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Coaching and cross disciplinary collaboration: more complexity and chaos?

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Abstract
In this article, the author reflects on the cross-disciplinary approach of working. It is stated that coaching psychologists are not well equipped for working as their theories are based on linear empiricism and focus on prediction and control rather than engagement with unpredictable emergent and ongoing processes. It is suggested the complexity should be learned through an array of different perspectives.

Keywords
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IN THE TARGET ARTICLE, the authors argue that coaching psychologists (in general) are not well equipped for working amid chaos and complexity because our theories have tended to be grounded in linear empiricism and focused on 'prediction and control, rather than engagement with ongoing, unpredictable emergent processes' (p.81). Part of the remedy, they suggest, is the development of emergent models of practice that can help practitioners to make sense of ambiguity and unpredictability. For this to be accomplished, we are urged to embrace 'cross discipliniarity' and open ourselves up to learning about the messy world of complexity via an array of different perspectives.

These observations are welcomed. The assertion that psychological science has contributed valuable but incomplete models of human experience is an important acknowledgement for coaching psychology. If nothing else it is a humbling reminder that the perspectives provided by our psychological training can both enable us and constrain us. In simple terms, we may be constrained by simply not knowing what to do next because our client's story does not 'fit' with the mental model(s) we use to try and make sense of it. In situations like this the presence of alternative perspectives can be enormously helpful, making the quest for such perspectives (beyond the boundaries of psychology) a worthwhile pursuit.

The author(s) also make the valid point that quantitative psychological research methods remain an important empirical approach for coaching psychology because 'much of our world is stable, with patterns of causation and prediction quite possible' (p.83). Evidence of this is not hard to find. For example, Gersick (1991) has observed that numerous change theories across diverse literatures (e.g. history of science, adult and group development) reflect a view that change is a process characterised by periods of stability and transition.

Learning from fossils

One discipline that has heavily influenced the adoption of such views is evolutionary biology and the empirical work of natural historians like Nils Eldredge and Stephen Gould, whose analysis of fossil records led to the *Punctuated Equilibrium* (PE) model of evolutionary change (Eldredge & Gould, 1972). According to this paradigm, natural systems change through cycles of relative stability (equilibrium) and rapid change (punctuations), rather than the gradualism proposed by traditional Darwinian accounts (Morris, 2001).

In a coaching context, understanding change through a PE lens has important implications, primarily because it sits in opposition to the (widely accepted) organisational view that change is constant, gradual and best pursued via the pursuit of 'continuous improvement' (CI; Bolton & Heap, 2002). Rather, PE proposes that periods of equilibrium are associated with limited change because the system's 'deep structure' (i.e. the configuration of factors that help a system function) remains relatively static (Gersick, 1991). In essence, this means that organisations in equilibrium are largely inert and unlikely to respond to any change initiatives direct towards it.

Although the issue of precisely identifying when an organisation is in equilibrium or punctuation is practically difficult, the adoption of the PE viewpoint may lead a coach to

counsel their client away from change efforts, if they assess the organisation as being in a period of equilibrium (by whatever assessment criteria they might select, e.g. stability of share price, continuity of leadership, etc.). In so doing, a coach may help the organisation to avoid the pitfalls of 'initiative fatigue' (Bolton & Heap, 2002) that can flow from CI initiatives and, instead, advocate for the consolidation of past initiatives ('lock in') that may both save money and preserve employee engagement (Bolton & Heap, 2002).

Simple cross-disciplinarity?

When coaching practice is informed by perspectives such as this (obtained beyond the traditional boundaries of psychology), the question can be asked 'to what extent is it reflective of cross-disciplinarity?' In the simple example cited above, it could be argued that the coach was employing a cross-disciplinary approach (at the local level) insofar as s/he used a related discipline – evolutionary biology – to guide thinking and action. Indeed, this may be how most coaches currently engage in cross-disciplinarity, should they not be participants in formal research projects or large scale organisational coaching assignments that bring diverse groups of professionals together. Yet, the target article seems to be advocating for something far more substantial than coaches simply becoming the educated consumers of research that various professional practice models promote (e.g. Local Clinical Science model; Stricker, 2002).

So, what exactly is meant by 'cross-disciplinarity'? How should this term be understood in the context of coaching amid complexity? If coaching psychology is indeed to become more cross-disciplinary, it will be important for some shared understanding to be developed about precisely what this means. Whilst a comprehensive review of cross-discipliniarity and its related terms is well beyond the scope of this response, the following sections will be devoted to briefly defining some important terms, identifying some of its potential benefits and discussing (with reference to empirical findings) some of its inherent challenges.

Cross-disciplinarity: How is it to be understood?

Calls for the translation of knowledge across disciplinary boundaries are ubiquitous across diverse literatures (e.g. Choi & Pak, 2006; Collin, 2009; Oborn & Dawson, 2010). Indeed, it has long been acknowledged that 'the real problems of society do not come in discipline-shaped boxes' (Kann, in Klein, 1990, p.35) and assumed that service provision within human systems can be enhanced by efforts that bring diverse people, concepts, theories and practices together for the purpose of addressing a common problem(s) (Oborn & Dawson, 2010).

Various forms of cross disciplinarity

The three forms of between-discipline collaboration mentioned most often in the literature are multidisciplinarity, interdisciplinarity, and transdiscipliniarity (Choi & Pak, 2006). Despite their increasing use, these terms appear to mean different things to different people and are often used interchangeably. For the sake of brevity, this paper will adopt the definitions that emerged from Choi and Pak's (2006) literature review of these terms (see Table 1).

In an attempt to simplify the distinction between these terms, Choi and Pak (2006) use food examples to clarify their meanings. For example, *multdisciplinary* collaboration is described as being additive (i.e. serving or tending to increase) and likened to a salad bowl, in which the ingredients remain intact (unchanged) and can be clearly seen. In contrast, *interdisciplinary* collaboration is interactive and involves a blurring of boundaries between disciplines (in pursuit of new common methodologies, perspectives and/or knowledge), which is likened to the partial (but not complete) merging of ingredients that occurs in a cooking pot. Finally, it is proposed that *transdisciplinary* collaboration is more holistic in nature and, like the production of a cake from its ingredients,

Table 1: Proposed definitions for cross disciplinary collaboration.

Term	*Definition*	*Simple descriptor*	*Food example*
Multidisciplinarity	Draws on knowledge from different disciplines but stays within the boundaries of those fields	Additive	Salad bowl
Interdisciplinarity	Analyses, synthesises and harmonises links between disciplines into a co-ordinated and coherent whole	Interactive	Cooking pot
Transdiscipliniarity	Integrates the natural, social and health sciences in a humanities context, and in so doing transcends each of their traditional boundaries	Holistic	Cake

Source: Choi & Pak (2006).

the final outcome has a reality that is other and greater than the sum of its parts. Importantly, Choi and Pak (2006) recommend that these terms be 'used to describe multiple disciplinary approaches to varying degrees on the same continuum' (p.359), with no approach being better than another – just different – and more or less suitable in different contexts.

Using the disciplinary continuum

When considered alongside Stacey's (1999) Certainty/Agreement Matrix, understanding cross disciplinarity along a continuum may help coaching psychologists to determine what degree is required in different contexts. For instance, within 'rational spaces', where an environment is relatively stable and predictable (or in 'equilibrium'), the degree of interaction across disciplines may not be critical because the level of certainty and prediction is sufficient to allow each discipline to contribute effectively using established theories and models. In these situations, multidisciplinary collaboration may be suitable simply because the environment does not require greater interaction to produce acceptable outcomes or solve problems.

For example, a community-based organisation might wish to improve the health of a known community by improving lifestyle factors and social interaction in public spaces (using a multidisciplinary approach). Conditions that might reflect relative stability...government that has confirmed its funding for three years, along with low levels of unemployment and crime within the target community. In this instance, one can imagine that the efforts of a cross-disciplinary team (which might include nutritionists, biostatisticians, exercise physiologists, community psychologists, general practitioners, horticulturists, demographers, town planners and others) could produce desirable results without its members needing to deviate greatly from theories, beliefs and practices that characterise their respective disciplines. In other words, the contributors are able to work towards a shared goal (improved community health) but do so relatively independently.

However, in situations where less certainty and/or prediction exist (i.e. the complex adaptive or chaotic spaces, or during periods of 'punctuation'), simple forms of cross-disciplinary collaboration are likely to be insufficient and require related disciplines to interact more for the attainment of desirable outcomes (i.e. work in a more *inter* or *transdisciplinary* way). However, as it will soon be shown, it is a difficult enough job to bring together sub-disciplines within the same discipline, let alone bring people together across vastly different disciplines.

The benefits and challenges of cross-disciplinary collaboration

Several authors have written about the experience of working along the cross-disciplinary continuum (e.g. Choi & Pak, 2007; Collin, 2009) and some of its benefits and challenges are worthy of mention.

Benefits of cross-disciplinary collaboration

According to Collin (2009), the benefits associated with interacting across disciplines include intellectual stimulation and creativity, the ability to address complex problems that transcend disciplinary knowledge, the opportunity to solve pressing problems that are valued in academia, industry and professional practice, and the chance to learn and apply new research technologies and methodologies. In addition, such collaborations can also help with the development important career-related skills, increase networking opportunities and potentially expand the funding sources (as many funding bodies favour cross-disciplinary work).

Challenges of cross-disciplinary collaboration

A considerable amount has been written on the challenges and pitfalls of cross-disciplinary collaboration (for a detailed discussion of barriers, see Choi & Pak, 2007) and will only briefly be covered here. According to Collin (2009), these challenges include the need for collaborators to address basic differences between themselves in terms of concepts, their research questions and the perspectives they take on them, their epistemology and related methods, etc. It is also important that they agree on project objectives and protocols, and communicate in a way that is clear, relatively free of jargon and via communication systems that are mutually suitable. Not surprisingly, the choice of a project leader, allocation of team roles and constant attention to relationships are other critical elements (Choi & Pak, 2007; Collin, 2009).

A recent case study reported by Oborn and Dawson (2010) provides a useful insight into the intricacies of working across disciplines and sub-disciplines. Using observational methods and semi-structured interviews, the workings of a cross-disciplinary team (MDT) within a health context were investigated (including surgeons, oncologists, radiologists, nurses, and pathologists amongst others). One of the key findings from this study was that the presence of a formal, structured MDT did not prevent privileged knowledge from becoming embedded in the practices of the group. More specifically, it was observed that the group seemed to privilege the knowledge of the surgeons far more than other disciplines, resulting in non-representative participation across the group. Paradoxically, rather than producing an inclusive and open approach, the MDT appeared to simply strengthen an existing medical hierarchy, with the surgeons possessing far more power than the other disciplines (particularly nurses). Although some learning did appear to occur within the MDT, it was concluded that 'the social context of interpersonal relations, socialised professional roles and asserted privilege of certain knowledge enables some ways of knowing about a patient to be promoted with little transformation resulting from multidisciplinary activity' (Oborn & Dawson, 2010, p. 1854).

Cross-disciplinarity: More complexity and chaos

From the preceding discussion it seems clear that cross disciplinary teams carry all the hallmarks of being highly complex, and potentially, chaotic environments themselves (due to the presence of different conceptual models, language, methodologies, and social pressures). This is somewhat ironic given that such teams are usually assembled as a way to allow professional people from diverse (but ultimately related) disciplines to work more effectively within highly complex, and often, chaotic environments.

Conclusion

The preceding discussion has responded to the ideas contained in the target article by exploring what 'cross-disciplinarity' actually means and drawing on Choi and Pak's

(2006) continuum that differentiates three differing degrees of cross-disciplinary collaboration. It is hoped this will help readers better understand their own (past and present) collaborative efforts, whilst helping to clarify the degree of cross-disciplinary collaboration that might be desirable within future environments where working across disciplines is important.

Moving beyond a simple monolithic understanding of this term should also be helpful for assisting dialogue between collaborators and for identifying what challenges and struggles might lie in wait for individuals and groups working along all points on this continuum. For example, there is an element of 'letting go' that is needed in transdisciplinary collaboration, which is akin to a detachment from the perspectives, beliefs, methods, etc., that constitute one's professional identity. This is no easy matter. Indeed, working in this way would require one to be highly mindful and engage the process with acute awareness of one's ongoing reactions and an open, receptivity to wherever the process might lead (Cavanagh & Spence, in press).

Given the presentation of multidisciplinary collaboration as a relatively simple form of cross-disciplinarity, it seems safe to assume that many coaching psychologists are already engaging in cross-disciplinary work of some forms (and have done for some time). As such, the first question posed at the end of the target article might be better restated as follows: 'How will coaching psychology embrace greater degrees of cross-disciplinary engagement such that it emerges as a new sort of psychology?'

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