

# **Riding The Waves: A Quantum Framework for Coaching-Related Research**

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As the variety of papers in this Proceedings and the two which preceded it show, we conduct coaching-related research for a wide variety of reasons and in many different ways. Our academic and professional experiences and our personal values inform the questions we choose to explore, the methods we use to collect information and the way we go about making sense of what we collect. Coaching researchers draw on the literature and methodologies of several disciplines and professional practices. Our research also reflects what we believe the purposes of coaching to be: a means of encouraging individual growth, organizational development and, for some, social change. Given the multifaceted nature of coaching-related research, the task of facilitating a review process for this Research Symposium has offered many learning opportunities. In this paper, I summarize some of the thinking and learning which resulted. In addition, I suggest a framework for coaching-related research which could credibly advance the development of coaching as professional practice.

## **The Many Faces of Coaching Research**

In recent years, I have taken part in the paper review and co-editing processes for the International Coach Federation (ICF) Research Symposium and Proceedings. The papers which have been presented, coupled with the keynote addresses (Grant, 2004, Stober, 2005) and White paper (Laske, Stober and Edwards, 2005), represent various

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research models. These encompass pure qualitative designs (Severin, 2004), mixed qualitative-quantitative designs (Lew, Wolfred, Gibson and Con, 2004; McCready 2005), and an array of qualitative designs including Appreciative Inquiry (Bush, 2005), narrative analysis (Drake 2005); hermeneutic phenomenology (Hurd, 2004) and grounded theory (Edwards, 2005). Beyond the ICF Research Symposiums and Proceedings, *The International Journal of Coaching in Organizations* issue on coaching research ((Bush & Lazar, 2005) showed a similar spectrum of interests and methods. Overall, studies in coaching implicitly or explicitly are rooted in a real world research orientation. This recognizes that (a) coaching itself is, in its present state, an art rather than a science; (b) that coaching interactions take place in an open system and are therefore subject to various undefined and perhaps unknowable conditions; and (c) that, without a foundational literature, the coaching community lacks a shared language for framing, interpreting and presenting such inquiries.

The absence of shared language presented an early challenge in preparing this paper: how to best refer to the topic under consideration. Most sources cited use the term *coaching research* (Grant, 2004, Stober, 2005, Laske et al. 2005). Bennett (in press) uses the term *coaching-related research* and presents six themes found within such research: the coach, the client, the coach-client relationship, the process of coaching, the results of coaching, and the theories related to the practice and teaching of coaching. In effect, the term coaching-related research defines the research themes which promote developing coaching as a profession. On reflection, I view the term coaching research as broad, encompassing studies about coaching (for example, a demographic profile of

practicing coaches), as well as studies in coaching. For purposes of this paper, I have adopted Bennett's term, coaching-related research, to position the proposed framework as most relevant to studies addressing his identified themes.

The purposes for which coaching-related research is undertaken are as diverse as coaches themselves. In a study of coaching researchers (Campone, unpublished manuscript), respondents offered motivations which included pragmatism and intellectual curiosity in almost equal measure. Practical motives included meeting requirements for doctoral degrees, documenting outcomes of organizational coaching, and creating coaching algorithms for purposes of standardizing programs. Intellectually curious coaches who conduct research want to better understand the underlying dynamics of coaching and to provide a solid basis for improving their coaching practices. Most of the respondents also stated that they and their coaching changed as the result of their intimate engagement with the data and the research process. While two-thirds drew on their academic backgrounds, many also used such skills as project management, interviewing and information mapping which they had honed through their professional practice. Thus, the skill sets which underpin coaching-related research include traditional academic research methods and hands-on practical experience. This pattern of engagement between coach-researcher and the research process itself is akin to the model of reflective practitioner advocated by Schön (1983). Reflection in action "tends to focus interactively on the outcomes of the action, the action itself and the intuitive knowing implicit in the action" (p.56). The subjective elements of coaching-related research appear to be integral to the field itself.

The emergent nature of the coaching field, coupled with the even more nascent status of coaching research, offers fertile ground for integrative, iterative research strategies. The variety of terms, assumptions, methodologies and standards in current coaching-related research echoes the current state of research practices in other disciplines including psychology, sociology, anthropology and education. Forming an integrative perspective on coaching-related research brings several lenses into play. These include traditional quantitative research paradigms complemented, supplemented or replaced by a new landscape of qualitative research, the topography of which includes constructivist, interpretive, and hermeneutic perspectives and diverse critical theories, with a concomitant complex of norms, standards and paradigms (Denzin & Lincoln, 2003).

### Entering the Stream

Irene Stein (2004) proposed that the Symposium Proceedings would serve as a platform for members of the coaching research community. She also expressed the hope that the coaching research community would “keep setting higher standards for ourselves in terms of rigorousness of thought, clarity of writing and careful planning, conducting and presentation of research” (p. xi). Given the fluid and ever-broadening landscape of research design, my colleague John Bennett and I devised a set of guidelines for the volunteer reviewers to promote fair and inclusive reviews for the researchers and learning for us. Our intent was to provide a set of review criteria which were broad enough to

apply to diverse research models yet suitably academic and professional. The guidelines reflected what, in our experience, are academic values: clear writing, original thinking, a contribution to advancing the profession, appropriate methodology and presentation of data, and sufficient references to the literature to ground the paper. Each paper was reviewed by two individuals and, if their recommendations diverged, was referred to a third reviewer.

Reviewer responses included a rating on each criterion, recommendation comments, and feedback for the authors. Reviewers were asked about their preference for reviewing quantitative or qualitative papers and wherever possible we honored those. None of the reviewers' feedback reflected deeply held convictions about a right way and a wrong way to do research. Sometimes, the reviewer comments pointed the authors toward other resources, models or ideas which many incorporated into their revised papers.

My learning started to emerge in a rereading of the reviewer feedback once all the logistics of sending the outcomes and responses to authors had been addressed and revised papers were returned. The reviewers' application of the guidelines, coupled with concepts in the literature on research, suggested a framework for following Irene's injunction to "keep setting higher standards..." and provide a platform for all who have a contribution to the coaching field. The learning, presented below, is offered as a starting point for setting up a framework which could inform subsequent coaching-related

research symposiums and serve as one piece of the foundation establishing coaching as a professional field.

## A Quantum Framework for Coaching-Related Research

Physicist Werner Heisenberg and his peers upended the paradigm of Newtonian science by introducing the Uncertainty Principle.<sup>1</sup> This set up a relationship between the observer and the observed by introducing the element of the observer's choice of where and how to focus. It also effected a significant shift in the practice of science by demonstrating the act of observation changes what's being observed. What does this have to do with the way we view coaching-related research? By offering reviewers a framework that would allow a spectrum of possible research models, the review process functioned reasonably well with an acceptable degree of uncertainty. Taking that idea a step further, a shared framework for coaching-related research could help focus discussion within the coaching research community and, with refinements and revisions, stand as an espoused theory of coaching-related research to be tested in action. Robson (2002) notes the perception of an ideological divide in social science research overall and states that, in his own view, "many of these differences are more apparent and real and that there can be advantages in combining qualitative and quantitative approaches" (p.6).

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<sup>1</sup> Put simply, Heisenberg demonstrated that someone observing an object in motion, a tennis ball for example, could either measure the location of the ball in space or the speed at which it is traveling but not both simultaneously. A second facet of Heisenberg's experiments demonstrated that the object of study (in his case an electron traveling through space), could manifest as a particle or a wave. The experimenter's choice of focus collapsed the multiple possible states into one through the act of observation. I am indebted to my physicist husband, Ed Spargo, Ph.D., for his help in distilling Heisenberg into a footnote.

To do so, he recommends a “promiscuous approach” to real world research while underscoring the critical elements of rigor and rules or principles of procedure.

Heisenberg’s demonstration of the Uncertainty Principle and related quantum principles was preceded by centuries of foundational research in Physics. Thus physicists had a body of foundational literature and a shared language- mathematics- with which to represent those ideas in theory-building. The field of coaching and coaching-related research is simultaneously seeking to document and verify the foundational principles and advance developing models and theories. Building on the concepts we applied in the 2005 review process, I propose six principles which, taken together, might serve as a framework to guide the practice of coaching-related research. Each principle allows the possibility for any coaching-related research undertaking to emerge as a singular and bounded research event (akin to Heisenberg’s particle) and as an element of an increasing flow- the wave of coaching-related research.

Principle One: Coaching-related research *proceeds from real world coaching experiences, practices or definitions and seeks to answer a valid question.* In considering the antecedents of successful research, Robson (2002) identifies five key elements:

1. Activity and involvement, both within the field of practice and within the professional community of practice
2. Convergence of two or more activities, interests and opportunities
3. Intuition about timing and the “rightness” of the work
4. Concern for theoretical understanding

5. Real world value which comes from examining questions which arise within practice and results which yield “tangible and useful ideas.”

Applying these to coaching-related research, this principle suggests the focus of inquiry is not purely speculative and the questions which are explored are in some way answerable. Valid questions may seek to address gaps in the knowledge base of the field, shed new light on the researcher’s work or nuances of practice, or raise issues and produce critiques (Chenail, 2003). The principle further suggests the researcher’s interests, research posture and chosen methods are aligned and the researcher advances as a “curious investigator” .

Principle Two: Coaching-related research *respects and honors the integrity, autonomy and privacy of clients, coaches and the coaching relationship*. Crawshaw’s (in press) exposition of the ethical issues within coaching-related research are relevant regardless of the research paradigm followed. At present procedures ensuring the integrity and transparency of person and process appear to be a concern mainly for coaches conducting doctoral research and for academics writing for professional publication. For doctoral students, a university’s review board oversees the process and ensures compliance with the appropriate codes of conduct adhered to by credentialed professionals. As coaching-related research increasingly takes place apart from the academic setting, issues of integrity will carry greater weight. As with all of these principles, there are implications for the training and education of coaches in the principles and practices of coaching-related research. The key element of this principle is ensuring that a coach researcher preserves transparency with all study participants on



matters of confidentiality, the purposes, uses and processes of the study, the implications of study participation and freedom of choice. In keeping with this principle, consent is as likely to be an iterative and on-going process as it is a onetime matter.

Principle Three: Coaching-related research is a *purposeful inquiry* which contributes to the fundamentals of the coaching field (coaching and coach education theories, practices and principles) and to the coach researcher's professional growth and evolution. The first principle addresses the questions raised in coaching-related research and this principle suggests the purposes of such research. This principle integrates elements of the scientist-practitioner model referred to in keynote addresses at previous ICF Research Symposiums (Grant, 2004, Stober, 2005) and the reflective practitioner model (Schön, 1983). Given the field of coaching is simultaneously developing a foundational literature and norms and standards for professional practice (and by implication for preparing practitioners), it seems appropriate to encourage research which can address multiple purposes. A coaching-focused revision of scientist-practitioner research purposes might include:

1. to develop a better understanding of the human change process
2. to improve the accuracy and reliability of coaching assessment and outcomes measures
3. to develop more grounded methods of coaching interventions
4. to develop more grounded models for promoting client change and growth.

The research questions may be driven by the coach researcher's individual interests or by the interests of some external organization. Alternatively, research questions may

emerge as a result of constructed, collective thinking within the coaching-related research community.

Principle Four: Coaching-related research follows and makes *transparent systematic methods of information gathering and analysis*. We don't want to find ourselves in the position of the two scientists depicted in a cartoon given to me by a colleague years ago. Both fellows, wearing lab coats, are standing in front of a chalkboard containing a lengthy equation, the mathematical symbols of which are interrupted at midpoint by the phrase "and then a miracle happens." One scientist is telling the other "I think you need to do a little more work on step two." Whatever research paradigm a coach researcher follows, the inquiry process must observe the protocols directed by academic convention. For example, following an interactive model of research design (Maxwell, 2005), a rigorous process of information gathering and analysis begins with specifying the goals of the study and a conceptual framework. These in turn influence the formulation of research questions, selection of methodologies and strategies to ensure validity. In writing up the study, the researcher includes the concepts, variables, relevant factors and the ideas, beliefs, and assumptions which inform the study. As we learn together to strengthen coaching-related research, we need to show the thinking behind the thinking and the material on which the thinking focuses. Transparency in research methods ensures the credibility of the resulting study.

Principle Five: Coaching-related research promotes *a scholarly integration of coaching theory and practice*. Theories, methods and practices of coaching draw on

disparate fields. Coaches offer clients reflections which integrate their speaking and implicit thinking, coach observations and external data. Similarly, coaching-related research can weave together the threads of actions- both the participants' and the researcher's- with underlying theories drawn from the coach's own experiences coupled with the external data of literature. Returning for a moment to Heisenberg, this principle suggests that each study in coaching acknowledges all of the potential states, or uses, to which the study can be put. This includes using the study as information to deepen individual coaching practice, as a building block in creating a foundational literature for a field and as a model for subsequent coaching-related research.

Principle Six: Coaching-related research *presents enough artifacts* (quantitative data, texts, descriptions, researcher reflections) *to enable others to share the researcher's understanding*. As noted earlier, coaching-related research can serve several purposes. As we contribute to the field's knowledge base, the studies we undertake must meet tests of validity. Valid studies, regardless of the research paradigm used, provide enough documentation to support credibility in descriptions, conclusions, explanations and interpretations. They contain the possibility of testing by others. The researcher recognizes the ways that these might be wrong and makes clear the strategies used to rule out threats (Robson, 2002). In quantitative research, these may include various controls in sampling; formulation of hypotheses; ensuring the integrity of the data and data collection; and manipulating statistical processes to exclude extraneous variables. In qualitative research, questions of validity need to be addressed before, during and after the research process. Maxwell (2005) identifies several strategies which

may be applied to acknowledge specific threats within a given study. These include (a) the researcher's long-term and intensive involvement with the phenomenon being explored; (b) ensuring that the data are rich, detailed and varied enough to provide a full picture; (c) systematically soliciting respondent validation and feedback about the data and conclusions; (d) seeking and investigating discrepant evidence and negative cases; (e) triangulation; and (f) comparisons of data across time, events or between actual and theoretical examples.

## Conclusions

To grow the field of coaching as a profession, it is necessary to develop a framework for coaching-related research. Such a shared framework would accomplish several purposes:

1. establishing the credibility of the theories, models and outcome studies which are presented as the foundational literature of the coaching field
2. establishing norms and standards which can be integrated into the education and training of coaches, enabling them to be informed consumers of research
3. creating a shared language and norms for the coaching-related research community.

I do not expect that coaching researchers, or for that matter our colleagues in related fields, will come to certainty or consensus any time soon about the a universally agreed on research paradigm. I offer the proposed principles and the framework they form to

open a dialogue within the coaching community and to suggest some elements which warrant considerable exploration, refinement and testing. Our laboratory is real life. Coaching helps people break through to new paradigms of life and leadership. A quantum framework for coaching-related research will enable us, as a community of practitioners, to break through to new paradigms of meaningful inquiry within and about the work that we do.

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