

Evidence-based coaching: Flourishing or languishing?

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Abstract

Coaching and coaching psychology offer a potential platform for an applied positive psychology and for facilitating individual, organisational and social change. Experts from around the world were invited to comment on the emerging discipline of coaching psychology and the commercial coaching industry. Several key themes emerged including the potential of coaching to contribute to health promotion, social change and organisational development. There was unequivocal consensus for the need for an evidence-based approach to coaching. A review of the psychological coaching outcome literature found there have been a total of 69 outcome studies between 1980 and July 2007: 23 case studies, 34 within-subject studies and 12 between-subject studies. Only eight randomised controlled studies have been conducted. This indicates that coaching psychology is still in the early stages of development, and can be understood as an emerging or protoscientific psychological discipline. A languishing–flourishing model of coaching is described. To flourish, coaching psychology needs to remain clearly differentiated from the frequently sensationalistic and pseudoscientific facets of the personal development industry while at the same time engaging in the development of the wider coaching industry.

When I was a graduate student in psychology . . . about half a century ago, I thought of opening a storefront office in the South Side of Chicago, near the University, where I would advise people who walked in about how to get the most out of their lives. That dream has now been realised by the sudden growth of the coaching movement – especially its evidence-based branch. I do think serious, empirically grounded life coaching can be very helpful. The dangers consist, as with all good ideas of this kind, in promising too much, in extending beyond the knowledge base, and in becoming rigid and territorial.

(Mihaly Csikszentmihalyi, personal communication, 2007.)

Many of us came to our studies in psychology with aspirations similar to those expressed by Professor Csikszentmihalyi. We came with the expectation that we would learn empirically validated ways to work with people, to help them set and reach goals in their personal and business lives, only to find that psychology as taught in academic settings seemed to be more focused on dealing with mental illness than mental health, more about the amelioration of dysfunction rather than the identification and enhancement of healthy functioning.

Of course, to characterise the entire psychological enterprise in such a grossly dichotomous way does not give due credit to the very real contributions of more than a century of skilled and gifted psychological scholars and practitioners. However, while at one level such gross generalisations are odious, nevertheless they hold a measure of truth. Has psychology tended to be more focussed on the overcoming of problematic behaviours, thoughts and emotional states, than on identifying the behaviours, thinking patterns and emotional functioning that leads to positive wellbeing and goal attainment? While both undertakings are important, we think the balance to date has been lopsided.

Our intention is not to mount an argument for positive psychology. That has been done eloquently elsewhere (e.g., Seligman & Csikszentmihalyi, 2000). Rather, in this paper we contend that coaching psychology is a form of applied positive psychology and it can be seen as an emerging subdiscipline in psychology. Evidence-based coaching can be a useful real-life experimental methodology for psychologists exploring the psychomechanics of goal attainment, the development of

resilience, wellbeing, hope and other personal strengths.

In this paper we ask world-renowned experts what they consider to be the major challenges for this emerging sub-discipline, and review the state of the empirical research in executive, workplace and personal coaching. We also present a new model of flourishing and languishing for emerging disciplines, and consider some of the opportunities and dangers faced by coaching as it develops.

Coaching psychology: An applied positive psychology?

There has been a frustrating lack of a systematic application of psychological knowledge beyond clinical populations, and this frustration has, in part, given impetus to the emergence of contemporary coaching psychology (Grant & Cavanagh, 2007). Yet questions remain as to what exactly contemporary coaching psychology is and how it may be differentiated from other forms of psychological practice and coaching that is not grounded in psychological science. These are vexed questions, not least of all because coaching psychology is continuing to develop, and its final relationship to other forms of psychological practice is yet to be seen.

In an attempt to answer the question of what is coaching psychology, the Australian Psychological Society Interest Group on Coaching Psychology (APS IGCP) defined coaching psychology as “an applied positive psychology [which] draws on and develops established psychological approaches, and can be understood as being the systematic application of behavioural science, which is focused on the enhancement of life experience, work performance and wellbeing for individuals, groups and organisations with no clinically significant mental health issues or abnormal levels of distress” (APS IGCP, 2003).

A limp definition?

As the field of coaching psychology has grown and begun to mature, the above definition of coaching psychology may not reflect current practice. Two major issues present themselves. First, the notion that coaching psychology simply draws on and develops previously established psychological approaches is beginning to appear somewhat thin. Coaching psychology practitioners and researchers are starting to develop and validate models of theory and practice that do more than simply draw from existing psychological literature. Although coaching psychology clearly owes much of its theory and evidence to pre-established psychological knowledge,

a coaching-specific theory and research base is being developed (Cavanagh, 2005, 2006; Grant, 2003a, 2006; Kilburg, 2004; Laske & Stewart, 2005; Stober & Grant, 2006).

Second, it is becoming increasingly difficult to sustain the notion that one of the major differentiators of coaching psychology is that it deals with a population unencumbered by psychological distress or frank psychopathology (Cavanagh, 2005). Research conducted in Australia has shown significant levels of psychological distress among significant proportions of those presenting for coaching interventions (Green, Oades, & Grant, 2006; Spence & Grant, 2007). Research and practical experience suggests that coaching clients have at least the same level of psychopathology as is found in the general population, if not higher.

The real question is not whether coaching psychology clients have therapeutic needs. The issue is how the task of coaching differs from the task of psychotherapy. In other words, what are the boundaries between the different forms of applied psychology? We believe that this boundary is not primarily found in the client. Rather it is found in the goals, or foci of the psychological interventions themselves.

Differentiating the foci of applied psychologies

If we are to differentiate coaching psychology from other forms of psychological practice we must return to the core foci of the different areas of applied psychology. As mentioned above, the APS IGCP definition states that coaching psychology is the “systematic application of behavioural science, which is focused on the enhancement of life experience, work performance and wellbeing for individuals, groups and organisations”.

Many practitioners of other forms of applied psychology would assert, quite rightly, that this is their focus also. Although we are not aware of any research on the matter, it is probably safe to say that most psychologists intend their work to enhance the lives of those they serve. The question is not whether coaching or any other psychological practice is designed to make life better. The question is, “what explicit focal point or pathway do the different practice areas use in order to achieve this end?” These different foci necessarily highlight some features of the psychological enterprise and “target populations”, while causing other features to recede. To illustrate this we will briefly contrast what we believe to be the focus of coaching psychology with the stated goals and foci of clinical, counselling, and industrial/organisational (I/O) psychological practice.

Counselling, industrial/organisational and clinical practice

As stated by the APS College of Counselling Psychologists, the goal of counselling psychology is predominantly focused on the use of “therapeutic techniques” in the amelioration of distress (APS, 2007a). For example, the APS website states that “individuals may seek assistance from a counselling psychologist to help them to . . . “manage stress and conflict at home and work, deal with grief, loss and trauma, [and] overcome feelings of anxiety and fear”.

The predominant focal point of I/O psychology is the role of psychological dynamics in the service of organisational level goals. I/O psychologists seek to “enhance organisational effectiveness, productivity and individual wellbeing . . . [by applying] psychological principles and methods to understand and influence work behaviour and attitudes, and organisational structures” (APS, 2007b).

The primary focal point of clinical psychology is the cure of psychopathology. “Clinical psychologists are specialists in the assessment, diagnosis and treatment of psychological problems and mental illness” (APS, 2007c). Clinical psychologists seek to enhance human functioning primarily via the identification and cure of psychopathological states. If cure is not possible, then the clinical task is usually to equip the patient to deal more adaptively and successfully with their symptoms.

Focal point of coaching psychology

The explicit focal point of coaching psychology differs subtly but significantly from each of the above foci. Coaches seek to assist their clients to articulate self-congruent goals and aspirations and to systematically work toward their achievement. These goals may be developmental in nature or at the level of performance or particular skills acquisition.

This is not to say that the process of coaching does not often have therapeutic outcomes for the individual, or positive outcomes for organisations. In their work, practitioners may draw on or borrow techniques such as cognitive restructuring and relaxation from clinical and counselling psychology. However, coaching is not intended to primarily address psychopathology or serious intrapersonal or interpersonal distress. Best practice in coaching encourages the referral of clients for whom these are primary issues. This is particularly important for coaches not trained in clinical or counselling psychology.

It is important to remember that the majority of coaches per se do not have any training in psychological science (Grant & Zackon, 2004) and, if they do have training in coaching, they tend to be

trained in atheoretical, proprietary models of coaching. In contrast, coaching psychologists are formally trained in psychology, and draw upon this knowledge base as a primary foundation for practice.

All the same, it is also important to remember that not all psychologists are equally familiar with all areas of psychology. Applied psychologists should be able to draw from a wide area of psychology. However, of particular importance to the practice of coaching psychology are the goal-setting, change dynamics, wellbeing and self-regulation literature within psychology.

Coaching psychology: Multidisciplinary perspective

An additional differentiation point between coaching and other areas of psychological practice is the multidisciplinary nature of coaching. While the behavioural sciences are a major source of knowledge and practice in coaching, coaches also draw on techniques and understanding developed in areas as diverse as business and economics, education, philosophy and religion.

The field of coaching is young. Its ongoing development is less than assured. Coaching is still at the stage of an emerging discipline, and the development of coaching-specific theory and evidence-based practice is a major challenge facing academics, researchers and practitioners.

Comments from seasoned observers

To explore how experts viewed the present state of coaching and coaching psychology, we invited eight seasoned observers of clinical psychology, coaching, positive psychology, organisational development and health psychology to comment on this developing field.

Although this expert sample is small in terms of participant numbers, the combined experience of these individuals is extraordinary. Between them they have published over 1000 peer-reviewed scientific papers, over 130 books, many hundreds of professional articles, and have over 220 years of professional experience (See Appendix 1 for further details).

A number of key themes emerged from their responses. All agreed that solid research and theoretical development were a priority. Others warned that the commercial opportunities associated with the self-help industry may encourage the misrepresentation of coaching services and outcomes. Some commentators emphasised the importance of organisational and executive coaching being theoretically grounded, and others observed that coaching has considerable potential in promoting health and social change. Their comments are presented here.

What is the magic in the magic bullets?

Adrian Furnham commented that:

...coaching, like “talent management”, is all the rage... There is an ever growing and unregulated coaching industry in many Western countries with organisations spending large sums on “trophy” and “magic bullet” coaches. Coaching seems to have replaced everything: training, mentoring and even training in business.

The academics have now caught up with this trend and are beginning to ask some fundamental questions – mainly about theory and intervention efficacy. While there is some evidence of distinctive theory development in this field what is immediately vital is evidenced-based evaluation of coaching. To assess the efficacy of both coaching and therapy is a difficult, expensive and all important task.

Clinical psychologists have been doing this research for years comparing the comparative efficacy of therapies for various illnesses. At present coaching seems a bit like alternative medicine: there are many practitioners of different types and many happy clients, but insufficient good evidence that it is anything more than placebo. To demonstrate the efficacy of alternative medicine we need good science: double-blind, randomised, controlled trials.

Coaching psychology is in the same position. To exist, indeed thrive as a branch of applied psychology it required evidence-based research of the highest quality. Only then can one begin to make honest and accurate claims about what it can offer.

(Adrian Furnham, personal communication, 2007.)

Empirical evidence: A compass in the sea of commercialism

Ken Sheldon’s message echoes Adrian Furnham’s. Sheldon recognises the power of financial attractors, and states that empirical research is essential if both coaching and applied positive psychology are to avoid the pitfalls that have captured some other psychological interventions and the self-help industry more generally.

To me, the single most important thing for coaching (and positive psychology) to keep in mind is the necessity of collecting rigorous empirical evidence. This may be the only thing that separates the field from earlier humanistic psychology and from current non-validated self-help books, while also dealing with difficult scientific issues concerning demand effects, placebo effects, and just plain wishful thinking. The emerging life-coaching profession, I believe, is especially vulnerable to these problems because of the commercial and money-making possibilities it presents.

(Ken Sheldon, personal communication, 2007.)

Taking the long view: Evidence of efficacy over time

Manfred Kets de Vries extends the empirical theme suggesting that longitudinal research is needed to

ensure that the impact of coaching is more than simply a result of engagement in a helping relationship.

Research in psychotherapy has shown that the quality of the relationship between psychotherapist and client (whatever the psychotherapeutic orientation may be) can have a considerable impact on the outcome of the process. A similar comment can be made about the quality of a coach–client interface. Experience, however, has also shown us to be on guard for miraculous “transference cures”. Thus to establish the effectiveness of a coaching intervention, it will be essential to engage in rigorous follow-up studies. Given the demands of our institutional clients, at INSEAD’s Global Leadership Centre we go at great length to identify the parameters that make for successful interventions to further the training, selection, and methodology used by our coaches.

(Manfred Kets de Vries, personal communication, 2007.)

Economic impact: Return on investment

Given that coaching in organisational setting is expensive and sometimes time consuming, the financial return on investment from coaching is an important point for David Clutterbuck.

Given the increasing sums organisations are spending on coaching and mentoring, it is becoming more and more important to demonstrate return on investment. It is unfortunate that most research and writing in coaching is little more than a collection of anecdote. By contrast, most research in mentoring is highly quantitative, yet often deeply flawed by virtue of failure to define the precise phenomena being measured. Gradually we are beginning to see research in both fields, which is both qualitative and quantitative and which addresses the three critical reasons for measurement: to improve the quality of learning relationships, to improve the quality of programmes and initiatives, and to demonstrate return on investment.

(David Clutterbuck, personal communication, 2007.)

Personal impact: Facilitating health and wellbeing

For others, coaching psychology has the potential to reinvigorate existing helping modalities. Stephen Palmer sees great potential for the use of coaching psychology in the emerging field of health coaching.

I see coaching psychology impacting upon the development of health coaching. We already know the limitations of behavioural and educational approaches to encourage change in health behaviours. The research in the field of coaching psychology is very promising as it has found that a coaching approach based on solution focused cognitive behavioural principles can reduce stress and aid goal attainment. Unlike health training, which is being promoted in the UK, health coaching goes beyond just focusing on behavioural goals and health education. It will help clients to develop the cognitive, mental imagery and emotive skills and strategies needed to

stick to a weight control plan, permanently stop smoking, reduce alcohol consumption, manage stress and pain etc. Thus the developing field of health coaching is more than just a marriage of convenience but a harmonious blend of evidence based health and coaching psychology.

(Stephen Palmer, personal communication, 2007.)

Social impact: Transforming our world

Sir John Whitmore, one of the original pioneers of coaching and highly active in coaching for over 25 years, sees coaching methodologies as having the potential to play a significant role in cultural and social change.

About 25 years from its inception, the coaching industry is maturing well. Attempts are in process to agree standards and ethics, the large coaching associations are in collaboration talks, the fast-food poor-quality coach trainings have (so far) failed to hijack the industry, and it continues to expand in quantity and outreach. Given the potential problems of a start-up, it has done well – so far. The danger now is that its own best people may not realise how important it is and may themselves sell it short. The global culture is entering a renaissance- type transformation from hierarchy to self-responsibility. Coaching methodologies are perfectly placed to act as the mid-wives for that transformation. The self-directed, humanistic principles of coaching must permeate education, healthcare, management and leadership, religion and other great social institutions if we are to overcome the enormity of the twin crises of social injustice and environmental degradation facing humanity. The coaching industry can and must expand and rise to the challenge...

(Sir John Whitmore, personal communication, 2007.)

Two challenges

The comments above point to two challenges that seem integral to the development of coaching as a discipline. The first challenge is for coaching to prove itself as a valid and reliable change methodology. The coaching world is urged to gather solid evidence as to the effectiveness of coaching through well-designed outcome studies.

The second challenge is for coaching leaders, researchers, and practitioners to look beyond the demands of this immediate research agenda, to develop a vision of the role of coaching as an emerging discipline in enhancing the lives of individuals, and the sustainability of organisations and the world as a whole.

Research challenge: Making (rather slow) progress

What then is the current state of the coaching psychology outcome literature? PsycINFO has journal records on coaching dating back to the 1930s. The earliest papers are the Gorby (1937) report of senior staff coaching junior employees on how to

save waste, and the Bigelow (1938) article on how best to implement a sales coaching program. To date (July 2007) there are a total of 355 published scholarly papers or dissertations on coaching listed in PsycINFO. This figure includes life (or personal coaching) and workplace and executive coaching, and specifically excludes papers on sports coaching, therapeutic work with clinical populations, educational coaching or coaching for psychometric or educational tests. Papers from *International Coaching Psychology Review*, a joint APS and British Psychological Society publication, are also included in this overview.

The number of published papers has escalated in recent years. In the 62 years between 1937 and 1999 only 93 papers were published. In contrast, in the 6½ years between 2000 and July 2007 a total of 262 papers were published (Figure 1).

However, quantity is not necessarily quality. Of the 355 published papers to date 167 have been articles, opinion papers, descriptive articles or theoretical discussions, and there have been 60 PhDs and 128 empirical studies. Many of the published empirical papers are surveys (e.g., Fanasheh, 2003) or descriptive studies into the nature of executive coaching (e.g., Schnell, 2005), investigations into organisations' use of coaching (e.g., Douglas & McCauley, 1999; Vloeberghs, Pepermans, & Thielemans, 2005), or examinations of perceptions of coaching (e.g., Garman, Whiston, & Zlatoper, 2000; Olsen, 2006). That is to say, most of the empirical literature is contextual or survey-based research about coaching as a professional activity or about the characteristics of coaches and coachees, rather than outcome research into the effectiveness of coaching as a methodology for creating and sustaining human change. Figure 2 shows the relative numbers of types published articles, PhDs and empirical studies since 1980.

Outcome studies

Outcome research can be understood as research that is conducted to examine the effect of an intervention on specific variables. Such variables in coaching outcome research can include goal attainment, performance, wellbeing, stress, resilience, workplace engagement and satisfaction, organisational climate or quality of relationships.

The first published empirical outcome study in the psychology literature was the Gershman (1967) dissertation on the effects of specific factors of the supervisor–subordinate coaching climate upon improvement of attitude and performance of the subordinate. No other empirical outcome studies related to coaching were published until the Duffy (1984) dissertation on the effectiveness of a

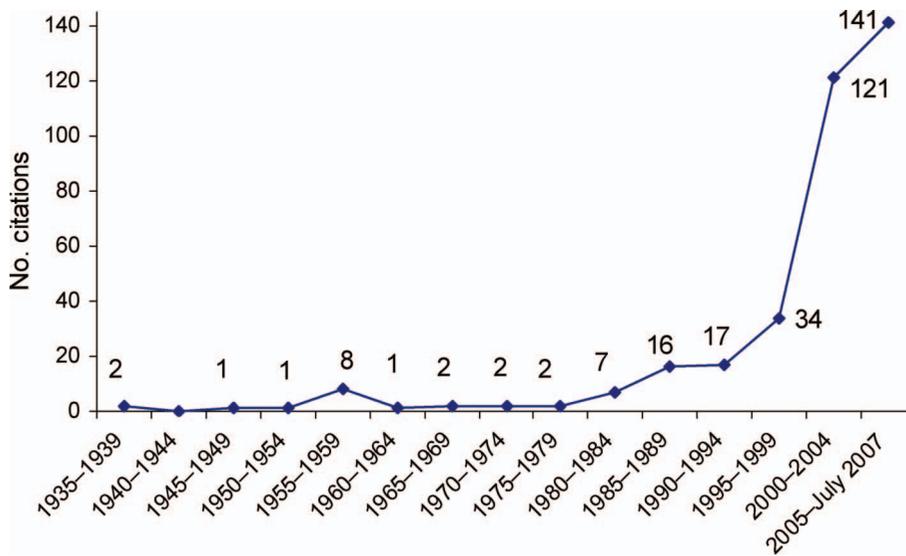


Figure 1. Total number of coaching citations: 1935–July 2007 ($N=355$).

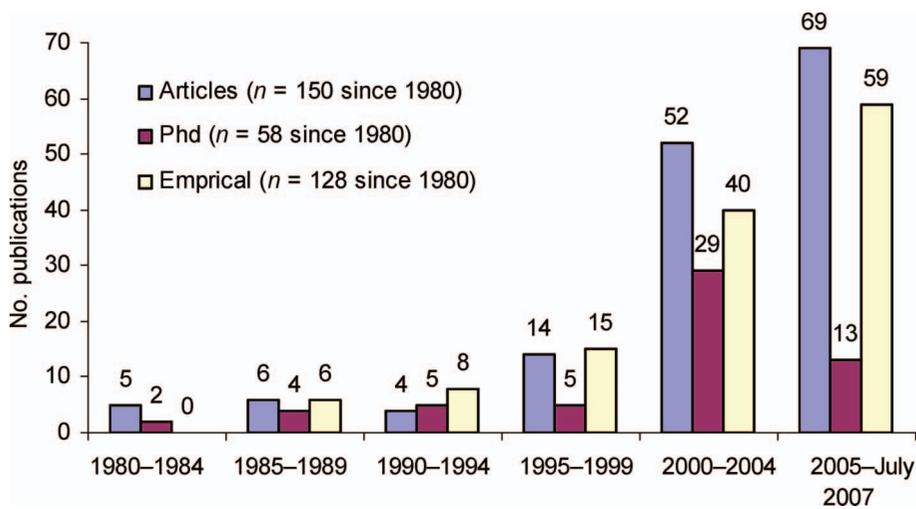


Figure 2. Types of coaching publications: 1980–July 2007.

feedback-coaching intervention in executive outplacement.

There have been 69 outcome studies that have examined the effectiveness of coaching since 1980. There have been a total of 23 case studies, 34 within-subject studies and 12 between-subject studies. Figure 3 shows the distribution of the types of outcome studies between 1980 and July 2007.

While case studies can be informative and can provide rich in-depth qualitative insights, many of the 23 case studies in the coaching literature are purely descriptive with an emphasis on practice-related issues rather than development of theory or the evaluation of coaching outcomes (Kilburg, 2004). Single-case designs can provide useful data-

driven evaluations. However, few case studies have incorporated established and validated quantitative measures and designs that robustly assess the impact of coaching. (One rare example is Libri & Kemp, 2006).

The 34 within-subject studies represent the largest single methodological approach to coaching outcome research. Within-subject studies have the potential to provide useful quantitative data and allow for the use of inferential statistics, provided that the studies are well-designed and use validated and reliable measures. Although there are a number of commentaries rightly drawing attention to the deficits in much of the existing coaching research (Fillery-Travis & Lane, 2006; Passmore & Gibbes,

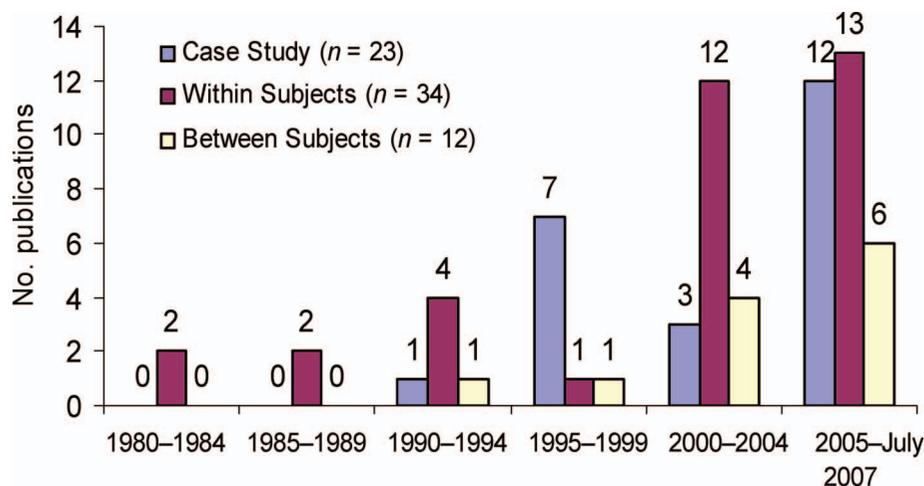


Figure 3. Types of outcome studies: 1980–July 2007.

2007), it would appear that the coaching research is moving through the “natural” stages of research development, from case studies, through to uncontrolled within-subject studies, and then on to quasi-experimental and randomised controlled between-subject designs. The 12 between-subject studies are outlined in Table 1.

Randomised controlled studies

Only eight of the 12 between-subject outcome studies used a randomised controlled design (Deviney, 1994; Taylor, 1997; Grant, 2003a; Miller, Yahne, Moyers, Martinez, & Pirritano, 2004; Gattellari et al., 2005; Green et al., 2006; Green, Grant, & Rynsaardt, 2007; Spence & Grant, 2007). Sue-Chan and Latham (2004) used random assignment to self, peer, or external coaching group, but did not use a no-intervention or placebo intervention control group.

The eight randomised controlled studies of coaching that have been conducted to date indicate that coaching can indeed improve performance in various ways. Three of these eight studies have been in the medical or health areas. Taylor (1997) found that solution-focused coaching fostered resilience in medical students. Gattellari et al. (2005) found that peer coaching by general practitioners improved coachees’ ability to make informed decisions about prostate-specific antigen screening. Miller et al. (2004) found that coaching with feedback was superior to training-only conditions, in a program designed to help clinicians learn motivational interviewing skills.

Four outcome studies have been in the life (or personal) coaching domain with community samples and students. These have indicated that life coaching can improve, indeed facilitate goal attainment and

reduce anxiety and stress (Grant, 2003a), enhance psychological and subjective wellbeing (Green et al., 2006; Spence & Grant, 2007) and resilience, while reducing depression, stress or anxiety (Green et al., 2007).

Only one randomised controlled study has been conducted in the workplace, with Deviney (1994) finding no changes in supervisors’ feedback skills following a multiple-rater feedback intervention and coaching from their managers over 9 weeks.

To the authors’ knowledge no randomised controlled studies of workplace or executive coaching by professional external coaches have been published in the psychological literature to date. (For recent reviews of executive coaching see Joo, 2005 and Passmore & Gibbes, 2007).

The dearth of randomised controlled studies is a serious shortcoming in the coaching outcome literature. Rightly or wrongly, randomised controlled quantitative studies have become an important benchmark for outcome research in many areas of science. However, randomised allocation to intervention or control is often extremely difficult in real-life field research. In light of the challenges in using randomised designs, most coaching outcome studies have used single group, pre–post within-subject designs (e.g., Grant, 2003b; Jones, Rafferty, & Griffin, 2006; Olivero, Bane, & Kopelman, 1997; Orenstein, 2006). There have been some published quasi-experimental studies with pretest and post-test comparisons and non-randomised allocation to an experimental or control group. Using such a design Evers, Brouwers, and Tomic (2006) found that executive coaching enhanced participants’ self-efficacy beliefs in personal goal setting, but they did not measure goal attainment itself. Miller (1990) examined the impact of coaching on transfer of training skills, but the drawing of conclusions was

Table 1. Outcome studies of executive, workplace and life coaching utilising between subjects designs

Study	Intervention overview	Type of study	Key findings
Miller (1990)	33 employees. Some received coaching by their managers over 4 weeks	Quasi-experimental field study (a) Coaching group; (b) control group	No significant differences in pre – post-test assessment for interpersonal communication skills
Deviney (1994) [†]	45 line supervisors at a nuclear power plant. Some received feedback and coaching from their managers over 9 weeks	Randomised controlled study (a) Feedback plus coaching, (b) feedback with no coaching, (c) control group	No significant differences in pre – post-test feedback behaviour
Taylor (1997) [†]	Participants undergoing a Medical College Admission Test preparation course	Randomised controlled study (a) Training only, (b) coaching only, (c) training plus coaching, (d) control group	Coaching reduced stress more than training
Grant (2003a) [†]	62 trainee accountants received group coaching over one semester	Randomised controlled study (a) Cognitive coaching only, (b) behavioural coaching only, (c) combined cognitive and behavioural coaching, (d) control groups for each condition	Combined cognitive and behavioural coaching most effective in increasing grade point average, study skills, self-regulation, and mental health. GPA gains maintained in 6-month follow-up
Miller, Yahne, Moyers, Martinez & Pirritano (2004) [†]	140 licensed substance abuse professionals learnt motivational interviewing via a range of methods	Randomised controlled study (a) Workshop only, (b) workshop plus feedback (c) workshop plus coaching, (d) workshop, feedback, and coaching, or (e) waitlist control group	Relative to controls, the four trained groups had gains in proficiency. Coaching and/or feedback increased post-training proficiency.
Sue-Chan & Latham (2004)	53 MBA students in two studies in Canada and Australia	Random assignment (a) External coach, (b) peer coach, or (c) self-coached	Study 1: External coaching associated with higher teamplaying behaviour than peer coaching. Study 2: External and self-coaching associated with higher grades than peer coaching
Gattellari et al. (2005) [†]	277 GPs in total. Some received two phone-based peer coaching sessions integrated with educational resources	Randomised controlled study (a) Peer coaching and educational resources, (b) control group	Compared to controls, peer coaching increased GPs ability to make informed decisions about prostate-specific antigen screening
Gyllenstein & Palmer (2005)	31 participants from UK finance organisation	Quasi-experimental field study (a) Coaching group, (b) control group	Anxiety and stress decreased more in the coaching group compared to control group.
Evers, Brouwers, & Tomic (2006)	60 managers of the federal government:	Quasi-experimental field study (a) Coaching group, (b) control group	Coaching increased outcome expectancies [‡] and self-efficacy
Green, Oades, & Grant (2006) [†]	56 adults (community sample) took part in SF-CB life coaching program	Randomised controlled study (a) Group-based life coaching, (b) waitlist control	Coaching increased goal attainment, wellbeing, and hope. 30-week follow-up found gains were maintained
Green, Grant, & Rynsardt (2007) [†]	56 female high school students took part in SF-CB life coaching program for 10 individual coaching sessions over two school terms	Randomised controlled study (a) Coaching group, (b) waitlist control group	Coaching increased cognitive hardiness, mental health and hope.
Spence & Grant (2007) [†]	63 adults (community sample) took part in SF-CB life coaching program	Randomised controlled study (a) Professional coaching group, (b) peer coaching group, (c) waitlist control group	Professional coaching more effective in increasing goal commitment, goal attainment and environmental mastery.

Notes: GP = general practitioner; GPA = grade point average; MBA = Master's of Business Administration; SF-CB = Solution-focused cognitive behavioural.

Findings from these studies are only brief summaries; see actual publications for full details.

[†]Randomised controlled study.

restricted by a high rate of participant drop-out: 91 participants began the study but only 33 completed the final measures. Barrett (2007) used a quasi-experimental, modified post-test-only control group design, finding that group coaching reduced burn-out but did not improve productivity. Gyllensten and Palmer (2005) found that, compared with a no-coaching control group, coaching was associated with lower levels of anxiety and stress, but not depression.

Developing a common knowledge base of outcomes

The total of 46 within-subject or between-subjects outcome studies conducted to date is a significant start to the foundations for knowledge base on the effectiveness of coaching. Furthermore, the amount of research is increasing over time.

However, a key problem in comparing the results between outcome studies is that there has been little consistency in the use of outcome measures. Many researchers develop their own idiosyncratic self-report measures, and these tend to be simplistic “satisfaction with coaching” surveys. Such measures are uncertain as regards their validity and reliability. Few studies have used well-validated measures of mental health and wellbeing or constructs such as resilience, despite the fact that there are a wide, readily available range of such measures designed for use in the general population. For example, the Depression, Anxiety and Stress Scale (Lovibond & Lovibond, 1995), the Psychological Wellbeing Scale (Ryff & Keyes, 1996) and the Cognitive Hardiness Scale (Nowack, 1990) fit such a description.

Because coaching is a goal-focused process, goal attainment is an important outcome measure. Yet, most outcome studies have not measured the impact of coaching on goal attainment in a way that allows comparison between studies. Goal attainment scaling (GAS) techniques offer a useful means of measuring goal progression and can link coaching success to predetermined objective success benchmarks (Fillery-Travis & Lane, 2006). Well-conducted GAS would also help address the serious limitations of the few studies that have examined return on investment in coaching using subjective post-coaching ratings of success (e.g., McGovern et al., 2001). (See Spence, 2007 for a comprehensive discussion of the use of GAS in coaching).

Longitudinal studies

In addition, to determine the real efficacy of coaching, longitudinal studies are needed. The few follow-up studies that have been conducted indicate that coaching can indeed produce sustained change. Grant (2003a) investigated the effects of cognitive

only, behavioural only, and combined cognitive and behavioural coaching, and found that only the gains from the combined cognitive-behavioural coaching were maintained at a 6-month follow-up. In a 12-month follow-up Miller et al. (2004) found that coaching with feedback was superior to training-only conditions in maintaining clinicians’ interviewing skills. Investigating the long-term effects of a randomised waitlist controlled program Green et al. (2006) found that gains from participation in a 10-week solution-focused cognitive-behavioural life coaching were maintained at a 30-week follow-up. Libri and Kemp (2006) provide a refreshing example of a well-designed case study of cognitive-behavioural executive coaching. Using an A-B-A-B design with an 18-month follow-up, they found that cognitive-behavioural coaching enhanced the coaches’ sales performance and core self-evaluations.

Coaching: Science, protoscience or pseudoscience?

Science can be understood as a system for acquiring and developing knowledge, and applied science is the application of scientific knowledge to human needs or problems. Science studies, and offers explanations for, naturally occurring events. Scientific data must be consistent, observable, predictable, and testable, and any conclusions, explanations or theories must be tentative and open to modification as new information becomes available (Chalmers, 1976).

A protoscience can be understood as an emerging science. It differs from established science in that it fails to meet all the criteria that delineate established science. For example, an emerging discipline may be classed as protoscience because consistent observations and predictions, although theoretically possible, have yet to be undertaken due to the youth of the field and/or practical or technological limitations.

A pseudoscience, on the other hand, is a collection of ideas, beliefs, methodologies, or practices that claims to be scientific, or is presented as being “scientific” but does not adhere to the basic tenants of the scientific method. Pseudo-science is characterised by the use of vague language, exaggerated or untestable claims, and the misuse of highly technical jargon. Pseudoscientific claims are often used to promote proprietary commercial products or establish credibility where such credibility would not normally be warranted (Lilienfeld, Lynn, & Lohr, 2003).

The distinctions between pseudoscience, protoscience and normal science is important in the emerging field of coaching due to coaching’s roots in the self-help and actualisation movement that emerged from the human potential movement of the 1960s (Spence, 2007). A key characteristic of the

self-help and actualisation movement is the uncritical embracing of new ideas, and reluctance to put those ideas to scientific testing or peer review. Hyperbole is commonplace in such settings, where unqualified self-declared “international thought leaders” and aspiring gurus frequently walk a fine line between calculated misrepresentations of the truth and complete fabrications (see Frankfurt, 2005 for a discussion of these issues).

Case in point: Use of neuroscience to create a pseudoscience

A case in point is the current popularity for attaching neuroscientific attributions to events that can be adequately and satisfactorily explained via existing behavioural or psychological explanations.

Research by Deena Weisberg and colleagues at Yale University suggests that the use of neuroscientific jargon can give greater credence and credibility to what would otherwise be judged inadequate or trivial explanations of common psychological phenomena. They found that gratuitous neuroscience references made poor or illogical explanations appear more credible. Weisberg and colleagues warn that their findings could have serious implications for the application of neuroscience to a range of social and organisational issues, and caution that people can be easily misled by neuroscientific jargon and intriguing colourful pictures of brain activity. Furthermore, physiological brain imaging analysis, although irrelevant, can give the impression that the explanation is connected with a wider, more insightful, scientific explanatory system (Weisberg et al. in press; as cited in Jarrett, 2007, p. 461).

It may well be that the next wave of pseudoscience in coaching will be marked by workplace trainers and business consultants who are completely unqualified in neuroscience using neuroscientific jargon and neurological images as pseudo-explanatory frameworks for simplistic proprietary coaching systems. Indeed, recognised leadership experts such as University of Southern California’s Professor Warren Bennis have described such approaches as being “filled with banalities”, and commented that “what worries me is people being taken in by the language of it and ending up with stuff we’ve known all along” (Bennis cited in McGregor, 2007, p. 61).

Other seasoned commentators of the coaching industry have warned that some sections of the coaching and leadership industry may simply shift from a self-help, pop-psychology basis to a pop-neuroscience basis, and in doing so diminish the standing of coaching and undo much of the positive work that has been achieved to date. “Most coaches . . . have no real understanding of the psychological theories underpinning their work . . . what

I see happening now (and this is a warning) is that we are moving from pop psychology to pop neuroscience . . . the tendency is to learn it at the surface and therefore misuse most of the principles while doing coaching” (Jay, 2006, p. 76).

Hyperbole

The field of coaching is a broad one. One does not have to look far to see the hallmarks of hyperbole, faddism, and blind belief. It is not hard to find coaching books or websites that make sensationalistic claims that would be unheard of among the more mature industries, claims that would lead to serious reprimand by governing bodies in any regulated industry or genuine profession. An excerpt from the introductory chapter of a book on coaching, published only last year (2006), illustrates this point.

“What you are about to read is the very first coaching process that’s been defined in significant detail. In fact, it’s the only real process available. Backed by the executive education program of a major university, the Sherpa process has held up to close scrutiny by seasoned veterans of adult education and received their unequivocal endorsement. Since there’s no significant competition, the Sherpa process is the only credible standard for executive coaching.” (Corbett & Coleman, 2006).

Corbett and Coleman’s book purports to be designed to train professional executive coaches to coach in a professional, honest and ethical fashion. It is perhaps not surprising, given the calibre of the above quote, that the book contains absolutely no references whatsoever to any scientifically derived evidence in support of their claims of efficacy.

Yet despite the ready availability of such ill-considered and unsubstantiated hyperbole in the coaching world, our foregoing analysis of the academic coaching literature does demonstrate that the hallmarks of a rapidly growing protoscience exist in coaching. These hallmarks are more obvious in some sectors of the industry than others (e.g., coaching psychologists seem to be leading the way in terms of developing a research base). Still, there is a considerable way to go before we could confidently assert that coaching (or even coaching psychology) had earned the status of normal science.

Towards a flourishing – languishing model of coaching psychology

Given these issues, can we say if coaching psychology is flourishing or languishing? Anderson, Herriot, and Hodgkinson (2001) conceptualise science within a 2 × 2 model along the dimensions of relevance and rigour, in which four cells are

occupied by Popularist Science (high relevance, low rigour), Pragmatic Science (high relevance, high rigour), Pedantic Science (low relevance, high rigour), and Puerile Science (low relevance, low rigour). Although it is a useful model, we contend that the Anderson et al. approach does not quite capture the element of openness to new perspectives that is central to development in science generally, and the creation of new paradigms in particular.

The Keyes (2003) conceptualisation of flourishing and languishing may be of more help in answering the flourishing or languishing question. Keyes (2003) proposed a mental health model with two orthogonal dimensions: the mental health continuum and the mental illness (depression) continuum. Keyes conceptualises mental health and mental illness as being separate dimensions, with mental health being more than the mere absence of mental illness symptoms.

Individuals high in mental health and low in mental illness are designated as flourishing in life, whereas those low in mental health are designated as languishing, either with or without depression depending on their level of mental illness (Keyes, 2003).

In Keyes' conceptualisation, languishing can be understood as a state in which an individual lacks positive emotions toward life, is not fulfilling their potential, nor realising their aspirations or goals. Flourishing can be understood as a state in which an individual feels positive emotions towards life and is fulfilling their potential and purposefully attaining their aspirations or goals.

The Fredrickson (1998) "broaden and build" model of positive emotions also incorporates the notions of languishing and flourishing. In Fredrickson's work, languishing is characterised by avoidance, feelings of hollowness and emptiness, and the narrowing of thought–action repertoires. It is said to occur in the context of prolonged negative emotions. Human flourishing, on the other hand, is characterised by exploration, creativity, use of intuition, building social connections, enhanced coping strategies, resilience and the building of a connected environmental knowledge base (Fredrickson, 1998; Fredrickson & Losada, 2005).

Examining the functioning of high-performing teams, Losada and Heaphy (2004) found that conditions for human flourishing were generated when team communication was characterised by positivity (support, encouragement and appreciation) rather than negativity (disapproval, sarcasm, cynicism). The optimal positivity/negativity ratio was found to fall between approximately 3:1 and 11:1 (Losada & Heaphy, 2004). Too little or too much positivity caused a constriction of behaviour toward languishing. Furthermore, high-performing teams were characterised by a balance between advocacy of their position and enquiry, and by a balance

between focus on self and others in their communication. Together these three dimensions were important in forming an expansive emotional space that enables human exploration and connection. These findings mirror those found in other settings such as marriage (Gottman, 1994), therapy (Schwarz, 1997), and within organisations generally (Sutcliffe & Vogus, 2003). These findings suggest that such expansive emotional spaces engender broader information processing strategies, greater resilience and greater variability in perspective.

Disciplines can flourish or languish

It is possible that a discipline or domain of pure or applied science can flourish or languish in ways similar to teams and individuals (Seligman, 2003). But how might one conceptualise the health or illness of an applied science?

Central to the scientific method is the notion of rigour. Sciences need to be able to clearly delineate theories and articulate testable hypotheses. For our purposes, a scientific work can be classified as being rigorous if the research methodology is able to test the hypothesis under investigation, the design does not lead to experimental biases, there is sufficient information for others to replicate the study, it has undergone critical peer review, and the conclusions are supported by the data and the data are not over-interpreted (Diamandis, 2006).

The use of reason, logic and critical thinking are fundamental in this endeavour (Chalmers, 1976). However, when overindulged, critical thinking can become an attitude or habit of criticism (and a poor substitute for rigorous thought). This habitual criticism can easily constrict the emotional space available for human action. Indeed, academia has often mistaken opposition for discussion, criticism for critical thinking, and rigidity for rigour.

The balance to critical thinking is openness to new ideas. Like rigorous disciplined thought, this is also fundamental to the scientific endeavour. Openness to new ideas and directions implies a readiness to seek new understanding and new ways of doing. It is a willingness to push the boundaries of our current understanding and practice, or even to look beyond our current perspectives and consider new paradigms that may help us understand more fully ourselves, others and the world.

Thus, instead of mental illness and mental health, rigorous thought and openness to novelty might serve as the key dimensions for our model. Figure 4 presents a flourishing–languishing model of coaching psychology.

The upper left quadrant of the model is the place occupied by pseudoscience. Of course, the extreme position of uncritical acceptance of new ideas is

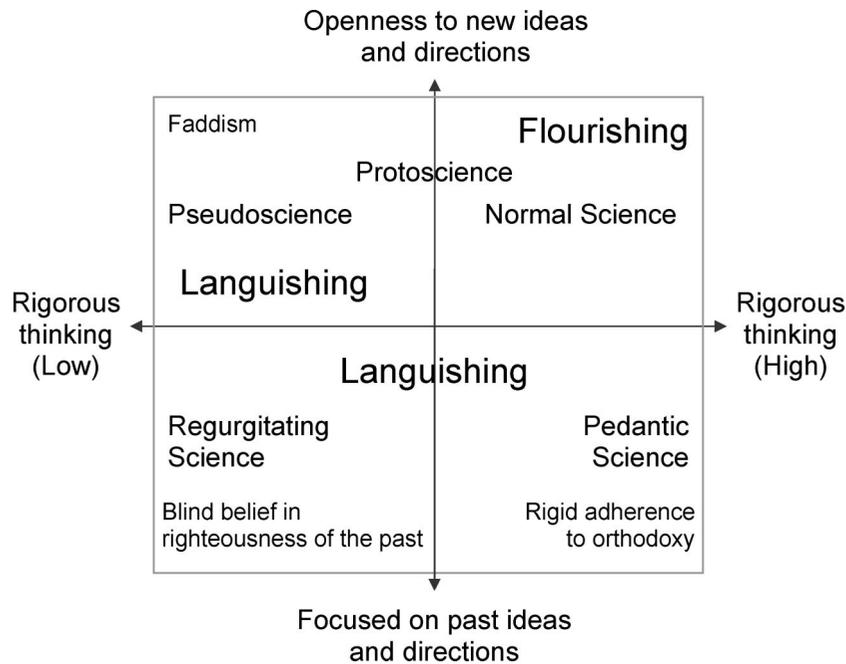


Figure 4. Languishing–flourishing model of coaching psychology.

faddism. Here rigor is abandoned in favour of fervour. Ultimately, one would expect that a discipline whose main thrust was found in this quadrant would languish. As the first flush of excitement fades, the lack of substance reveals that the emperor actually has no clothes, and pseudoscientific explanations actually add little that is new or useful.

The lower left quadrant is also a place of languishing. Here rigorous thinking and exploration give way to conventional thinking, or the blind acceptance of past ways of understanding and doing; science that merely regurgitates past ideas. While for the proponents of these belief systems this is a place of comfort, the self-sealed and repetitive nature of thinking in this quadrant leaves no room for growth or discovery. This quadrant is the fate of systems that prematurely canonise their theories and techniques and fail to develop a solid research agenda that tests their assumptions and extends their understanding.

In the lower right quadrant rigor is present, but it is predominantly enlisted in the service of maintaining the status quo, or scientific orthodoxy. In relation to the Anderson et al. (2001) framework is the area of pedantic science. There is little openness to alternative perspectives and therefore no possibility of paradigm change (Kuhn, 1996). Here criticism is mistaken for critical thinking, and rigidity for rigor. This is the quadrant of professional arrogance. The rigidities of both the lower quadrants in this model indicate that these quadrants represent thinking that creates closed systems. When any system becomes closed, the consequence is stultification and ultimately death (Stacey, 2000).

Flourishing is found in the upper right quadrant. This quadrant is characterised by a tension between rigour and openness to new directions. It is this tension that is creative of growth. It is not unbounded growth, as in faddism or pseudoscience, but growth grounded in evidence. In complex systems terms this is the place of bounded instability, or the edge of chaos (Cavanagh, 2006; Stacey, 2000). The openness to new perspectives and ways of doing makes it unpredictable. The commitment to rigor harnesses that unpredictability creativity to ensure it is not simply self-indulgence.

New disciplines need to find this upper right quadrant if they are to emerge and grow beyond the level of an interesting idea or fad, toward a protoscience and finally attain the status of normal science. It is the blend of vigour and rigour, openness and discipline that makes this journey possible.

Is coaching flourishing?

The present review suggests that coaching is an emerging discipline. But is it flourishing? In the past it has been very easy to look at the vigorous growth of the industry, the fervour of its practitioners and the rapid acceptance of coaching as an intervention among consumers, and conclude that coaching was indeed flourishing. Much of the youthful vigour of coaching remains, but not all that grows is truly flourishing. According to our model, coaching as a scientific discipline could be said to be flourishing to the extent that the literature and practice are both rigorous and open to new directions – creative and

disciplined. So the question remains, how well do we manage this tension between openness and rigour? How well do we surf the edge of chaos?

We would assert that some elements of the industry are indeed flourishing while others are deeply languishing due to a lack of rigorous examination.

On the side of flourishing, we have seen a small explosion of writing and research that seeks to develop new ideas and make novel connections between existing ideas, and a willingness to begin to put these ideas to the test. This is an excellent start. The outcome literature only really started to emerge in any quantity in 2000, but it shows a promising progression in rigour from case studies, to group studies, toward randomised controlled studies. Such a progression is to be expected in the early stages of an emerging discipline.

On the side of languishing, there appears to be a worrying lack of rigour in many of the claims and much of the published work in coaching. A great deal of it appears to be more akin to the self-help literature. That this is the case is not necessarily to be too strongly bemoaned given the emergent status of the field. Youth tends to vigour rather than rigour. However, perhaps more worrying than these ill-advised, unsupported and pseudoscientific claims, is what appears to be a lack of capability or even desire to rigorously evaluate coaching claims among many coaching practitioners. This is a consequence of the fact that, as an industry, coaching has no barriers to entry, or recognised standards of education. An ability to be rigorous, and a respect for this aspect of practice are yet to become a part of the culture of coaching.

This leaves a challenging tension for those who would see the industry flourish and grow as a scientific enterprise. They need to be clearly differentiated from the frequently sensationalistic and pseudoscientific facets of the industry, while at the same time resist falling into the type of scientific arrogance that alienates. Such arrogance is more likely to create the conditions of languishing in the field than to encourage a more informed approach to coaching practice. This leads us to consider the second challenge facing coaching: that of vision.

Maintaining a positive vision for the field

As mentioned earlier in this paper, coaching faces two major challenges. The first is developing a theoretically sound and empirically grounded knowledge base. We have spoken of this at length. The second challenge is for coaching leaders, researchers, and practitioners to look beyond the demands of this immediate research agenda, to develop a vision of the role of coaching in enhancing the lives of individuals, and the sustainability of organisations and the world as a whole.

It is perhaps deceptively easy for those in the coaching industry who come from professional backgrounds such as psychology, or who are engaged in academic research, to focus narrowly on the scientific undertaking, and to forget that health of coaching as a discipline is an industry-wide issue. The current penetration of coaching psychologists within the industry is low. One study has shown that only 14% of coaches report formal training in psychology (Spence, Cavanagh, & Grant, 2006). So while coaching psychology may “punch above its weight” in the field, its fate is still very much linked with the wider coaching industry.

At an individual level, for those of us involved in the education of coaches and the conduct of research, the danger is that we will engage in discussion primarily within our own closed group. That the industry has developed to this point with so little input from academia suggests that it may well be doing at least some things right. To limit the conversation to those who are research savvy runs the risk of leaving behind the bulk of practising coaches, and in the process losing the important contribution of their expertise and experience. Increasingly sophisticated theory and research require increasingly sophisticated consumers of that research and increasingly strong connections between consumers and researchers if it is to remain relevant. This is both a significant educative task for the industry and a challenge to the vision of researchers.

Fortunately there appears to be a growing, industry-wide, recognition of the need to improve standards and education in coaching. There have been, and are, multiple efforts to develop competency frameworks, codes of ethics, training guidelines and accreditation systems. One current initiative, the Global Convention on Coaching (GCC), shows promise in creating a genuine, industry-wide, international dialogue aimed at developing common frameworks of understanding and solutions to the challenges faced by this emerging discipline (GCC, 2007). What this dialogue will produce is yet to be seen. However, psychologists’ engagement with the non-psychological sections of the coaching industry and with dialogue processes such as the GCC, will be important for the successful emergence of the field as a profession and a science. To enter into this dialogue effectively we need to foster a vision within coaching psychology that understands the present state of the industry as a step in a greater journey. Ultimately, this vision needs to encompass something of what the industry might become and what it might contribute to the world.

Concluding comments

The quantity of coaching research is indeed developing, and the knowledge base is expanding.

Moreover the sophistication of coaching research is growing. This bodes well for the future of this emerging discipline, as does the general impetus in the coaching world toward improved standards. In acknowledging these challenges it is also important to bear in mind that coaching has only recently sufficiently coalesced such that intelligent and informed scientist–practitioner dialogue between researchers has become possible. In time there is hope that the wider coaching industry will be brought into this scientist–practitioner dialogue.

Clearly, there is much to do, both in terms of improving the quality and quantity of research, developing shared standards and frameworks, and in developing an industry-wide capability to engage in open and rigorous thinking. Nevertheless, we believe that the movements afoot in the coaching industry, and the state of research and literature, invite an optimistic view of the future of coaching and coaching psychology.

Perhaps the final comment should come from Alex Linley, who concisely encapsulates the opportunities and challenges that the contemporary coaching movement faces.

Coaching psychology provides a remarkable opportunity for applying the principles of psychology – and particularly positive psychology – to enhancing the wellbeing and improving the performance of well-functioning individuals, groups and organisations. Unlike traditional approaches that are premised on models of what is wrong with people, both coaching psychology and positive psychology are more focused on what is right with people. It is imperative that as psychologists we develop an evidence base to support and extend this work. We need to know what works, why, and for whom, so that we can deliver best value and the most effective support to the people, groups, and organisations with whom we are working. An evidence-based approach is the foundation on which our future success will be built, and the yardstick against which it will ultimately be measured: without this evidence base, we risk becoming pedlars of the latest self-help fashion, a situation that would serve neither us as professionals nor the people who we strive to serve.

(Alex Linley, personal communication, 2007.)

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Sir John Whitmore

Sir John Whitmore is a pioneer of coaching worldwide and the creator of the Be the Change movement. He has written five books on sports, leadership, and coaching, of which *Coaching for performance* is the best known, having sold one quarter of a million copies in 17 languages.

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