach would ensure that people who are impacted by environmental issues form part of the decision-making process in framing policies and environmental management. Public involvement is crucial for fostering effectiveness and accountability and building trust and cooperation among stakeholders (Li, 2017). A change in the way planning and management are undertaken is particularly necessary for Nigeria because of gaps in the current system. Encouraging grassroots participation has benefits that cut across environmental justice, consolidation of traditional knowledge, and encouraging the taking of ownership and proactiveness especially in matters of the environment that directly and indirectly impacts the earth. Promoting such co- operation is one of the driving reasons for incorporating EJ in this study. This is because it is a concept that disproportionately affected groups can relate to in contrast to the more global goals of sustainability which is more futuristic and may not be a tangible goal for many. According to (Agyeman et al., 2002), where convergence or cooperation of EJ and sustainability has happened, the results have been outstanding. The fusion of the two concepts has also been employed in research on sustainable cities and communities (Haughton, 1999), which is at the core of my research. Moreover, achieving the goals of sustainability is hinged on local actions which the EJ framework provides by emphasizing opportunities to ensure inclusion and a just and sustainable society by ensuring actions or inactions do not disadvantage any specific social group.

Flood Risk Management

Flood Risk Management (FRM) encompasses measures targeted at reducing the threats, probability, and impact of floods. A key component of FRM is developing long-term flood risk mitigation and intervention strategies that can resist climate change and reduce flood risk through the roll-out of sustainable, cost-effective, socially and environmentally acceptable means (Woodward, Gouldby, Kapelan, Khu, & Townend, 2011). Flood risk is expected to rise over the years and the intensity, severity, and frequency of rainfalls will steadily increase (Myhre et al., 2019). This makes it pertinent for FRM strategies to be robust and resilient in the face of impending climate-related events. Pluvial or rainfall flooding is particularly pertinent and forms the focus of this research because it is the main type of flooding experienced in many Nigerian cities and across the globe.

Pluvial flooding is particularly a critical issue in urban areas and occurs when the rainfall intensity exceeds the capacity of both the engineered and natural drainage infrastructure (Rosenzweig et al., 2018). The impacts of urbanization and climate change are expected to increase pluvial flood risk. Effective FRM entails bringing together the different perceptions and viewpoints of what comprises flood risk, the development mechanisms, the causes of the development, ways of reducing the risk, and different ways of combining the measures (Klijn, Kreibich, De Moel, & Penning-Rowsell, 2015). The problem needs to be adequately framed, understood and the best control measure or policy solutions adopted. Flood risk varies and as such, no one approach is best suited for everywhere. The practice has been that countries/localities adopt measures that suit their geographical dynamics. For example, the Netherlands'

government adopts a multi-layered approach to FRM with flood protection as the base, sustainable spatial development as a supplement and disaster management as last resort approach (Klijn et al., 2015). In the UK, even as the majority of the flood-prone land is made up of natural valleys with no flood protection, communities have also been known to find unique solutions to suit their local environment (Klijn et al., 2015).

There have been several positive outcomes from involving residents in flooding research. One example is the Ryedale Flood Research Group in the UK which enabled people affected by flooding to seek alternative ways of mitigating local flooding issues to become actively involved in the production of custom flood management strategies which were then put into the public domain and influenced flood risk management practices and knowledge (Landström et al., 2011; Lane, Landström, & Whatmore, 2011; Whatmore & Landström, 2011). The field of FRM is quite hierarchical adopting a top-down approach (Fekete et al., 2021), therefore, a shift to a more participatory approach involving residents who experience flooding is important especially given the dynamics of flooding. For example, different types of flooding occur in different locations which should require tailored mitigation approaches. For example, European countries experience mainly fluvial flooding while Nigeria and Ghana, for instance, experience fluvial and pluvial flooding in different parts of these countries. Urban sprawl has also been identified as a major driver of increasing flood risk (Klijn et al., 2015), as has also been observed in Port Harcourt.

It is common to have regulations that protect people from flooding which all local planning authorities are expected to comply with but this is not the case in Nigeria where development has occurred in areas not appropriate for housing developments (Echendu, 2021). There is no integrated FRM strategy in place and this has led to the adoption of sub-optimal solutions where in many cases, more problems are created instead of solutions (Echendu, 2020a). A rethinking of what FRM means and ways to meet challenges posed by changing times for mitigation and adaptation is essential to find meaningful solutions to flooding. It is time to start thinking beyond the present and more towards a sustainable future by being proactive in anticipating and planning for developments and environmental changes and act quickly upon the evidence-based knowledge.

Africa is lagging in disaster planning even though its population and economy are highly vulnerable to climate impacts (Nkrumah et al., 2019). This work will contribute to the body of work in flooding research as well as seek scalable solutions that could influence FRM elsewhere in Africa, in developing regions of the world, and wherever a similar phenomenon is experienced. There is evidence that people impacted by floods in Nigeria make efforts to mitigate flood risk but a more streamlined and concerted effort would yield more positive outcomes and also prevent sub-optimization for example flood mitigation efforts at a place causing flooding elsewhere. It is in this regard that this work seeks to work with communities in a bid to find lasting sustainable solutions to flooding.

Methodology

My work will adopt the case study research design and a mixed methods research methodology. Mixed methods research involves combining elements of quantitative and qualitative research approaches to deepen and expand the depth of findings and understanding. It provides an opportunity to corroborate, elaborate, or clarify results (Schoonenboom & Johnson, 2017; Timans, Wouters, & Heilbron, 2019). Survey research will be employed. According to De Vaus (2008), survey research is inherently quantitative and positivistic in direct contrast to qualitative methods such as participant observation, unstructured interviewing, case studies, etc., and helps to assess thoughts, opinions, and feelings of a large number of people. Qualitative research on its part is suited for research that involves developing a theory to aid in capturing and explaining the complexity of an issue among population groups or individuals which existing theories do not satisfactorily explain (Liamputtong, 2009). Even though both men and women will be participants in this research, I intend to engage more deeply with women who are rendered more vulnerable by flooding as a result of gender ascribed roles (Akintoye, Eyong, Effiong, Agada, & Digha, 2016), and who also have important knowledge and unique perspectives to contribute. Specifically, residents and indigenes of select neighborhoods for

whom the flooding is a recent experience and where prior research has never been conducted will be the focus of my research.

Conclusion

There is a significant gap in harnessing and leveraging local knowledge in disaster risk management in Nigeria which this work will contribute to filling. Knowledge from this research will inform sustainable flood risk management. The conceptual frameworks informing this work stem from different movements and academic fields with different core goals. In my work, these frameworks complement each other and will enable a deeper analysis of the research problem. While sustainability focuses on multiple-scale policy-making and ensuring the needs of the future generation are not compromised, EJ focuses more on grassroots everyday current power imbalances that unequally impact specific groups. Sustainability goals have emerged from technocratic policy processes in contrast to EJ birthed from grassroots pushback to those top-down decisions with lopsided impacts on disadvantaged members of the society. As observed by (Agyeman & Evans, 2004), the EJ movement also considers intergenerational equity while also demanding the elimination of the injustice being experienced by the current generation and considerations for the planet as a whole. Adopting these top-down and bottom-up conceptual frameworks in my work will enable a more holistic understanding of a problem that requires both levels of action for sustainable solutions. FRM is aimed at developing long-term flood risk mitigation and intervention strategies that can resist climate change and reduce flood risk through the deployment of sustainable, cost-effective, socially, and environmentally acceptable means. In this research, these three conceptual frameworks become woven into each other whereby FRM becomes a sustainability goal and the active involvement of the people in FRM is at the core of environmental justice whereby the people who are affected by environmental issues are also involved in seeking solutions with the overarching goal of achieving sustainability. Flooding research needs to be more inclusive and involve people who have lived experiences of flooding. Community engagement is the first step to understanding and seeking solutions to a problem that is set to worsen in the years to come (Henderson, Steiner, Farmer, & Whittam, 2020). Evidence abounds that citizen involvement in tackling environmental issues leads to long-term sustainable outcomes, even beyond flooding to the wider ecosystem (McEwen, Holmes, Quinn, & Cobbing, 2018; Reed et al., 2018). It is envisaged that this research will contribute to knowledge on flood control, inform policy and enhance citizen participation in solving environmental problems.

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PART IX

ORGANIZATIONAL STUDIES: ETHICS AND GOVERNANCE: DOCTORAL STUDENT SUBMISSIONS

41. How Current and Proposed Environmental Governance Structures Can Contribute to Environmental Sustainability and Justice in Chemical Valley

JUSTINA H.K. MANG

Abstract

As the most polluted region in Canada, Chemical Valley's history is riddled with centuries-old imposing, yet formative, decisions involving controversial land sales and surrenders of First Nations land. The process of colonization and nation-building has laid the foundation for industry to encroach on Aamjiwnaang First Nation (AFN) traditional lands, and continues to have devastating impacts on inhabitants' quality of life and on the environment. Despite being a wealthy, liberal, progressive, and environmentally conscious nation, Canada does not currently recognize in law the right to a healthy and ecologically-balanced environment. While the Supreme Court of Canada's Greenhouse Gas Pollution Pricing Act (GGPPA) ruling has legitimized the newly-established regulatory framework for greenhouse gas (GHG) emissions, through the Output-Based Pricing System (OBPS), to address adverse climate change outcomes impacting the nation, GHGs are but one of several types of pollutants that cumulatively threaten the health, lives, and culture of the AFN living in Chemical Valley. Though the effects of criteria air contaminants and toxic pollutants on human health and the environment are not regulated with the same type of scrutiny as GHGs, strong arguments and evidence indicate that perhaps they should constitute an equivalent matter of national concern and scope. The GGPPA ruling (and the governance structure that embeds it), together with incorporating a right to a healthy environment in law, have the ability to address key governance gaps underpinning environmental injustice and environmental unsustainability, and thereby can make meaningful progress for the AFN and other such populations impacted by intense industrial emissions. With the recent ruling and the long-awaited proposed amendments to Canadian Environmental Protection Act (CEPA) with *Bill C-28*, the opportunity to capitalize on finally translating important environmental justice and sustainability dimensions, indicators, and concepts into environmental governance regulatory mechanisms, is unprecedented.

42. A Reflection on Board Composition Diversity and its External Impacts

CHAFIKA EDDINE; WILLIAM FUNG; AND WILLIAM HOLMES

Abstract

Board decisions can greatly affect business and, as a result, can impact stakeholders and the planet. Companies tend to prioritize ESG risks internally without much consideration for external consequences. This study proposes that corporations can contribute to climate action and sustainability by building a board that combines demographic and cognitive diversity. The investigation aims to compile an initial understanding of board composition diversity and the fundamental aftereffect for organizations adopting a longer-term view when analyzing the consequences of their activities, such as climate change and sustainability, in addition to simply considering financial outcomes. One significant lever to effect change toward a more sustainable world points to increasing diversity on board composition. Boards should be representative of their stakeholders with respect to gender and racial/ethnic diversity.

Keywords: corporate governance, board composition, ESG, climate change, gender diversity, sustainability

43. Civil Servants: Frank and Fearless or Simply Subjective?

JESSICA CARLSON

Abstract

Although there is an increasing recognition of the role of bias in decision making, a persistent gap in the literature remains with regard to the role of bias in policy decision making of civil servants. This gap is problematic as the majority of civil servants are by law expected to provide impartial and objective advice. A traditional rhetoric of 'fearless advice, loyal implementation' has provided guidance to civil servants with an aim to balance neutral and responsive competence. However, this culture of fearless advice, loyal implementation is dated and not reflective of current complexities that civil servants face in policy decision making. Accordingly, through a comprehensive literature review, combined with personal reflection and observation, a conceptual theory is proposed: *a strong belief in or culture of fearless advice and loyal implementation increases certain biases in policy decision making of civil servants through the erosion of protective factors of transparency, discourse and accountability*. It is timely to examine bias, discourse, transparency and accountability within the civil service in policy decision making as there are significant advances in collective understandings and substantial opportunities to shift public policies as the world recovers from COVID-19.

Author Note

44. The Ethical Imperative for A Priori Insider Threat Prevention Programs [full paper]

BILL DANIELSEN

Abstract

There is an insider threat risk present in the government of Canada. It has struck in the past and will certainly in the future. Dark Triad personality traits, consisting of Machiavellianism, psychopathy and narcissism are leading indicators of insider threat activity. The risk of these threats may be mitigated (aggregated) by social bonds. Current insider threat programs are reactive in nature, and respond to events after they have taken place, or after they have hired a potential threat risk into their organizations. These *a posteriori* programs leave organizations at significant risk. The impact of these threat events is significant and severe. Previous events have significantly impacted Canada's international reputation, and potential future events could have a significant financial impact to the economy. Employee screening activities are commonplace in government due to the importance placed upon maintaining a trust relationship. Given the prevalence of traditional screening programs, and the significant financial and reputational risk, there is an ethical imperative to develop *a priori* insider threat detection programs.

The Insider Threat Problem

It is a Sunday morning and the spring rain is gently falling. The government of Canada is two days away from its fiscal year end. This also means that it is the time of year when employees are receiving their performance review. Bobby has worked for the government for 10 years and is increasingly frustrated that he does not feel valued. Throughout the year, his supervisor has commented on his poor attitude. Bobby is regularly talking down to colleagues and even commented to the Director General that he could easily do their job. In spite of these disciplinary challenges, Bobby works reasonably well as a computer programmer and holds a SECRET security clearance. He is one of a few people that maintain the Social Insurance Register (SIR), and he has complete access to it. The Social Insurance Register contains all of the Social Insurance Numbers (SINs), and biographical information of people who have a SIN. It is arguably the largest database of personal information in Canada.

As Bobby looks out the window, he has taken a decision. Bobby is going to "show" management how much he is needed. He is going to sabotage the SIR so that he can demonstrate how "important" he is to the organization, and to show how "useless" management is. Bobby's actions are going to impact the Social Benefits programs of one of Canada's largest federal departments that distributes more than $120 billion a year to Canadians (ESDC, 2020). Perhaps more importantly, his actions are going to shake the very core of confidence that Canadians have in the Government of Canada to safeguard their information.

The case of "Bobby" is a fiction, thankfully. That said, at any time there could be such individuals who look to commit such an attack. These attacks are known as Insider Threats.

Examples in the World – Is there an Insider Threat Problem?

Given the story of the "Bobby" lead-in, and of course the fantastical nature of events the mind conjures when we

speak of things such as espionage, sabotage and subversion, you would be forgiven if you wondered aloud if this was a real concern for the government, especially in Canada. In business, risk is often spoken with regard to a negative impact or damage to the brand. Indeed, research exploring the impact of the five-factor employer brand (EB) model against the three-factor intent to join (ITJ) model has demonstrated that a company's reputation, acceptance and belongingness, work-life balance and ethics directly correlate to a candidate's ITJ (Sharma & Prasad, 2018). Further research has demonstrated that "trust is at the core of all good relationships" and trust and reputation are intrinsically linked (Clarke, 2007). This demand that trust be present and that organizations be responsible is so vital that a common and popular phrase that is often repeated is that "accountability should hurt" (Owen et al., 2000). When considering the importance of the trust relationship I would suggest that the value of the "brand" of the government, and indeed of the word "Canada" itself lies in the sentiment it creates. In a public survey, 80% of respondents noted that they were familiar with the government logo and brand and associated it with such sentiments as "trust and credibility, as well as national pride" (Canada, 2019). This brand is not a symbol or a product but represents the "trust" relationship Canadians have with government. This "trust as a brand" consists of the trust Canadians have that their government is competent, and is capable to protect their personal information. So, with this in mind, is there an insider threat within the government of Canada? Unfortunately, the wolf is already at the door, and they have struck before. This is why it is so important that insider threat programs expand in their nature to *a priori* screening. With this in mind, I will demonstrate that there is an ethical obligation toward having an *a priori* insider threat prevention program.

Consider the following examples:

Petty Officers Reid and Sinclair

In July of 2007, Petty Officers 2nd class Sylvia Reid and Janet Sinclair were charged and later convicted in 2010 of sabotage, conspiracy, mischief and willful property damage under the National Defence Act and Criminal Code of Canada (R. v. Reid, 2010, CMAC 4). Facts agreed upon in court noted that the then Petty Officers were employed at the National Defence Command Centre in Ottawa and worked on the Processor Displays Subsystem Migration that tracks missile and space events around the globe. This is a key system for the Canadian/United States North American Aerospace Defense Command (NORAD) relationship. The two Petty Officers were married to one another. Both felt under-valued at work, considered co-workers lazy and their supervisors unengaged and incompetent. Wanting to show how critical they were to the organization they hatched a plot. Petty Officer Sinclair was away on maternity leave but provided instructions to Reid on how to corrupt the database they controlled. This would show that their co-workers were not capable, and the Petty Officers would then be brought in to fix the database, further showing their value.

Ironically, the cost to repair the damage caused was $536, taking just 4-hours (R. v. Reid, 2010, CMAC 4). Consider the non-monetary damage, and more specifically the damage to Canada's reputation with partners that has resulted from this and other events. Researchers have noted that the reputation of an organization is based on historical performance. If and when new behaviour comes to light that changes the perception in this performance, there is an increase in risk to the damage caused to the reputation (Lange, Lee & Dai, 2011; Maor, 2016; Luoma-aho & Makikangas, 2014). In the case of Reid and Sinclair there was certainly damage to the reputation and faith in the Canadian Forces to undertake their role. Additionally, this event caused damage to the relationship between Canada and the United States and the NORAD agreement as well as damage to Canada on the international stage. If Canada could not be trusted to protect such a vital database, what else could be damaged? The international black-eye that this event caused would take years to go away, and while still healing, a near death blow was dealt.

Sub-Lieutenant Jeffrey Delisle

It was a cool evening in December 2011 when my work cellphone rang. I was in North Carolina with my team and we had just finished a day of training in preparation to deploy to Afghanistan in 2012. At the time I was the Officer

Commanding the National Counter-Intelligence Unit (NCIU) Pacific Region. The NCIU is the Canadian Military's unit that is responsible for investigations into Terrorism, Sabotage, Subversion, Organized Crime and Information Operations (Government of Canada, 2003). Part of my responsibilities included maintaining relationships with key allies and partners. One of these was a colleague in the US Central Intelligence Agency (CIA) who had just called. "Bill, what the hell is going on with that Delisle guy"? I hadn't seen any news that day, nor had I been looking at my work e-mails so I was completely unprepared. Needless to say, my colleague was concerned about the threat and risk Delisle posed and this case would have long lasting impacts to Canada's formal relationships with its intelligence partners.

Around July 2007, having found out that his wife was having an affair, Jeffrey Delisle walked up to the Russian Embassy in Ottawa – literally walked up to the front door – and offered to sell Canada's secrets through an intercom. Having worked in Human Intelligence, Source and Agent Operations, and Counter-Intelligence for more than 20-years – the absurdity of this is actually quite baffling. It would have been to the Russians as well. Was this a trap? This certainly could not be real?

Delisle admitted during his pre-sentencing interviews that he was trying to commit "Professional (career) Suicide" (R. v. Jeffrey Paul Delisle, 2012). He was feeling emotionally crushed by the end of his marriage and was also frustrated in his career. Prior to his commissioning, Delisle had served as a Sergeant in the Reserves. During interviews he stated that he was frustrated that his previous experience was not given its due credit and respect and that his previous experience had been "wiped clean" and taken for granted (2012). Superiors rated that he was competent, but appeared unambitious. Court reports also indicate that he had previous money problems. Ultimately, it was found that over a four-year period, Delisle sold secrets to the Russians and received approximately $111,000 for his work (Borden Colley, 2019). When you consider that Delisle worked for military intelligence where there are indeed monitoring tools, and given the other potential signs, how is it possible he could go undetected for 4 years?

Again, the impact of this event to Canada's trust relationship has been extreme. In media reporting in 2021 it notes that even 10 years on, the impact endures and that Canada's international trust relationship has been eroded (Bronskill, 2021). When considering that the governments "brand" is trust, the damage has been catastrophic. Worthy of note, these are just two recent examples. Other extremely high profile cases include those of Russell Williams, former base commander for Canadian Forces Base Trenton currently serving a life sentence for rape and murder (Westoll & Campbell, 2020), and more recently, the allegations and impending trial of Cameron Ortis. Ortis was a senior executive with the Royal Canadian Mounted Police (RCMP) who is alleged to have sold classified information to organized crime figures (Anderson, Culbert & McKeown, 2020). Up to this point, it seems apparent from the stories above that there are clear improvements in the government of Canada's insider threat detection programs that need to take place. Indeed, I would suggest that there is an ethical imperative toward needing *a priori* detection and prevention programs.

Defining the Insider Threat

At times, when we think of what an insider threat might look like, our minds conjure images of spies. Powerful images of saboteurs, insurgents, and foreign agents looking to coopt governments. Indeed, these are a reality. But perhaps more concerning are the threats posed by the "Bobbys" within government, the rank and file employee who has access to IT systems, money management, or personal information databanks (PIDs). So between international spy and regular employee, how can we define an insider threat? Interestingly enough, there are some professional reports that have been created to support financial institutions and private sector organizations in building out relatively fulsome insider threat protection programs, however many fail to define what an insider threat is. One such recent example includes the 2018 Insider Threat report/whitepaper prepared by Cybersecurity Insiders (2018). It is difficult to conceive that you could build a program without defining what you are trying to protect against. Having a clear statement of the threat/ problem is key.

Fortunately, and in support of defining the threat landscape, data analyzed by the Carnegie Mellon University Centre for Emergency Response Team Coordinate Centre (CERT/CC) shows that organizations face three main types of insider

threats: long-term fraud, sabotage, and espionage (theft of information) (Keeney & Kowalski, 2005). While a significant effort has been made to develop security programs to protect against the outside threat, internal technological growth has increased the vulnerability to threats from insiders (Randazo et al., 2004).

So what exactly is an insider threat? The United States Department of Homeland Security defines an insider threat as "the threat that an employee or a contractor will use his or her authorized access, wittingly or unwittingly, to do harm to the security of the United States" (Homeland Security, n.d.). The National Institute of Standards and Technology (NIST) out of the US Department of Commerce defines an insider threat as someone who ". . .will use her/his authorized access, wittingly or unwittingly, to do harm to the security of the United States. This threat can include damage to the United States through espionage, terrorism, unauthorized disclosure, or through the loss or degradation of departmental resources or capabilities" (NIST, n.d.). Likewise, the Carnegie Mellon Computer Emergency Response Team (CERT) defines an Insider threat as ". . . a person that works from within an organization to subvert the confidentiality, integrity, and availability of the information contained within the walls of that entity" (CERT, 2016).

Within a government of Canada context, there is no commonly accepted definition of what constitutes an Insider threat. Public Safety Canada defines an Insider threat as being a "threat risk" and categorizes it as ". . . anyone with knowledge or access to an organization's infrastructure (both physical and computer networks) who maliciously, or by change, misuses their trusted access to harm the organization's employees, customers, assets, reputation or interests" (Public Safety, 2019). From all of these definitions, there are commonalities from which we can derive a common operational understanding of the insider threat. Plainly, an insider threat is someone who is already employed within your organization that uses their privileged access to cause harm. Across all of the previously mentioned definitions the word "harm" is a constant. This word can be subjective, and as such needs to be qualified. In support of this, and given that I am focused on harm that could occur within the federal government of Canada, I will anchor the definition of harm on the Treasury Board Secretariat (TBS) Directive on Security Management, Appendix J (TBS, 2019). In this directive harm to:

> "information, assets and services are categorized as "very high," "high," "medium" or "low" impact to reflect the degree of injury that could reasonably be expected as a result of a loss of confidentiality (resulting from unauthorized disclosure), loss of integrity (resulting from unauthorized modification or destruction), or loss of availability (resulting from unauthorized removal or other disruption):

Very high: Applies when a compromise could reasonably be expected to cause severe to exceptionally grave injury;

High: Applies when a compromise could reasonably be expected to cause serious to severe injury;

Medium: Applies when a compromise could reasonably be expected to cause moderate to serious injury; and

Low: Applies when a compromise could reasonably be expected to cause limited to moderate injury." (TBS, 2019)

For the context of this paper, I will use and focus on the simple definition for insider threat as I continue the exploration of the threat and risk whereby insiders can wreak havoc from within. I will further make a case that organizations have both an ethical and fiduciary responsibility to prevent insider threats *before* someone is within their employ.

<h1 style="text-align:center">So What, Now What?</h1>

Existing Theory – Individual or Micro-level of Analysis

Dark Triad

Previously I defined an insider threat as someone *who is already employed within your organization that uses their privileged access to cause harm.* This definition looks at the deliberate "action" made by the individual threat actor. Firstly, we need to explore any potential characteristics that can be linked to the person themselves as leading indicators of insider threat risk. There is indeed significant research that looks at specific personality traits that have been linked to insider threats. Specifically, the term "dark triad" was coined by Paulhus and Williams in their seminal work linking Machiavellianism, sub-clinical psychopathology and sub-clinical narcissism (2002).

Extensive research has shown that there is a prevalence of certain personality characteristics that are found in those who commit insider threat attacks (Harrison, Summers, & Mennecke, (2018); Legg, Moffat, Nurse, Happa, Agrafiotis, Goldsmith & Creese, (2013) Maasberg, Warren and Beebe, (2015)). The most consistent and prevalent of these are Machiavellianism, sub-clinical psychopathy and sub-clinical narcissism (Paulhus and Williams, 2002). It is important to highlight at the onset that these three personality constructs, although grouped together as the dark triad, are indeed three separate and distinct items that each have their own significance in insider threat behaviour (Hogan and Shelton, 1998).

Machiavellianism

The phrase "the ends always justify the means" is commonly known, however many may not know that it was written by Nicolai Machiavelli hundreds of years ago (Machiavelli, & Bondanella, 2005). Machiavellianism as a clinical manifestation is often characterized as traits linked to individuals who demonstrate a manipulative or cold nature that lacks empathy, but also seem more stable and grounded (Kibeom, Ashton, Wiltshire, Bourdage, Visser and Gallucci, 2013; Kibeom and Ashton, 2014). In their study, Rayburn and Rayburn (1996) also explored the relationship between personality type, ethical decision-making and their linkages with Machiavellianism. Overall, they found that individuals with Type-A personalities, those who were generally extroverted tended to be more ethical than those with Type-B, those considered more introverted (Rayburn & Rayburn, 1996). Specific to Machiavellianism, individuals tended to experience more job strain, less job satisfaction and did not see room for opportunity or control in their careers (Gemmill and Heisler, 1972). Their research also found that Machiavellianism was positively correlated with individuals who had higher degrees of intelligence, and that this also associated positively with Type-A personalities. Interestingly, their research did not reveal a difference in ethical orientation between males and females. As an overall, individuals who have a higher degree of intelligence tended to be less ethical (Gemmill and Heisler, 1972). More recent research has shown that individuals with higher Machiavellian tendencies were also more likely to take advantage of situations (misreporting for financial gain), and experienced less emotional burden or sense of conscience (Murphy, 2012).

Psychopathology

Psychopaths are broadly characterized by their highly impulsive behaviour, tendency toward thrill seeking, having a

low empathy and experiencing low anxiety (Kibeom, Ashton, Wiltshire, Bourdage, Visser, and Gallucci, 2013; Jones and Paulhus, 2011; Kibeom and Ashton, 2014). In leadership roles, they tend to place their personal well-being ahead of (if not to the expense of) others, but these tendencies are sometimes accounted as them exhibiting behaviours of "fearless leadership" (Blickle and Genau, 2019). Their tendency toward lacking empathy and resistance to anxiety enables these individuals to be more self-confident and exert more social influence (Lilenfeld and Widows, 2005). Certainly it can be concerning when we see these individuals in positions of influence, and as such potentially holding a role that could expose organizations to a higher degree of insider threat risk. This makes understanding the role and impact of impulse and psychopathic behaviour important.

Narcissism

Narcissists tend to be extraverted and experience an over-heightened sense of self-worth that verges on grandiosity. They tend to have a strong sense of entitlement, are seen as dominating others, and experiencing an overall sense of superiority (Harrison, Summers, and Mennecke, 2018; Kibeom, Ashton, Wiltshire, Bourdage, Visser and Gallucci, 2013; Paulhus and Williams, 2002).

Interestingly, narcissism and Machiavellianism are often closely linked or paired together as they tend to favour an individual's perceptions of their own capabilities, opportunity for advancement and motivation to succeed (Harrison, Summers, Mennecke, 2018). Further, narcissism and psychopathy were positively associated with impulsivity (Jones and Paulhus, 2011). Interestingly yet entirely surprisingly, narcissists tend to seek career opportunities that put them in positions of power (Brunell, Gentry and Campbell, 2008; Padilla, Hogan and Kaiser, 2007). While their extraverted and dominant nature seemed to propel them into positions of power, narcissists were seen as destructive leaders whose on the job performance did not match their personal vision of superiority (Brunell, Gentry and Campbell, 2008). In effect, their vison of their own performance did not match the output seen by others.

The Role of Impulsivity

When discussing the dark triad personality traits, an exploration of impulsivity is important, especially for its relationship with the dark triad and Social Control Theory (SCT). Indeed, it is this impulsivity in the dark triad that most directly links to the low self-control that is discussed by Hirschi and Gottfredson in their SCT as it relates to social bonds (1969). Additionally, Jones and Paulus explored this link between dark triad personally traits and impulse control and noted the importance of this relationship (2011). Specifically, Jones and Paulus' study looked to assess correlations between functional versus dysfunctional impulsivity as defined by Dickman (1990). Functional impulsivity has been shown to predict idea generation (Brunas-Wagstaff, Bergquist, Morgan & Wagstaff, 1995), enthusiasm, adventurousness, and the ability to make quick decisions (Dickman, 1990). Dysfunctional impulsivity is linked to erratic disorderliness (Dickman, 1990). Behavioural characteristics seen in dysfunctional impulsivity included distraction and poor decision making (Brunas-Wagstaff, Bergquist, Morgan & Wagstaff, 1996) as well as suicide ideation (Dear, 2000). Key to the dark triad, both psychopathy and narcissism positively associated with impulsivity (Jones and Paulhus, 2011). Independently, psychopathy correlated with dysfunctional impulsivity while narcissism was associated with functional impulsivity. Machiavellianism had no unique association with any type of impulsivity (Jones and Paulhus, 2011).

Since we know that there is a significant prevalence of the dark triad personality traits in those who commit insider threat attacks, and that there is a significant implication toward impulse control (or a lack thereof), an exploration and understanding of what factors mitigate negative actions is warranted (Maasberg, Van Slyke, Ellis, Beebe, 2020; Harrison, Summers, Mennecke, 2018; Hirschi & Gottfredson, 1969). Firstly, we need to explore how to test for dark triad personality traits as a contributing factor toward insider threat behaviour.

Testing the Dark Triad Traits

Previously mentioned research by Harrison, A., Summers, J., & Mennecke, B. (2018); Legg, P. A., Moffat, N., Nurse, J. R., Happa, J., Agrafiotis, I., Goldsmith, M., & Creese, S. (2013); and Maasberg, Warren and Beebe, (2015) has pointed to the presence of the dark triad traits in insider threats. Focusing on very specific personality vectors, Hare has suggested ". . .that psychopathy is the single most important clinical construct in the criminal justice system, with particularly strong implications for the assessment of risk for recidivism and violence. . . " (1998). To test for psychopathology, Hare has developed the Psychopathy Checklist – Revised (PCL-R) (1995). Additionally, Christie and Gies developed the MACH-IV as an assessment tool for Machiavellianism (1960). This 20-item inventory calculated using a Likert scale provides insight into the potential for someone to be manipulative, using others as a means to an end. Another well established and rigorous inventory is the Minnesota Multiphasic Personality Inventory-2 (MMPI-2). This 567 item inventory is used to assess a range of personality disorders such as psychopathy, depression, somatization and some ego-driven behaviours (Drayton, 2009). While all of the aforementioned inventories can paint part of the personality picture, they do so in a way that is possibly incomplete or at least not specific enough for the assessment of the insider threats. Recognizing the need for a simple yet reliable inventory, Jones and Paulhus developed the Short Dark Triad (SD3) measurement for the Dark Personality Traits (2014). While their evaluation of the SD3 did indeed demonstrate that it was a reliable measure, the researchers acknowledge that there is criticism given its brief nature (consisting of only 27 questions) (2014). While the SD3 is efficient in the detection of the dark triad personality traits, it does so in the absence of other generalizable personality traits. As such, many researchers looking toward generalizability to the populous tend to do so through a hybrid connection between the SD3 and the Big Five Personality traits of agreeableness, extraversion, openness, conscientiousness and neuroticism (Hodson et al., 2009; Jonason et al., 2010; Williams et al., 2010). As one would expect, this leads to overlap and inefficiencies that make such a hybrid approach less desirable. I would suggest that in place of this hybrid one must consider the HEXACO framework as a more reliable tool for assessing insider threat linked personality traits.

HEXACO Framework

The HEXACO framework developed by Ashton and Lee, consists of an evaluation of honesty- humility, emotionality, extraversion, agreeableness, conscientiousness and one's openness toward new experiences (Ashton & Lee, 2007). By way of an advantage over the hybrid SD3-Big Five model, the HEXACO's honestly-humility as well as agreeableness factors share common elements in rating the respondents' tendency toward manipulation or use of others, and their tendency toward cooperation (Ashton & Lee, 2007). Another powerful advantage quite germane to the study of insider threats is that the HEXACO model allows for a more granular assessment of reactions to provocations (Lee & Ashton, 2012). As insider threat behaviour holds significant links to impulsivity (Jones & Paulhus, 2014), the richness of measurements linked to reactions and provocations will be important. An additional benefit that I would anticipate, but the literature is silent on, will be how the HEXACO model could be expanded as a means of reviewing a relationship with Social Control and by extension, Life Course Theories as explained by Hirschi and Gottfredson (1990) and Sampson and Laub (1993). The inclusion, or perhaps modification of the HEXACO as a means of testing the dark triad personality traits, and their relationship with social bonds will be key if not critical to our ability to reliably predict insider threat risk.

Macro-level Analysis

Social Control and Life-Course Theories

Social Control Theory

Social Control Theory (SCT), also known as Social Bond Theory (SBT) was a concept developed by Travis Hirschi (1969). In SBT, behavioural attachment to society is framed around four foundations, specifically an individual's commitment to social norms, parental and cultural attachment, involvement in community and activities, and finally, holding a common value system within society (Hirschi, 1969). His theory found that in cases where there are weak social bonds, this leads to an individual having a low self-control which in turn leads to the threat behaviour (Hirschi, 1969).

Hirschi and Gottfredson note that the development of social bonds (or lack thereof) in youth and adolescence are what anchors criminality (1990). They reject categorically that any decrease in criminality later in life can be attributed to changes in social bonds. On maturation reform they argue that any "reform is just that, change in behaviour that comes with maturation; it suggests that spontaneous desistance is just that, change in behaviour that cannot be explained and change that occurs regardless of what else happens" (Hirschi and Gottfredson, 1990).

While holding an epistemological view similar to Hirschi and Gottfredson's Social Control Theory (1983), Sampson and Laub have suggested that there is a significant need to look beyond low self-control as the key determining factor. What their research has shown is that delinquent behaviour tends to naturally decrease with age (2003), and that more significant stability can be attributed to social bonds formed beyond adolescence. Such increased bonds can be found through commitment and success in the workplace, or through the development of significant social relationships such as through marriage or having children (1993).

Life-Course Theory

In their seminal work *Crime in the Making*, republished in 1993, Sampson and Laub consider that while it can be true that some people who exhibit criminal tendencies in youth may continue this behaviour in later life, evidence seems to clearly indicate that there is a marked decrease (Sampson and Laub, 1993). Their theory of age-graded informal social control holds three basic principles. Firstly, deviant and delinquent behaviour in childhood and adolescence can be attributed to weak family and school social bonds. Secondly, that there is a continuity between antisocial behaviour from childhood through to adulthood. Finally, that social bonds associated with family and employment can mitigate criminality in later-life activities (Sampson and Laub, 1993). In effect, Sampson and Laub attribute this decrease in criminality to later-onset chances or enhancements to social influences, or the development of social bonds that they refer to as changes in life-course (1993). The life-course has been defined as being "pathways through the age differentiated life span" where events in life influence our decision-making processes (Elder 1985). Caspi et al took a more deliberate approach in defining life-course whereby they see it as a "sequence of culturally defined age-graded roles and social transitions that are enacted over time" (1990). Examples of later onset social bonds can include "marriage, parenting, education, the economy, and employment have led to the evolution of emerging adulthood as a unique stage of the life course" (Salvatore and Taniguchi, 2012). When considering the case of marriage we note that it is seen as an important right of social passage that is based in part on social conformity toward conventional societal norms (Arnett, 1998; Sampson and Laub, 2003). These distinctions show that there are indeed changes in social behaviour, and that these changes have impact on criminality are key to the study of insider threat behaviour.

Indeed, while acknowledging that criminality decreases with age and certain stability to one's life-trajectory, there is a link between the absence of social bonds, or a break-down in how the perpetrator views their life-course that can be

directly linked to threat behaviour. That is to say, someone who has the dark triad personality traits and a life-trajectory with weak social bonds has a greater disposition to commit an insider threat attack. This connection between social bonds, someone's life journey and the dark triad will be explored through an analysis of Sampson and Laub's life-course and age-graded theories for individuals who do hold dark triad traits. Linking this theory to practice, if we consider the case of Jeffrey Delisle mentioned earlier, from a social bonds perspective we can see that his marriage was failing, he had financial difficulties, his self-assessment of work value was inconsistent with how he was viewed and he appeared to be isolated from society. In effect, he lacked significant attachment or social bonds. Seeing these lack of social bonds in hindsight does little to mitigate the events that happened. What needs to be in place is an effective *a priori* screening element that accounts for both the dark triad and social bonds. Quite astutely, Hare has noted that "...the ability to identify and measure a construct is prerequisite to understanding its nature" (Hare, 1996). More broadly, we need to be able to measure the dark triad traits both individually and collectively, in order to understand the very nature of insider threat and see how these personality dynamics can and indeed must be woven into threat mitigation programs.

Insider Threat Programs

Given the prevalence of specific personality traits that point to increased insider threat risk, and the potential implication of SCT, certainly the detection of these will anchor insider threat prevention programs. In fact, they do not. Much of the research exploring insider threat activities and programs surrounds the CMO model or Capability, Motivation and Opportunity (Wood, 2000). Available research discusses a number of advanced programs and detection tools that are used to predict and block insider threat behavior. For example, Magklaras and Furnell have developed a three-tiered structure of mathematical functions that form an insider threat prediction model capable of calculating threat probability (2001). What is often interesting is that articles will mention that insider threats are "a comprehensive issue that involves human factors and system factors so that the detection needs to be considered from the above two aspects simultaneously" (Zhu, Guo, Ju, Ma & Wang, 2017) but will then only discuss anomaly detection and not human factors. Other recent research has looked at some exceptional tools that focus on deep system learning and system log analysis whereby the system itself "can learn both the essence of normal behaviors and abnormal behaviors, fully characterizing the rich internal information of the data, to form an adaptive optimization DBN (deep belief net) model for insider threat detection (Zhang, Chen & Ju, 2018). In effect, although some very exciting and certainly impactful tools, the threat is already within the organization, has attempted to make an attack, and these tools focus on attending to the event *a posteriori*. The threat attack has happened and you are now reacting to it. In effect, all these post-event tools can provide is to minimize damage to an attack that has been attempted or has occurred.

One of the most broadly accepted standards for Insider Threat programs is that developed by the United States Department of Commerce, National Institute of Standards and Technology (NIST). NIST's framework for Insider Threat programs includes four core components, namely that a program must identify the threat, protect against it, have detection tools in place, and the ability to respond and recover (NIST, 2013). Another recent example of a technically well written and well regarded guide on Insider Threat Best Practices has been prepared by the Security Industry and Financial Markets Association (SIFMA, 2018). SIFMA classifies itself as "the voice of the nation's securities industry" (SIFMA, n.d.). Interestingly, the SIFMA guide notes that an effective program must combine "policy and human elements with technical controls and solutions into a single, holistic model" (Sidley Austin LLP, 2018). It goes on to note that "Numerous academic studies have attempted to identify the psychological traits prevalent in insider spies". Nevertheless, psychological, demographic, and occupational characteristics do not easily translate into a set of rules that can be applied to discover and predict insider attacks, and the relationship between such characteristics and unintentional insider threats is even more difficult to measure (Sidley Austin LLP, 2018). I am reminded of an axiom. Just because something isn't easy, does not mean that it should not be done. Indeed, as this paper has thus demonstrated, the assessment of one's personality and social bonds are critical to the proper development and effective implementation of any meaningful insider threat program. To leave personality and social bonds out of any meaningful insider threat

program is quite simply to leave the person who is committing the act out of the equation. Since it is the person who commits the act, a program must account for this key human dimension. Any effective insider threat program must include *a priori* screening of known threat indicators *before* the threat is allowed into your organization. If the program does not account for blocking the threat from entering the organization, it will be severely limited to reacting to insider threats versus blocking them from happening.

Financial Impact of Insider Threat Events

So far, it has been made clear that there is awareness of the leading indicators for insider threat behaviour through the dark triad, and there are effective tools available that can detect for this potential vulnerability. I have also discussed how current programs focus on strategies that could more accurately be considered response actions (*a posteriori*) versus an effective mitigation strategy. I have highlighted that in a government of Canada context, the threat and vulnerability from such events is the significant damage to the reputation of Canada and the significant impact this has on our international relationships. Beyond the risk of reputation there is another extremely key factor. Namely, the Canadian economy is at risk from insider threat attacks. By way of an example consider that one single department, Service Canada, is responsible for the dispensation of 170.2 million transactions totaling more than $180 billion dollars (Employment and Social Development Canada, 2020). Compared against the overall Canadian gross domestic product of approximately $1 trillion dollars annually, this one department accounts for 9% of the Canadian economy (Statistics Canada, 2021). In effect, it is not impossible to conceive that a significant insider threat attack could have a catastrophic impact not only to reputation, but to the entire Canadian economy.

Insider Threat as Applied Research

Critical Analysis of Insider Threat Research

Up to this point I have demonstrated the following. Firstly, that there is indeed a real threat in the world and here in Canada linked to insider threats. Whether it is the cases of Sinclair or Delisle as presented, or the upcoming trial and allegations of Ortis; there is clear evidence that insider threats have been found within the government of Canada, and logically we must conclude that there will be others to follow. Secondly, I have presented the research that demonstrates a direct link to the dark triad personality traits of Machiavellianism, psychopathy and narcissism and insider threat behavior. Thirdly, I have discussed the relationship between Social Control Theory/social bonds, and where their absence is linked to criminal behaviour. Additionally, how one's Life-Course trajectory can have a mitigating or aggravating effect. That is to say, one's life-course trajectory can lead to the development of social bonds that offsets the insider threat behaviour or inversely, the removal of social bonds can increase threat risk. Finally, I have discussed that the current industry best practices for insider threat protection programs is through *a posteriori* IT tools on systems that seek to protect organizations *after* the threat/attack has happened.

When we consider the points above, the gap in literature, research and indeed in current practice becomes apparent. An insider threat program designed to attend to a threat cannot be effective if it only begins after the attack or attempt has happened. In the government of Canada context where I have previously discussed that the brand is the "trust" relationship with Canadians, there is an ethical imperative to ensure that any insider threat program takes a proactive approach and cannot be reactive. When considering the absolute need toward the safeguarding of Canadian's information and assets, the government has both an ethical obligation and fiduciary responsibility to ensure *a priori* protection. Additionally, and it must be stated, there is a need for such an *a priori* program to be implemented at the

enterprise level. That is to say, that it must be consistent horizontally across all of the federal government. I can state with first-hand experience, there is no consistent approach or application to insider threat programs at this time that is equal across all of the federal government departments. This lack of consistency will be explored empirically at a later date as a means to validate patterns. Worthy of note, this current lack of an enterprise approach can be linked to limitations and an imbalance on resources and technologies between departments of different size as well as variance in the perception of risk.

If we know from the research that dark triad personality traits are present in individuals who commit insider threat attacks, and it seems apparent that social bonds and a person's life-course trajectory have a significant role in whether someone commits deviant or impulse-driven behaviour then surely research could be undertaken that validates this connection and develops a screening tool. Not unlike the HEXACO inventory, a screening tool could be developed that would highlight the leading indicators of insider threat risk. Such a tool could be used *a priori* in the hiring process that would be informative, and indeed could offer the opportunity to mitigate insider threats before they ever take place. If, as I have stated, there is an ethical imperative to have such a tool, the use of such a tool does beg the question on the ethics of its use. What do ethics and practice tell us about screening someone for potential behavior before they have committed any act? Surely such tools cannot be ethical. Indeed they are ethical, and are already very commonplace in their use.

Ethical considerations

It is important to address the ethical concern head-on. There is indeed research that discusses how the use of screening tools on employees is unethical. For example, in his research, Davidson discusses a wide array of testing procedures currently in use in the United States, such as drug screening and polygraph testing (1988). While recognizing that the loss to organizations through theft or inefficiency was more than $100 billion a year, Davidson did conclude that the use of such tests was unethical, largely based on how he considered such tests to be an invasion of individual privacy. This protection of privacy was codified in US federal legislation, namely the Employee Polygraph Protection Act, enacted in 1988. This act prohibits essentially all private sector employers from demanding employees submit to a polygraph. Interestingly, this protection to the private sector does not apply to US federal employees where polygraph testing is widely conducted and publicly reported. Examples include obligatory polygraph testing for individuals holding Top Secret Security clearances, or employees of intelligence services (Henderson, 2020). These same contradictions between what is seen as commonplace yet unacceptable is also present in Canada. For example, R v Beland (1987) reject the use of polygraph evidence aimed at supporting someone's credibility. At the same time, the Canadian Security Intelligence Service (CSIS) notes in its hiring Frequently Asked Questions (FAQs) that "All CSIS employees must obtain a Top Secret security clearance and the polygraph is a mandatory part of the process" (CSIS, 2020). Quick web research will also show that the use of a polygraph is fairly commonplace as part of the hiring process for many police forces across Canada as well (Cape Breton Regional Police, n.d.; Royal Canadian Mounted Police, n.d.). Putting aside the specifics of polygraph testing, "integrity testing" for personnel selection is quite commonplace (Dalton and Metzger, 1993), and indeed is mandatory for federal employees in Canada (TBS, 2014). Research has shown that conducting integrity testing, when paired with human resources practices, increased employee work performance (Febrina and Syamsir, 2020; Rosmi and Syamsir, 2020). In the context of those wanting employment in the federal government, the participation in this integrity testing (in the form of security screening) is voluntary insofar as you can exclude yourself, but this immediately disqualifies you for the position. Indeed, maintaining a valid security screening is a standard condition of employment (TBS, 2014). The purpose of these security screenings is to assess an individual's honesty and reliability as well as their loyalty to Canada (TBS, 2014). When considering the ethics of this practice, we must consider whether screening for honesty, reliability and loyalty is ethical when someone has not exhibited behaviours to the contrary. The TBS policy offers that the conduct of such a screening is "a fundamental practice that establishes and maintains a foundation of trust within government, between government and Canadians, and between Canada

and other countries" (TBS, 2014). I immediately refer back to how the "brand" for the government is indeed that trust relationship. As was noted in the Sinclair and Delisle cases, the damage to that trust relationship and the consequences are extreme and long-lasting. Further, I have highlighted that there is a significant financial exposure to potential insider threat attacks. Where one single department manages 9% of Canada's gross domestic product (Employment and Social Development Canada, 2020; Statistics Canada, 2021), the potential risk that an insider threat could pose would not only impact the organization, but the Canadian economy as a whole.

Given the use of employee screening tools and that they are a generally accepted practice, and given the expectation of Canadians that their information will be appropriately safeguarded, compounded by the exceptional financial risk; there is indeed an ethical imperative to have such screening programs, and they are equally commonplace.

Conclusion

This paper has positioned the following critical points. Firstly, that there has been validated insider threats within the government of Canada, and that the actions of these rogue individuals has had significant and lasting negative effects for the government. The result of these attacks has certainly been an international degradation of Canada's reputation, and the trust "brand" of the government has been severely impacted. Further, there is an exceptionally high risk that an insider threat attack could have a catastrophic financial impact that could impair the Canadian economy. Secondly, this paper has presented that there are indeed specific personality traits that are associated with insider threat activities. These traits, known as the dark triad, can indeed be used to predict insider threat potentiality (Jones and Paulhus, 2011). As not all people who hold dark triad personality traits commit insider threat attacks, I have posited that social bonds could be the mitigating factor and that these bonds can change through one's life-course trajectory and journey. This relationship and integration of dark triad traits and social bonds needs to be studied and validated. This integration, if validated, may indeed lead to a new framework and understanding. To that end, I have presented that the HEXACO or some similar, if not modified version, would be best suited to validate this relationship. Thirdly, I have discussed how the current "best practices" linked to insider threat programs are almost exclusively focused on activities *a posteriori* to an employee being within (hired by) the organization. That is to say, they are entirely reactive and inwardly focused, and therefore are more associated with reducing the impact of an event than reducing the actual threat risk. I further explore the practical implications, if not the critical need for an assessment tool to be developed so as to be employed at the front-end of a human resource process. I have argued that there is a need for *a priori* assessment so that the true potentiality of an insider threat attack can be reduced *before* the person is employed and granted access to critical systems. Lastly, I have concluded that the use of assessment tools in government, and indeed in the private sector are commonplace, and are ethically required given the foundational role and relationship the government has on ensuring it lives up to its trust brand. In fact, I have shown that to not have these tools is an ethical failing and is a breech in the fiduciary relationship the government has with Canadians. This paper has noted that there is indeed an insider threat problem. We know potential causes and mitigations. What needs to come next is the development of an effective and rigorous assessment tool that can be applied by human resources professionals as a means to reduce insider threat risk *before* someone is offered the opportunity to strike.

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EDUCATION AND RESEARCH METHODS: DOCTORAL STUDENT SUBMISSIONS

45. Developing the Higher Order Thinking of K-12 Students Through Asynchronous Forums: From a Trial Program to a Doctoral Project

HIROSHI MIYASHITA

Abstract

This paper describes the development of an action research project. After presenting an overview in Section 1, I report an action research study that I conducted with a co-researcher in Section 2. One of the major challenges in the field of teaching English as a foreign language at high schools in Japan is that English classrooms tend to lack learning activities to develop higher order thinking due to the test-oriented practices. The purpose of this action research is to explore an extracurricular blended learning program that was created as an intervention to develop the higher order thinking of English learners at a public high school in Japan, drawing on the construct of mediation from sociocultural theory (SCT). In this program, the participants engaged in online synchronous and asynchronous activities with English as a medium of instruction and communication while being supported by face-to-face sessions conducted in Japanese. The focus of this study is on the asynchronous forums. Data are collected through three methods: asynchronous forums to obtain written texts from participants, pre- and post-surveys, and the researchers' observations. The results show that participants found collaborative constructivist learning meaningful and exhibited higher order thinking development to varying degrees. However, there are some implications that learner-learner interaction was not so activated. In Section 3, I will introduce my doctoral project, which I am designing based on the findings of the previous study. In Section 4, I will discuss why this action research project can be applied research. In the last section, I will discuss the projected benefits to students, instructors, course designers, and policy makers in Japan as a conclusion.

Keywords: asynchronous forums, blended learning, English as a foreign language (EFL), content analysis, dynamic assessment, higher order thinking, sociocultural theory

46. Understanding Masculinities as a Way to Create Inclusive and Diverse Learning in Schools: The Teacher as the Catalyst

SUSAN EUVERMAN

Abstract

This research is aimed at understanding how masculinities are formed in males in a small northern BC town through narratives of five males who grew up in Houston, BC. The focus here is to further understand the role of education, in particular how teachers may affect the masculinity development of boys in school. The way in which masculinities are formed and acted is very complex so my contention is that when teachers become more aware of their own gender identity development, they may then contribute to a more diverse and inclusive practice for all students. In order for there to be a better understanding of how educators contribute to the forming of masculinities, there needs to be education in teaching programs and in the K-12 system devoted to this understanding.

47. Emergence of Appreciative Storytelling: A Hybrid Method From the Field

NANDANA PRASAD AND DEBRA HOVEN

Abstract

This note from the field describes my narrative of the emergence of Appreciative Storytelling (AS) derived from my experiences in the Territory of Nunavut gathered over a period of eight years. AS is a means of coalescing crucial, candid and emerging information based on personal experiences encountered by the first author referred to as 'I' throughout this paper. The significance of this hybrid method is that I plan to implement it in my doctoral research as the method of choice rooted in its origins in Nunavut's Elder knowledge-keepers. As a hybrid and naturalistic method, I perceive it as the most appropriate participatory method for my community-based study. In further reflections, I propose various interpretations of the results of AS and their contributions to sustainability of traditional knowledge and thereby, intergenerational equity.

Keywords: appreciative storytelling, story-sharing, continuity of experience, research method

48. Getting Patricias to Talk About Social Fitness: Artefact Elicitation as an Interview Technique [full paper]

CHELSEA A. BRAYBROOK

Abstract

This conference paper presents a perspective on artefact elicitation as an interview technique to help research participants communicate about topics that make them uncomfortable. Emic research conducted with serving and retired members of Princess Patricia's Canadian Light Infantry (PPCLI) on the impacts of information and communication technologies (ICTs) on their social fitness provides the examples for this paper. Infanteers' role is to *close with and destroy the enemy* and being tough is an implicit part of the job description. Aspects of army, and more specifically Infantry, culture make sharing and talking about fears, struggles, and shortcomings very difficult for many members of this group and this hesitancy to share can be a barrier for researchers looking to understand sensitive social issues in this population. On the other hand, storytelling and artefact collecting are also parts of army culture and if artefact elicitation can help soldiers and researchers to make the connections between their experiences and the research question, then researchers will benefit from a truthful, and often unfiltered, account of the relevant events.

Keywords: artefact elicitation, social fitness, information and communication technology

Background

The Canadian Army (CA) defines social fitness as "the ability to maintain a sense of identity and belonging, develop and maintain trusted, valued relationships and friendships that are personally fulfilling" (CA, 2015, p. 3). As serving member with 21 years in the army, I needed to read this definition several times when the army published the new integrated performance strategy in 2015. The strategy aims to improve readiness and resilience by focussing on six areas of performance fitness; social fitness is one of the six areas (CA, 2015; DND, 2015). The definition of social fitness is loaded with meaningful parts of my life: sense of identity, sense of belonging, trusted friendships, personal fulfillment. I would have a really tough time talking about these subjects with a researcher or any person that I did not know well.

Around the time the CA published the performance strategy, I was commanding a rifle company in the Princess Patricia's Light Infantry (PPCLI). Our team was getting ready to deploy to Latvia on Operation Reassurance and we had recently returned from a domestic deployment in northern Saskatchewan. During those extended periods of time away from home, I started to notice how much of an impact information and communication technologies (ICTs) were having on my team and myself. At the time I had no idea that my observations would lead me to Royal Roads University (RRU) and the Doctor of Social Science (DSocSci) program. A few years later, and with a lot of help, I made it through my candidacy exams and ethics reviews and started my research on the impacts of ICTs on social fitness in the PPCLI.

Research Findings and Conference Offerings

Anyone with a computer and/or cell phone has likely experienced ICT-enabled opportunities and challenges to

aspects of their social fitness, borrowing the CA's definition. Using a two-case study on serving and retired member of PPCLI, my research examined the impacts of ICTs on social fitness in PPCLI (CA, 2015; DND, 2015; Yin, 2018). My project found that soldiers used ICTs positively for peer support, relationship maintenance and to communicate and connect socially. Negatively, ICTs intensified workloads by creating boundaryless work conditions, set the conditions for chains of command to make changes on a whim and reduced opportunities for unmonitored expression online due to the potential for negative professional consequences resulting from these activities.

A separate journal article, to be submitted for consideration with *Armed Forces & Society*, describes the findings of my project in detail. In this conference paper, I would like to share some insights into using artefact elicitation as an interview technique to help research participants talk about topics that make them uncomfortable (Barton, 2015). Patricias, the informal name for members of PPCLI, can be uncomfortable and hesitant to talk about challenges to their social fitness because, as infantry soldiers, they are part of an army sub-culture where admitting fears, personal struggles and shortcomings are still a taboo. Patricias can also be uncomfortable talking about the opportunities because this means talking about love, feelings and vulnerabilities. The role of the infantry is "to close with and destroy the enemy" (CA, 2013, p. 1-1), meaning that soldiers who sign up to be infanteers are signing up to do some of the Canadian Government's hardest work. These are mentally and physically tough people.

Patricias are also storytellers. We love to hear, and tell, a good story; we want all the details. When we reminisce, we connect – thus Legions spread across the country (Royal Canadian Legion, 2021). Our stories and experiences reinforce our senses of PPCLI identity and belonging. We also keep totems. Badges that mark our successes on hard courses, medals that recognize our contributions to expeditionary missions, course photographs, gifts from friends, and commanders' coins – are just a *few* examples of the totems, or artefacts, that hold meaning for us. A tough infanteer filled sub-culture that keeps totems and likes to tell stories is a good match for artefact elicitation as an interview technique concerning potentially uncomfortable subjects (Barton, 2015). From my experiences, all research participants easily selected an object that represented social fitness for them and were able to make connections between the artefact and social fitness, and subsequently between social fitness and ICTs.

In the next sections I will briefly discuss applied research in the CA, share three examples from my research where artefact elicitation as an interview technique helped my participants, and myself, talk about some challenging topics and make insightful connections to my research question, and I will end with a discussion and conclusions.

Applied Research in the Canadian Army (CA)

From the onset, I designed my DSocSci research to be applied because I wanted to help solve a practical problem I was facing as a CA leader (Bickman & Rog, 2008). When I approached RRU and applied for the DSocSci program, I wanted to leverage my professional experience as a senior officer in the CA, but knew I was missing some of the academic skills I needed to conduct policy-relevant research. The DSocSci program mentored me and taught me academic skills to use alongside my professional experience and help answer my research question in a way that will contribute to meaningful and sustainable institutional and individual change in my organization (Pulla & Schissel, 2017).

As I designed my research project, I was committed to developing a detailed theory of change (TOC) as part of my research proposal because I wanted to ensure that my outputs were focussed on organizational and individual change recommendations for the CA that would leverage the opportunities and mitigate the challenges that ICTs presented to social fitness (Belcher, 2016).

My TOC helped me to choose to complete my dissertation by portfolio, rather than by monograph, so that I could share my findings with the academic community, military chain of command and greater military community through a journal article, a policy paper, and a digital artefact gallery, respectively. Although my results may not be generalizable to the entirety of the Canadian Armed Forces, the two cases in the study had a broad representation of ranks and experience and were in very good agreement (Yin, 2018). My project would certainly benefit from additional cases (or

related research) in the future, but for now my focus is on communicating my findings through the outputs of my TOC to start making my organization more supportive, resilient and ready for operations.

Examples of Elicitation and Breaking Barriers

The primary purpose of this paper is to share three examples from my research where artefact elicitation as an interview technique was helpful for participants who were uncomfortable sharing some of their experiences related to social fitness (Bagnoli, 2009; Barton, 2015). The examples selected showcase opportunities for ICTs, rather than challenges reported by participants. Generally, the challenges ICTs present to social fitness were raised in the structured portion of the interviews and were not extensively discussed during the artefact elicitation. More information on the challenges presented are in my draft journal article and dissertation portfolio.

Although the paper will focus on the opportunities ICTs help create for social fitness, many of these examples were hard for participants to talk about because they are deeply personal and they are related to themes of perceived struggles, failures and/or shortcomings. Examples include not being there in person for a friend, ongoing support to veterans in need, being absent as a parent and spouse, and helping others who are struggling to maintain their sense of identity and belonging, respectively.

Prior to the COVID-19 pandemic, I had intended to interview my research participants in person. In my original plan, participants would have brought their artefacts to the interview and I would have taken a photograph of the artefacts for use in my portfolio outputs. COVID-19 public health measures necessitated that I collect data respecting physical distancing measures, so I altered my collection plan to include telephone calls and emails, with participants emailing me a photo they took of their own artefacts prior to our telephone interviews. Although not my initial plan, I am very satisfied with end results and retrospectively believe that these collection methods made it easier for my participants to make their contributions.

In the following three sub-sections, I present examples where I assess that artefact elicitation was an effective interview technique in my project. For the sake of anonymity, my participants are called Delta, Echo and Foxtrot. Each section sub-section provides an overview of the participant's military experience, a photo of their artefact, a description of the meaning behind the artefact, its relation to my research question and my perspective on why artefact elicitation was effective.

Participant Delta

Delta is a senior non-commissioned officer with decades of military experience. They have extensive operational experience and have deployed many times. They served in two Canadian infantry regiments and have several advanced qualifications. They are an expert in the technical aspects of mechanized warfare and infantry manoeuvre tactics. Delta sent me the following photograph prior to our interview.

Figure 1 *Delta's Artefact Photograph*

This is a photo of a rock that Delta and a friend first shared during a period of stress where both were frustrated due to a group of senior officers delivering a patronizing speech as they prepared to deploy to Afghanistan a decade ago. Delta's friend gave him the rock with the understanding that if there was something they needed to talk about, their friend would always be there. This started a tradition where Delta and their friend passed the rock back and forth for the duration of their deployment to Afghanistan where Delta was involved in many combat operations, some resulting in fatalities. The rock symbolizes friendship and support for Delta and was a reminder of trusted and valued friendships; that they were never alone, even at the worst of times. To Delta, this rock symbolizes some very important aspects of social fitness, although they may not use the term.

Recently, Delta sent a photo of the rock, by Facebook, to the friend they had shared it with during their tour in Afghanistan when they saw that their friend was having personal trouble in some online posts. The two had not connected in years but the artefact, enabled by ICTs, allowed them to reconnect and provide supports as needed. Delta explained:

> I had seen that he was going through a difficult time. I saw it online, on Facebook of all things. And, so, I sent him a text message with a picture of the rock saying, "Hey, I wish I was there to pass this back to you." It kind of rejuvenated discussion and I was able to kind of help him with, what appears to have helped him a little bit, with the stress he was under.

Delta would have preferred to be there for their friend in person, but their ability to send the photo of the rock was a second-best option. As Delta explained the meaning of the rock to me, they also made the connection between their online support group and my project. Since their tour in Afghanistan, Delta has been a member of a closed Facebook group that offers supports to the members of their previous unit. Only those who served in their deployed group are members, and the group has remained intact for over a decade. Delta reports that this group often connects socially over Facebook and that they continue to provide informal supports to members, long after their deployment ended:

> [The closed Facebook page] allows us to stay in touch with each other and then if somebody is having a hard time it's actually voiced there because it's a place where they know they're not going to be judged. Including, we had a guy who was having extreme difficulties, he had been released from military and he was having drug issues and starting into suicidal issues. It was a place for him to come on[line] and say, "Hey, this is what's going on in my life." And two of the guys from the platoon drove several hours to go see him as soon as they knew that there was a problem. They got in their cars and they went and saw him and that was the start of him actually going to drug rehab, getting clean and now he's off drugs. That page is been going since 20XX, just after we got back [from deployment] and it's been helpful, quite helpful.

A recurrent theme in my research, although not directly related to social fitness and ICTs, is the role of the Canadian infantry's regimental system in the *long fight*. Not all countries use regimental systems; however, in Canada, infantry officers serve in the same regiment until they are promoted to the rank of Colonel and non-commissioned officers serve in the same regiment for the entirety of their careers (PPCLI, 2019). Effectively for most, they will serve in one regiment rather than move between the three Canadian infantry regiments headquartered in Edmonton, Petawawa and ville de Québec. This is an idea that I will revisit in this paper with Participant Foxtrot's artefact; the participants in my project formed life-long bonds and friendships with their regimental buddies and these soldiers often form the first line of support for each other throughout their lives when times are tough (PPCLI, 2019).

When recruited for my project, Delta was unsure of how their experiences could be of use to my project, as they thought they did not have much experience with my research question. Without Delta's artefact as an elicitation technique, it is very unlikely that the questions I had prepared for the semi-structured interview would have helped Delta to connect their experiences to my research question. Delta's story was instrumental to the findings of my research project and contributed directly to helping me understand the opportunities that ICTs bring to social fitness. Additionally, Delta was willing to share deeply personal and meaningful information but would have likely been uncomfortable doing so if the conversation had not arrived there effortlessly, helped along by their sharing of the rock.

Participant Echo

Echo is a retired non-commissioned member who served in both standard infantry and specialist companies; they are a trained sniper. They have several operational deployments, including one as a sniper. Sniper training is long and very difficult, with low pass rates. Many soldiers do the training course several times; Echo did the course twice, passing the second time. Echo's interview photograph is below.

Figure 2 *Echo's Artefact Photograph*

This is a photo of a sniper bullet, called a hog's tooth; it symbolizes success on the sniper course and the staff give it to participants when they pass the course. Soldiers are proud to receive this token and generally wear it or keep it with their valuable items. For Echo, the hog's tooth symbolizes accomplishment, belonging to the sniper community and camaraderie, as everyone would expect; however, in their case, it more importantly symbolizes the sacrifices that their family and spouse made so that they could pursue their dreams. They emphasized that nothing they accomplished in their career would have been possible without the support and commitment of their spouse.

As we discussed the hog's tooth, Echo was recalling time away from home on both their first and second sniper courses. The course is three months long and takes place in Dundurn, Saskatchewan, a five-and-a-half-hour drive east of Edmonton, Echo's home at the time. When Echo started the course, they had one young child and by the end of the course, they had two. Echo shared how ICTs helped to keep them in touch with family and friends, maintaining their relationships:

> I was still able to go on Facebook and see the videos she would upload to there, they were just about, you know, my kid. It made it so much more manageable as opposed to just wondering and waiting. That was huge. And then on my sniper courses, or exercises even, just having the ability to check my Instagram or Facebook to see what I'm missing out on when I go home. So, it makes you feel a tad homesick, but at the same time you know that you are not missing out on things and you've got something to look forward to when you get home. I get to see my kids when I get home.

Soldiers spend so much time away from families on training, courses and deployments that many reported that ICTs were necessary for social health: accessing support, providing support and maintaining relationships. Echo deployed overseas in the early 2000s when ICTs were less developed and experienced the improvements in connectivity over the last decade-and-a-half. They were adamant that it was the day-to-day, hour-to-hour access that made social life and family life much better when away from home for extended periods. It was the little things: Facetime at the park for five minutes, a few minutes of family time throughout the day, dialing into birthday parties and get togethers. ICTs helped Echo participate, although at a distance, and left them feeling engaged and that they did not miss out on too much.

Similar to Delta, Echo was interested in taking part in my project, but didn't think they had relevant experiences. Echo's feedback will stay with me for the rest of my military career. They were so honest about the opportunities ICTs bring to participation in important family and friendship life events that I cannot imagine a chain of command who would not fight to get this access for their soldiers and, when possible, ensure that soldiers have the time to maintain

and participate in their social lives. Central to social fitness are relationships and belonging. Without Echo's artefact I doubt that our conversation during the semi-structured interview would have delved as deeply into how ICTs help with relationship maintenance during periods of time away from home, an important finding of my project. I also think that Echo's selection of the hog's tooth, a known totem to all in uniform that is deserving of professional respect, clearly reinforces what they shared in the interview: nothing hard that is accomplished by a soldier comes without strong social supports, they are essential to soldier readiness and resilience.

Participant Foxtrot

Foxtrot is a senior officer who commissioned from the ranks. They have decades of experience in cadets, the reserves, as a paratrooper and at all levels of command, below unit, in PPCLI. They have several operational tours and extensive experience supporting the regimental family, including serving and retired members. The photograph Foxtrot submitted of their artefact is below.

Figure 3 *Foxtrot's Artefact Photograph*

This is a photo of hobnailed parade boots. Polishing boots, called a "boot party" when done with friends, is a military ritual; often repeated, many, many times before important ceremonial events and on basic training. Soldiers put hours and hours into getting a mirror-like shine on these leather boots. Foxtrot has worn the same parade boots for over three-and-a-half decades, and although hobnails are no longer the standard across the Canadian infantry, they will not be retiring these boots any time soon. These boots symbolize a career of service and sacrifice to Foxtrot. They've worn them to every important formal event in their career. When these boots were new in the 1980s the resoling – or application of the hobnails at the cobbler shop – required Foxtrot to save up a meaningful sum of money. Foxtrot gladly paid for this improvement to their uniform because the hobnails make a distinct noise when a soldier walks across the parade square, a sound Foxtrot described as "damn sharp", and I would agree.

Foxtrot talked a lot about the stories behind the boots and of the lasting friendships made in cadets that followed them through their career of service in PPCLI. Many of their friends live across the country now and they regularly connect on social media when they can't be together in person or are in between meet-ups. The boot parties of the past have become Zoom parties in the present. Foxtrot shared:

> I think that as more guys get older there's this tremendous value in using the internet and Zoom and these other platforms to get online and bitch and complain. I know many different sorts of sub-groups of guys who have gotten together and we do chat lines on a Facebook site, and those are the guys who didn't have the technological savvy to get on a Zoom call, but they're sitting there, drinking beer, staring at Facebook, sending each other messages back and forth. And that's a great thing. I've seen all kinds of stuff, "OK, guys we can't get together, so, you know, let's meet here [online] and we'll talk army shit." I think that's the greatest thing in the world...The Regimental system, at the end of the day, is first and foremost for peer support in the long fight.

Foxtrot's use of several different social media platform to stay connected with their friends, providing and receiving supports, are an important part of their weekly routine. They engaged on these platforms before the COVID-19

pandemic, but they've reported increased use when they are unable to travel and/or meet in person due to public health protection measures. The ability to private message, chat and video chat lets these soldiers connect, let off steam and reminisce, despite geographic distance. Foxtrot's feedback provided important insights into the how members of PPCLI who are geographically isolated from the main groups in Edmonton and Shilo maintain their sense of regimental identity and belonging, two important components of social fitness. By connecting to "bitch and complain" and to "talk army shit", these people stay connected to the current happenings in the regiment and play an active role in current regimental events.

As in the previous two examples, Foxtrot questioned their ability to provide insights to my project and their use of ICTs before the interview. As soon as we started talking about the boots, it was clear that Foxtrot served with many friends, who are considered to be family, and that they actively maintain these relationships. From there it was easy for both Foxtrot and me to connect their experiences to the research question and really get a deep understanding of how ICT use can aid with maintaining senses of identity and belonging to PPCLI.

Discussion

Although I have only offered three examples for this conference paper, in each of my thirteen interviews participants brought insightful artefacts that helped them to tell their stories and helped me to ask better questions during the semi-structured interviews. The complete online artefact gallery is located at www.socialfitnessintheppcli.com. When the provincial governments are able to relax the public health measures associated with the pandemic and PPCLI Regimental Museum can reopen to visitors, I will also be exploring options for an in-person gallery experience. In the meantime, the website it designed to be interactive and serve as a platform for continued sharing and communication about the opportunities and challenges ICTs present to social fitness in PPCLI and the CA.

When designing the semi-structured interview questions, I prepared several extra questions to be used if the conversation was awkward or had difficulties connecting to my research question. I did not need the extra questions in any of my interviews and each ranged from 45 minutes to 1 hour and 15 minutes. During the analysis, I remarked that almost all the data I collected was related to my research question. I attribute this conversational ease to the artefacts and how they helped participants to tell their stories and share their experiences.

Similar to other storytelling or "war story" projects involving military personnel ("Soldiers' Stories", 2006; Sites, 2013; Veterans Affairs Canada, 2021), of which there are too many to fully list here, my participants were excited to share stories about their artefacts and liked thinking about the ways ICTs helped them reach out to their social circles. Due to the changes necessitated by the COVID-19 pandemic, the end results of the artefact elicitation technique I used was quite similar to photovoice where photographs are used to facilitate the discussion between participants and researchers of topics that are potentially uncomfortable, sensitive and/or difficult (Wang & Burris, 1997). Artefact elicitation as an interview technique, in the form of photovoice, was used successfully by True, Rigg and Butler (2015) with veterans on a project to understand barriers to mental health care. Although my project was not related to care access and had no medical nexus, the three participants cited in this paper, and myself, are all veterans of Canada's expeditionary operations in Afghanistan during the time frame when the army was engaged in near continuous combat operations and share some of the hesitancies and qualities reported by True, Rigg and Butler (2015).

One important difference between mental health care access research with veterans and my own is that no participant in my project reported any sense of stigma around social fitness, describing their experiences more in terms of seeking safe, trusted and judgement-free spaces to share and build their social networks. Participants did report that the "infantry myth" of being physical and mentally tough at all times remains alive and well, a myth that can be a barrier to openly sharing perceived shortcomings and weaknesses in research projects.

My final observation about research on hesitant populations is about participant trust in the researcher. My thoughts and observations are certainly not unique to military populations (Guillemin et al., 2016; Ciszek, 2020) and not all existing research is in perfect agreement (Guillemin et al., 2018); however, because I am a Patricia I had almost instant trust with

my participants, a trust I have been careful to protect as I write up my research findings. In the army, and specifically the infantry, we can easily size each other up in a matter of minutes. As infanteers we are taught the credo "Mission, Men [sic], Self" a mindset that puts service before subordinates, and subordinates before leaders (Kilburn, 2005). From the day we enter the training system this mindset makes us accountable to each other, up, down and laterally throughout the chain of command. Military culture, and I would argue Canadian infantry regimental culture, can be a challenge for outsiders (Hall, 2011), so if someone from outside the community is interested in research with the Canadian Armed Forces, or part of it, they may find it effective to enlist the help of an insider.

Conclusions

For anyone considering data collection by semi-structured interview, I would highly recommend using artefact elicitation as a technique if there is any chance that participants may have difficulty linking their experiences to the research question or if the research topic is likely to delve into areas that may make participants uncomfortable. I would also recommend looking closely at the habits of any culture or sub-culture of research interest and talking to the members during the design phase to help ensure that the approach will be effective. I consider that my professional experience in two PPCLI infantry battalions and close work with the third set me up for success in this applied research project. As my project outputs aim to contribute to change for both my organization and individuals within my organization, I needed access to unfiltered feedback, positive and negative.

If any readers have further interest in my dissertation outputs, they are welcome to contact me at socialfitnessintheppcli@gmail.com or visit my artefact gallery website at www.socialfitnessintheppcli.com. I look forward to feedback as I continue to work on my dissertation portfolio synthesis and prepare for my dissertation defence.

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