The doctoral studies paradox: Indigenous cultural paradigms versus Western-based research practices

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Abstract

This is an exploratory conceptual paper regarding the ontological and epistemological premises that are present in the enrollment of Indigenous peoples in doctoral programs at higher education institutions (HEIs). The paradoxical nature of navigating through distinct points-of-view about two distinct cultural perspectives, that of the doctorate representing a culminating recognition of a professional culture based on Western tradition and the norms and values of Indigenous cultures. There are personal risks involved in undergoing an education predicated on conflicting messages paradoxes represent from prior personal and collective experience and from institutional dicta and expectations. This paper looks at how an individual brings these elements together in a transformative manner that accepts or rejects governmental preference for enhanced participation by Indigenous peoples in doctoral education programs.

Keywords: hybridity, Indigenous doctoral students, paradox, risk

Introduction

According to Wergin and Alexandre [52], successful academic organizations exhibit the ability to balance paradoxes. Perceptual in nature and reference dependent [20], the presence of a paradox describes a situation where contradictions (often in the guise of mixed messages), conflicting demands or opposing perspectives are simultaneously present [29]. To cope with the presence of paradoxes, "[as] people attempt to make sense of an increasingly complicated, ambiguous, and ever-changing world, they frequently simplify reality into polarized, either/or distinctions that conceal complex interrelationships" [L&D, p. 710]. Choices, especially difficult choices between competing values therefore represent value judgments. The complication here is what Arrow [3] noted regarding the consistency or contradictory nature of the value judgment in relation to social interests and individual experienced utility [21]. Choices within a paradoxical circumstance, particularly in a HEI environment, are based on (1) "figuring out how to accomplish conflicting purposes, without choosing among them" [W&A, p. 231] and (2) be able to explain personal or collective actions in a manner that is describable, systematic, and non-random [2]. Yet, as the Allais Paradox [1] points out, choices do not always reflect rational choices, i.e., judgments and choices are based on individual value complexes in relation to the extracted cues from the surrounding environment.

Pursuing a doctoral degree at HEIs

Pursuit of a doctoral degree tends to be a highly personal and unique set of events [26]. Personal motivation, prior educational, social, and vocational experiences shape how a student understands the process. Shaping experiences are:

- an intrapsychic sensemaking process based (based on personal expectations shaping motivation and purpose influenced by cultural values, family and social interactions in and out of educational settings),
- program design and approach to supervision (construction of or lack of formal curriculum dependent on the doctoral model available to the individual wanting a doctoral degree, approaches to supervision by program and individual academics),
- disciplinary and institutional expectations and requirements (formal and informal graduate attributes),
- **the implicit, tacit, or hidden "curriculum"** that drives the key processes in the doctoral education process,
- the motivation of doctoral supervisors in motivation and reason(s) for wanting to work with the student,
- **sociocultural expectations shaping the value** surrounding the worth of acquiring the degree and what the doctoral degree represents,
- the ability to overcome financial, personal, professional challenges inherent in the sacrifices involved in the pursuit of a doctoral degree, and
- how the individual is able to create personal meaning as a result of bringing these elements together into a meaningful proposition.

Success, as a result, is often associated as a matter of fit [10]. As Hawley pointed out, completing a doctoral degree is more than just being bright enough, there is a major emotional component to it. One reason for this is that successful completion is a culmination of a transformational process wherein the student becomes acculturated into and accepted within a professional community. A doctoral degree reflects a professional identity [19], a specific manner of perceiving, thinking, and feeling about an issue and how to approach it [42]. There is a degree of risk associated in successfully navigating through the doctoral process. Sensemaking becomes pivotal because it helps the doctoral student identify and understand those reference points (often being or framed by institutional rules, symbols, and values) that help, hinder, challenge or support as he or she traverses the various tasks leading to completion and recognition [6][51][55]. Individuals react to what they infer from their perceptions of valuation and valuing of circumstances based on the proposition that "the properties of things are not shuffled and combined at random in nature, but ... that there is constancy of association" [23]. The outcomes associated with identified (either consciously or subconsciously) reference points considerations that trigger a decision - are framed by the norms, habits, and expectations of, in this case, the doctoral student [22][48][49].

The extent of personalization in the doctoral experience leads to a higher degree of uncertainty, making risk aversion or risk taking a recognizable part of decisionmaking, arguably on the part of the student AND the supervisor. Uncertainty comes from not being versed in the tasks expected of them [46]. Uncertainty therefore often acts as a deterrent to those making a commitment to a doctoral program as well as more generally career decisions [12]. A key element here being the emotional state of regret, attempting to minimize it either before or after decisions are made [54]. The critical nature of regret is underscored by Lusted's definition of doctoral studies as a pedagogical process based on production and exchange [30]. Perceptions of environments and experienced utility and the cognitive processes linked to what is perceived tends to steer notions of regret impacting decisionmaking choices, especially as the process is becoming a doctor is intellectually and procedurally different from prior educational experiences. The approach is more entrepreneurial, emphasizing selfmanagement [10] in contrast to the previous educational methods based on discovery through a highly scaffolded and defined environment represented by the designed curriculum. The lived experience comes from a reverse perspective of being an active knowledge creator. The question "is it worth it?", as a result, is what drives persistence toward completion.

Potentially, the capacity for regret about decisions is enhanced because production and exchange occurs in interactions having "frontier effects" between the symbolic boundaries of self-identity and disciplinary/university expectations and requirements in the construction of new learning by the doctoral student [11][15]. Typical identified factors in the literature influencing completion or non-completion include:

- **supervision** (a key concern widely discussed in the literature),
- **program and/or discipline rigidity** (institutional lack of ability or unwillingness to adapt to extraordinary situations due to internal policies or accreditation or recognition schemes),
- financial support,
- support from peers (the ability to generate own or inability to enter into peer communities of practice within and/or outside the HEI), and
- support from employer and/or student's own resource capacity (e.g., access to needed means to achieve a desired/needed outcome, organization and balancing of disparate demands between educational and non-educational activities, time, transportation) [26][53].

However, for traditionally under-represented groups there are additional influencers:

- diminished academic preparation;
- ill-health;
- multiple family and community responsibilities;
- organizational dynamics
 - lack of academic staff from similar background (i.e., lack of role models),
 - institutional and individual academic staff preference for upholding traditional Western tradition and values pertaining to research, research methodologies, research questions, supervisor/supervisee relations, and values,
 - limiting the doctoral process to a project management model emphasizing rules and procedures more than the knowledge creation aspects of research and its manyfold implications discovery represents,

- lack of recognition of cultural differences that make it difficult for the institution to fully accept, value, and support culturally diverse perspectives and practices; and
- lack of appropriate pastoral care or, if available, informal support is "invisible"
 [4][27][31][33][34][35][43][45][47][53].

There are inherent paradoxes within these persistence factors. At play are the conundrums these represent and how individual values based on prior socio-psychological shape student responses, usually in favor of risk aversion. Sometimes the choices may not seem to make sense because the decisions have a more intrinsic value to the student that contradicts institutional or other third party perspectives. Understanding and accommodating (within plausible limits) these alternative realities may counter some of these influencers. What is important here is a willingness to identify the issues and a capacity and desire to negotiate an environment that is acceptable to the doctoral student, supervisor(s), HEI, and other stakeholders (e.g., accreditors, employers or potential employers, communities, community leaders, government agencies, regulatory agencies).

The conundrum: engaging Indigenous populations in doctoral level education and research

Poor performance in higher education by Indigenous groups have led to a range of initiatives by the Australian Government as of 2005 to improve access, participation, and success in attaining university qualifications [5]. In 2012, Behrendt et al. [4] recommended that the Australian Higher Education sector should aim to increase the total of domestic student doctoral completions for Indigenous Australians to at least 2.2 percent of the total population to increase overall national research capacity, as the total population of Indigenous Australians aged 15-64 reached the 2.2% level in 2007 [25]. Behrendt et al.'s report indicated Indigenous students made up only 1.1% of higher degree by research (HDR - honors, masters and doctoral degrees) students and 0.8% of all HDR completions in 2010. If there is such a thing as good news for this situation, the retention rate for Indigenous students was slightly lower compared to non-Indigenous students; yet, the overall attrition rate for Indigenous students in higher education has been as high as 56% while 12% of those eligible to enroll in any year actually do so [24]. While not directly applicable to doctoral studies, institutional outcomes of success for Indigenous students tend to fall into two categories: high enrollment-low completions or low enrollment-high completions [35]. Doctoral by research completions by Indigenous Australians ranged from a low of 8 in 2001 to a high of 37 in 2011 [45]. In terms of percent of completions, the percentage rate ranged from a low of 0.21 percent in 2002 to a high of 0.81 percent in 2011, averaging 0.48 percent during the 2002-2014 period.

While a number of the references cited talk about national interest and a discussion on generating strategies to increase access and participation, the question remains what are barriers to Indigenous engagement, especially at the masters and doctoral degree levels given that participation numbers remains under what parity figures suggest they should be (near the 2.2 percent level). The following two quotes provide an answer:

> Aboriginal knowledge has always been informed by research, the purposeful gathering of information and the thoughtful distillation of meaning. Research

acquired a bad name among Aboriginal Peoples because the purposes and meanings associated with its practice by academics and government agents were usually alien to the people themselves and the outcomes were, as often as not, misguided and harmful.[7].

Research is not a word taken lightly by Aboriginal peoples. Depending on the audience, it is a word that has varying contextual and historical significance. Research is a Western world term: for Aboriginal peoples it has meant centuries of violation, disrespect, subjectivism, and intolerance, all in the name of research [36].

These two quotes refer primarily to the perceived negative lived experience of Indigenous communities and their individual members as linked to experienced utility. The multiplicity of experiences felt by Indigenous communities and not just in Australia, but in Canada, New Zealand, the USA, and other countries with identifiable Indigenous populations - based on how Western processes interacted with or imposed on these communities, how these complemented or alienated existing beliefs, practices and social structures have created a situation of at minimum discomfort to outright alienation that help shape individual identity [28] that, in this case, needs to be overcome. Effectively, there is a cultural clash in place that requires the individual to potentially make choices because of the paradox generated between the potential benefits that doctoral education research provides as a seed or complement to other community based research versus the negative experiences had by the community in general and possibly the potential student directly. This is compounded by the realities that these possible future doctoral students will in all probability be first-in-family and come from a background that education is not valued (apologies for the tautology). At the crux of the matter is Wergin and Alexandre's missive of accomplishing conflicting purposes without selecting between them.

Lefebvre [28] talks about lived experience from a concrete (bodily, spatial) perspective, with individuals having to experience as a means of having perceptions that lead to conception. He treats lived experience as distinct from the perceived and the "thought". For him, there is an interconnection between the three, and it is this intersection where it can be argued that the navigation of paradoxes occurs as part of a self-learning proposition. Conception can overcome the lived experience. There is both a chance to meet the challenge of increasing Indigenous participation in doctoral education programs and, conversely, becoming a risk proposition if the negative perceptions emanating from the lived experience support the cognitive stereotype of Western research's impact on Indigenous culture and knowledge.

Superficially, the distinction between the Western tradition of doing research and doctoral education and Indigenous cultures has argument lines echoing C.P. Snow's "two cultures" [44]. However, rather than discussing the irresolute divide between the two, there is a third, in-between space where the chance to succeed converges with the risk proposition of irrelevance based on the adverse impact many Indigenous populations have felt in the name of research to benefit them. It is where self-identity and learning come together to stimulate change. Bhabha [1994] terms the identification process "hybridity" where renewal is based on iteration and translation where the different meanings from the two cultures are vicariously addressed. The result is the individual's ability to generate his or her own transformation of meaning and prioritization of

contingent and strategic elements that shape values and drive decisions, whether these be rational or based on other affective premises. In other words, this third space is where the boundaries of personal and social constructs come together to create an understanding of self (being and becoming). The tacit (usually not verbalized or difficult to express, with inferences drawn from clues that are not explicit [38][50]) and the explicit interact within the formal (external environmental contexts) and personal (contextual[37]) to achieve this understanding [39]. How this comes to pass is based on conscious choices, stumbling on them, or simply having grown up in them through an inductive process of observed actions and reactions [17][41].

Strategies for increasing Indigenous doctoral student numbers

A scan of the literature identifies the following areas for where changes/improvement needs to happen:

- supervision [13][31][46],
- enhancing cultural awareness within HEIs regarding Indigenous cultures, their knowledge and values [4][24]
- increasing the number of Indigenous academic staff who qualify to act as supervisors [9][25][45],
- revisiting the approaches to doctoral pedagogy and the models for approaching doctoral level research and dissertations[26][34], and
- expanding the acceptance of Indigenous cultural values in shaping the standard of practice in doctoral research methodologies[31][53].

Probably the most critical of these areas is supervision. Supervisor guidance provides the student a salve to counter the identified pitfalls [40]. Implicit in the supervisory process should be a pastoral relationship based on trust and respect [31]. Supervisors represent the disciplinary expectations and the institutional requirements for a successful graduate to the student. Specifically, the HEI designates the supervisor as the quality control mechanism to ensure successful completion. This creates a double role for the supervisor of needing to be the chief advocate, agent, and supporter while being the chief critic and gatekeeper. This is not the same as the supervisor being judge and jury, especially in terms of access and willingness to work with the student, preferably alongside in a negotiated environment. What is at play is a sympathetic Janusian role of backing the student up while making the doctoral student accountable to ensure the he or she can do the best work possible. Put in another way, the supervisor represents the existential paradox of becoming a doctor.

Supervising higher degree students has many tacit elements to the process. This is even more so in the case in doctoral level studies. Supervision tends to be experiential based on recollected experiences of when the supervisor was a student or previous supervision experience. There is no real codification of practice based on the required personalization to generate unique research projects. Nonetheless, what is effectively supervisor pedagogy reflects the everyday practices of the HEI's culture [13][40]. Formality comes in terms of norms representing expected attributes of doctoral degree graduates and disciplinary and professional expectations – dispositional and technical – that graduates need to exhibit and meet and enforced through procedures such as ethics protocols, timelines, and defined milestones. Supervision provides two areas of potential challenges to the doctoral student in relation to interactions with the formal and informal HEI culture regarding doctoral education. One area is in achieving acceptance of the methodologies used. Depending on the doctoral model utilized by an HEI, this occurs either through a confirmation process within the university, a preliminary proposal meeting with doctoral committee members, possibly the ethics panel, and potentially the HEI graduate studies/research office. Here issues of cultural awareness and acceptance are critical. There are the typical research paradigm wars that disciplines have within themselves or extend across the institution in the traditional internecine rivalry between the natural and social sciences, humanities, and professional programs. Acceptance of a different approach, focus, methodology, or paradigm based on cultural awareness and sensibilities thus becomes a negotiated affair requiring the supervisor to advocate for the Indigenous student to achieve acceptance and recognition that their work will meet the rigors expected of this level of research. The supervisor should facilitate the student's capacity to ground the research based on his or her own cultural knowledge systems [18]. A second area generating challenges for the supervisor is the extent to which the supervisor views the doctoral research project in terms of project management [31]. The question is one of emphasis, based on whether to focus on the procedural and research aspects of the thesis over the qualitative elements of the thesis as a transformative experience [14]. There is often a gap between the students' understanding about what research is and HEI expectations that acts as a barrier to the successful completion of the degree [32]. This leads to a third area, personal motivation for a supervisor in taking on board a doctoral student. Is it opportunity for recognition and promotion or to foster pragmatic benefits emanating from the relationship such as a favourable work environment [56]? Motivation sits alongside a fourth area of concern, that of qualified Indigenous academic staff that can act as mentors and supervisors. In 2009, there were 321 Indigenous academic staff in research only, teaching only, or combined teaching and research positions; parity numbers indicate that the total number of academic staff should have been 1180 [24]. In short, Indigenous the number of academic staff was only 27.2 percent of what should be in place. Not surprising, a recent study found that in their sample group, Indigenous staff providing doctoral supervision had on average 20 years of experience doing it [45]. Nevertheless, strategies are needed to promote success and foster career progression of Indigenous academic staff who are interested in pursuing doctoral degrees [4][24][45].

Conclusion

Upon completion, completers of doctoral degrees are expected to exhibit characteristics of a practicing professional:

- specialized knowledge, expertise and professional language;
- shared standards of practice;
- long and rigorous processes of training and qualification;
- a monopoly over services provided;
- an ethic of service in relation to clients;
- self-regulation of conduct, discipline and dismissals;
- autonomy to make discretionary judgments;
- the capacity to work together with other
- professionals to solve complex issues or problems; and

a commitment to continuous learning and professional upgrading [16].

There is a major personal transformation that takes place that requires commitment, persistence, and the belief that there is at minimum a personal payoff and, preferably, a vocational one. The personal nature of the experience highlights the interplay between personal sensibilities shaped by prior experiences and social, disciplinary, and HEI expectations cum requirements that frame the pursuit of a doctoral degree. The list represents the Western tradition of benefit that is widely accepted. But this is not the case with Indigenous peoples as they see negative results emanating from these types of activities. In turn, this adverse view of what higher education sponsored and/or research adds to the task of getting more Indigenous higher degree students, especially at the doctoral level. The focus of this paper has been the individual rather than the community. For Indigenous peoples the community is critical, thus it needs to be a separate discussion given space limitations. However, the individual as locus of discussion is important because of how a potential doctoral student brings together those experiences that shaped him or her and those external expectations and requirements to create that self-identity that generates meaning, identifies and manages perceived risks, and prioritizes values. Understanding this transformation helps to appreciate the challenges faced by governments and societies to engage Indigenous populations in educational settings as a means of increasing the individual and community quality of life.

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