

Mixed Methods in Knowledge Management and Organisational Research

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INTRODUCTION

Expanding interest in mixed methods research has catalysed an active and global community of practice engaged in organic dialogue surrounding the theoretical and practical implications of its adoption (Journal of Mixed Methods Research, 2014). Reflecting on these discussions, this article aggregates and advances knowledge regarding the nomenclature, philosophy, design, conduct, synthesis, evaluation, presentation and further, the specific capabilities of mixed methods research. It elucidates core areas of applicability to knowledge management and organisational studies, notably the human dynamics of system and culture change, alongside understanding of the knowledge environment. It seeks to promote the development of “connoisseurship” (Eisner, 1991, p.63) in this emergent field, to stimulate increased application to the benefit of academia and praxis, and support the development of latitudinous researcher skill sets.

Challenges and critiques are explored and addressed with a particular focus on issues surrounding rigor and quality (Bryman, 2013), specifically rationale, integration, validation, transparency and the underlying research competences needed to actualise mixed methods research (Eaves, 2014a). A researcher-as-bricoleur position is fostered through the evaluation of a panoptic and innovative range of data collection, analysis, synthesis and articulation techniques which support the capacity for “multiple ways of seeing” (Kincheloe, 2005, p.327). Primary research undertaken in the hi-technology communications industry and the multidisciplinary creative and third sectors elucidates this assessment, surfacing implications for future trends, best practice and research direction.

BACKGROUND

Prior to foregrounding the particularity of mixed methods research, it is germane to situate the approach in a broader context. Whilst the rigorous, coherent and transparent fusion of qualitative and quantitative data components is a central tenet of a mixed methods study, the *capacity* to employ multiple sources of evidence through different methods affords a long research tradition. Exemplars include case studies to benefit nuanced insight of a phenomenon across intrinsic, instrumental and collective cases (Stake, 2005; Yin, 2013); and grounded theory to systematically and iteratively examine social interaction and experiences to generate a theory of a process via constant comparison (Glaser & Strauss, 1967; Birks & Mills, 2011). It is also evidenced in some action research partnership approaches which iteratively address an immediate issue to surface and effect positive change and/or empower a group (Reason & Bradbury-Huang, 2013).

At this juncture, the specific facets of mixed methods research can be introduced, commencing with a synthesis of the varying definitions, classifications and nuanced nomenclature observed within domain literature (Burke Johnson, Onwuegbuzie & Turner, 2007). A mixed methods study comprises the systematic combination of qualitative and quantitative modes of enquiry in a single study or multiphase programme’s design, data collection, evaluation, interpretation and/or presentation phases. Recognising the intimate relationship between qualitative and quantitative data alongside different biases and limitations impacting all research approaches; it is opined that the broad summation of data collected and assessed through a mixed methods design capitalizes on respective strengths, supporting

the optimisation of outcomes as appropriate to the problem situation (Cameron, 2011; Eaves, 2014a). Mixing can also occur at the research programme level (De Lisle 2013). Multiple method research is a related subset (Cameron & Molina-Azorin, 2011) which employs more than one approach within a study but set in the same tradition, such as using many forms of qualitative technique. Multiple data strategies can also be adopted within the methods themselves.

Mixed methods research should be framed within a philosophical and theoretical research position and articulated purpose (Creswell & Plano Clark, 2010; Cameron, 2011). It thereby transgresses epistemology, methodology and methods based on the logic of a strong linkage between them. For example, a mixed methods study with a transformational orientation to benefit human-system organisational change, may be underpinned by complexity theory, employ an action research methodology and adopt methods ranging from model based tools such as dynamic systems simulation, to the participatory techniques of focus groups and interviews (Eaves 2014a).

PARADIGMS AND THE CALL FOR PRAGMATISM

A paradigm (Kuhn, 1970) may be considered a *worldview* (Tashakkori & Teddlie, 2009) based on ontological, epistemological, axiological, rhetorical and methodological beliefs which form “interlocking philosophical assumptions and stances” (Greene & Caracelli, 1997, p.6). Purists implicitly or explicitly assert their paradigm’s superiority and advocate the incompatibility thesis which posits that qualitative and quantitative data cannot be legitimately combined due to conflicting epistemological assumptions (Patton, 2002). Mixed methods advocates reject a “forced choice” (Cameron & Molina-Azorin, 2011, p.97) and posit that such diametric opposition fails to recognise what “each can contribute to the other” (Wolcott, 2002, p.99).

Addressing the paradigm issue in mixing methods, three stances are observed (Eaves 2014a): *aparadigmatic* (not considered relevant); *multiple paradigm* (alternate paradigms deemed compatible within same study) and *single paradigm* (qualitative and quantitative combination are appropriate under one paradigm). An

aparadigmatic perspective is not considered congruent as no research can be paradigm free, whilst the use of multiple paradigms creates tensions with the compatibility of integration. Adoption of a single paradigm is therefore broadly considered most appropriate (Hall, 2013) with *transformative* (Mertens, 2010) *pragmatic* (Morgan, 2007), *realist* (Hall, 2013) and *dialectic* (Eaves, 2014a) perspectives increasingly afforded. Of these, pragmatism is in receipt of noted recognition, support and attention (Journal of Mixed Methods Research, 2014; Eaves 2014a), with the capacity to bridge philosophy and methodology (Cameron, 2011) and value both subjective and objective knowledge. Without commitment to a single philosophical position or stance on reality, pragmatists are orientated towards contextually sensitive, utile action with the problem situation central to the approach selected.

Derived from the works of Peirce, Dewey, James and Rorty, there are diverse transitions of pragmatism which share a foregrounding of the “real world” (Feilzer, 2010, p.8) research problem and the most appropriate means to address it. This typically involves tailored method selection and combination, optimal use of resources, support for critical reflexivity and consideration of utile outcomes for practical and theoretical knowledge application. Drawing on Dewey (1920) and Hall (2013), pragmatism is more than an approach of convenience (Denzin, 2012) but rather, one that can be centred on “warranted assertions, consequential validity and persuasive, intelligent and reflective action” (Eaves 2014a). Actual effects and practical consequences are a core dimension of truth and meaning. This accommodates a plurality of views and is undertaken in reflection of, but not wholly constrained by, underlying philosophical debate, thereby combining:

...the inductive logic of qualitative exploration, the deductive reasoning of quantitative confirmation and further, the creative problem-solving emphasis of abduction. (Eaves, 2013, p.119)

DIMENSIONS OF BRICOLAGE

Mathison (1988) employed metaphor to vicariously represent the mixed methods practitioner as detective, doctor and car mechanic: inferring the need to employ practical intuition to navigate uncertain scenarios and

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