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The Efficacy of Coaching

Anthony M. Grant

Introduction

Is coaching effective? Is it cost-effective? The answers to these questions depend heavily on the contextual and situational factors at play and who is asking the question – and why. A professional coach or purveyor of coaching services asking the above questions may well take the growth of the coaching industry worldwide as one indicator of whether coaching is effective and "works", and it is clear that in the last 10 or 15 years workplace and executive coaching has grown from a relatively novel and little used intervention to a mainstream activity in organizations worldwide.

The annual revenue expended on corporate coaching has been estimated to be in the region of US$1.5 billion, and in 2009 it was estimated that there were approximately 40,000 professional coaches globally (Frank Bresser Consulting, 2009) up from approximately 30,000 in 2006 (International Coach Federation, 2006), and the figures are probably even higher today despite the Global Financial Crisis (GFC). Indeed for some organizations the pressures and tensions inherent in the GFC served only to highlight the need to provide good coaching to key staff (Farndale *et al.*, 2010). In the United States, 93 percent of US-based Global 100 companies use executive coaches (Bono *et al.*, 2009). In the United Kingdom, 88 percent of organizations use coaching (Jarvis *et al.*, 2005). In 2006 in Australia, 64 percent of business leaders and 72 percent of senior managers reported using coaches (Leadership Management Australia, 2006), and following the GFC, Australian businesses perceived a need for coaching in terms of the increased importance of developing new perspectives in tough economic times, renewed emphasis on communicating effectively with employees, and building trust and resilience with staff increased dramatically (Leadership Management Australia, 2009).

But the growth of the coaching industry and industry's recognition of the important role of coaching in both good and tough economic times is not a reliable indicator of coaching's efficacy or validity. Indeed, given that coaching is playing an increasing role in

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organizations worldwide, it is important that we are able to reliably access the effectiveness of coaching interventions and develop an evidence base for professional coaching. Is coaching effective and do we yet have an evidence base for coaching?

To begin the process of answering these questions, we need to determine what we mean by coaching, delineate the nature of coaching-related evidence, work out how to measure coaching effectiveness, and determine effective methodologies for assessing coaching outcomes, and do so in relation to the extant coaching literature. Drawing on past work in this area (Grant, 2011; Grant *et al.*, 2010), and beginning with some broad delineations of coaching, I review the recent extant research into the efficacy of coaching and highlight possible future directions for the measurement of coaching efficacy.

Seek First to Understand

Before we can meaningfully discuss the efficacy of coaching we need to understand the nature of coaching itself. Although the widespread use of the term "coaching" suggests that it is a monolithic activity, in fact coaching methodologies are highly diverse and heterogeneous approaches to creating and facilitating purposeful positive individual and organizational change.

Despite such diversity, most understandings of coaching are underpinned by the view of coaching as a collaborative relationship formed between a coach and the coachee for the purpose of attaining professional or personal development outcomes which are valued by the coachee (Spence and Grant, 2007). Thus, typically, coaching is a goal-focused activity; clients come to coaching because there is a problem they need or want to solve or a goal they want to attain, and they a looking for help in constructing and enacting solutions to that problem.

At its core the coaching process is a relatively straightforward one in which the coach helps stretch and develop the coachee's current capacities or performance, by helping individuals to: (1) identify desired outcomes, (2) establish specific goals, (3) enhance motivation by identifying strengths and building self-efficacy, (4) identify resources and formulate specific action plans, (5) monitor and evaluate progress towards goals, and (6) modify action plans based on such feedback. The monitor-evaluate-modification steps of this process constitute a simple cycle of self-regulated behavior, and this is a key process in creating intentional behavior change (Carver and Scheier, 1998). The role of the coach is to facilitate the coachee's movement through this self-regulatory cycle by helping the coachee to develop specific action plans and then to monitor and evaluate progression towards those goals (Grant *et al.*, 2010).

Sounds Simple: So Coaching Should be Easy to Evaluate?

Thus, in theory at least, the essence of coaching is a relatively straightforward process of setting goals, developing action plans, and managing progress towards those goals. Therefore, it might be entirely reasonable to assume that assessing the efficacy of coaching should be a comparatively easy process.

However, coaching as a broadly-applied human change methodology has been used with a vast range of issues, including: reducing workplace stress (Wright, 2007); creating organizational cultural change (Anderson *et al.*, 2008); business coaching (Clegg *et al.*, 2005); facilitating work performance in cross cultural contexts (Peterson, 2007); dealing

with resistance to change in low-performing managers (Passmore, 2007); enhancing sales force performance (Agarwal *et al.*, 2009); helping learner drivers develop driving skills (Passmore and Mortimer, 2011); improving communication and leadership skills (Wilson, 2004); helping with career development (Scandura, 1992); team building and group development (Cunha and Louro, 2000); and coaching to improve performance in job interviews (Maurer *et al.*, 1998) – an almost endless list of applications.

In addition to these rich and diverse applications, coaching in the workplace is conducted at all levels of the organization. Executive coaching for executive level employees is typically conducted within a formal coaching agreement with external coaches, using sit-down coaching sessions and encompasses a vast range of services and specialties: coaching for enhanced strategic planning; presentation skills; anger and stress management; executive management team building; and leadership development – all outcomes that are difficult to quantify. In contrast, workplace coaching in organizations can be understood as coaching that takes place in workplace settings with non-executive employees aimed at enhancing workplace performance and work-related skills. As such, it is often an internal coaching intervention delivered on the job by line managers and supervisors, or by employees specially designated as being in the coaching role. This kind of coaching often involves impromptu or "corridor coaching", rather than formal sessions (Grant *et al.*, 2010). Thus, the aims and processes of workplace coaching interventions are often somewhat different to those in executive coaching. Furthermore, and adding to the complexity of evaluating coaching in the workplace, is the fact that organizations tend to use a combination of both external and internal coaching approaches, for example one UK survey found that 51 percent of UK organizations used external coaches, 41 percent trained their own internal coaches, and 79 percent used managers as coaches (Kubicek, 2002).

Reviewing the Efficacy of Coaching is Complex, and the Literature is Disjointed

Because coaching interventions cover such a broad range of applications, and are conducted with such a wide and diverse range of participants, it is perhaps not surprising that the academic outcome literature on coaching is disjointed and somewhat fragmented. There is an increasing amount of coaching-specific, practitioner-generated research. Practitioner research in general tends to be conducted by independent practitioners on client outcomes associated with their own personal business. Practitioner research, especially as part of one's reflective practice, has the potential to be extremely valuable and has made a significant contribution to the emergence and development of an evidence base for coaching. However, a key limitation of practitioner research is that many practitioners are not trained in research methods or in the dissemination of findings. Further, most practitioner research tends not to use standardized or validated outcome measures, typically constructing pre-post surveys or questionnaires that target the specific behaviors that are the focus of the coaching intervention, or presenting estimates of financial return on investment (ROI: McGovern *et al.*, 2001).

Whilst such idiosyncratic outcome measures may be very useful to the client and often form valuable material in terms of marketing for coaching service providers, their relevance to the broader coaching-specific knowledge base is often limited. It should be noted, however, that the quality of coaching practitioner research is improving. Where some past coaching research seemed to be primarily aimed at marketing coaching services

(Corbett, 2006), recently there are many more well-grounded examples of contemporary thought in this area, particulary in relation to the evaluation of executive coaching (for some useful examples see Coutu and Kauffman, 2009; Hernez-Broome and Boyce, 2011).

As regards the peer-reviewed academic literature on the efficacy of coaching: as of January 2011 there were a total of 634 published scholarly papers or dissertations on coaching listed in the databases PsycINFO and Business Source Premier, beginning with Gorby's (1937) report of senior staff coaching junior employees on how to save waste. This figure of 634 includes life (or personal coaching) and executive and workplace coaching, but excludes papers on other applications of coaching such as sports or athletic coaching, forensic, clinical or psychotherapeutic populations, educational coaching or coaching for faking on psychometric or educational tests, which are not relevant to this chapter.

It is clear that the coaching literature has grown significantly in recent years. Between 1937 and January 1, 2011 there were a total of 634 published papers. In terms of assessing the efficacy of coaching there have been 234 outcome studies published since 2000 (to January 2011); 131 case studies, 77 within-subject studies, and 25 between-subject studies. Of the 25 between-subject studies, 14 were randomized studies (see Table 2.1 for a summary of the 25 between-subject studies).

Many of the published empirical papers are surveys about different organizations' use of coaching (e.g., Douglas and McCauley, 1999; Vloeberghs *et al.*, 2005), or studies examining the characteristics of coach training schools (e.g., Grant and O'Hara, 2006). That is, most of the empirical literature to date is contextual or survey-based research about the characteristics of coaches and coachees or the delivery of coaching services. Whilst this is useful information for both the coaching industry and the purchasers of coaching services, it does not tell us a great deal about the efficacy of coaching *per se*.

Outcome Studies

The first published empirical outcome study exploring the efficacy of coaching in the academic literature was Gershman's (1967) dissertation on the effects of specific factors of the supervisor-subordinate coaching climate upon improvement of attitude and performance of the subordinate, showed initial support of the efficacy of coaching approaches in the workplace. No other coaching outcome studies were published until Duffy's (1984) dissertation on the effectiveness of a feedback-coaching intervention in executive outplacement. Peterson's (1993) thesis on behavior change in an individually tailored management coaching program marked the dawning of a contemporary phase of coaching outcome research (prior to 1990 there had been only six published coaching outcome studies examining the efficacy of coaching).

Most of the 131 case studies in the coaching literature are purely descriptive, tending to emphasize practice-related issues rather than presenting rigorous evaluations of the coaching intervention. Very few of these case studies used established and validated quantitative measures, and few used case study methodology beyond a purely descriptive fashion.

Two Key Case Studies

From this author's perspective two case studies stand out in the coaching literature as exemplifying good practice in using case study methodologies to explore the efficacy of coaching. The first is Libri and Kemp's (2006) A-B-A-B single case design with a sales

Table 2.1 Summary of 25 between-subjects studies to January 1, 2011.

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 sig. differences pre-post 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.	Randomized controlled study (a) Feedback plus coaching, (b) Feedback with no coaching, (c) Control group.	No sig. differences in pre-post feedback behavior.
Taylor (1997)*	Participants undergoing a medical college admission test preparation course.	Randomized controlled study (a) Training only; (b) Coaching only; (c) Training plus coaching; (d) Control group.	Coaching reduced stress more than training.
Grant (2002)*	62 trainee accountants received group coaching over one semester.	Randomized controlled study (a) Cognitive coaching only; (b) Behavioral coaching only; (c) Combined cognitive and behavioral coaching; (d) Control groups for each condition.	Combined cognitive and behavioral coaching most effective in increasing grade point average, study skills, self-regulation, and mental health. GPA gains maintained in 12 month follow-up.
Miller *et al.* (2004)*	140 licensed substance abuse professionals learnt motivational interviewing via a range of methods.	Randomized 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 4 trained groups had gains in proficiency. Coaching and/or feedback increased post-training proficiency.
Sue-Chan and 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 team playing behavior than peer coaching; Study 2: External and self coaching associated with higher grades than peer coaching.

(*continued*)

Table 2.1 (*continued*)

Study	*Intervention overview*	*Type of study*	*Key findings*
Bennett and Perrin (2005)*	111 individuals randomized to nurse coaching group or usual-care control group with coaching conducted by nurses on phone and email.	Randomized controlled study (a) Health coaching; (b) Control group.	Intervention group had significantly less illness intrusiveness and health distress than controls at 6 months. Nurse-delivered MI, primarily using the telephone and email, is a feasible method to facilitate well-being with older adults.
Gattellari *et al.* (2005)*	277 GPs in total. Some received 2 phone-based peer coaching sessions integrated with educational resources.	Randomized 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.
Gyllensten and Palmer (2005)	31 participants from UK finance organization.	Quasi-experimental field study (a) Coaching group; (b) Control group.	Anxiety and stress decreased more in the coaching group compared to control group.
Evers *et al.* (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 *et al.* (2006)*	56 adults (community sample) took part in SF-CB life coaching program	Randomized controlled study (a) Group-based life coaching; (b) Waitlist control.	Coaching increased goal attainment, well-being, and hope. 30-week follow-up found gains were maintained.
Green *et al.* (2007)*	56 female high school students took part in SF-CB life coaching program for 10 individual coaching sessions over 2 school terms.	Randomized controlled study (a) Coaching group; (b) Waitlist control group.	Coaching increased cognitive hardiness, mental health and hope.
Spence and Grant (2007)*	63 adults (community sample) took part in SF-CB life coaching program.	Randomized 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.
Duijts *et al.* (2007) *	Dutch employees assessed for the effectiveness of a preventive coaching program on sickness absence due to psychosocial health complaints and on well-being outcomes	Randomized controlled study: (a) 6 month course of preventive coaching; (b) control group.	Significant improvements in health, life satisfaction, burnout, psychological well-being but no improvement in self-reported sickness absence.

Spence *et al.* (2008)*	45 adults (community sample) took part in mindfulness-based health coaching over 8 weeks.	(a)Randomized controlled study: SF-CB coaching followed by mindfulness training (MT); (b) Mindfulness training followed by SF-CB coaching; (c) Health education only control group.	Goal attainment greater in coaching than in the educative/directive format. No significant differences were found for goal attainment between the two MT/CB-SF conditions.
Fielden *et al.* (2009)	Nurses from 6 UK health care trusts were allocated to a coaching group (N=15) or a mentoring group (N=15).	Quasi-experimental field study (a) Coaching group; (b) Mentoring group in six-month coaching/ mentoring program. Qualitative and quantitative data at (T1=baseline, T2=4 months and T3=9 months).	Mentoring was perceived to be "support" and coaching was "action". Both reported significant development in career development, leadership skills, and capabilities; mentees reported the highest level of development, with significantly higher scores in 8 areas of leadership and management and in 3 areas of career impact.
Franklin and Doran (2009)*	First-year students: co-coaching with preparation, action, adaptive learning coaching, or self-regulation coaching PAAL (N=27) or self-regulation (N=25)	A double-blind random control trial in which participants were randomly allocated to either a preparation, action, adaptive learning (PAAL), or a self-regulation co-coaching.	Both co-coaching conditions produced significant increases in self-efficacy and resilience; however, only those in the PAAL condition performed significantly better on decisional balance, hope, self-compassion, the incremental theory of change, and independently assessed academic performance.
(Grant *et al.*, 2009)*	41 executives in a public health agency received 360-degree feedback and four SF-CB coaching sessions over 10-week period.	Randomized controlled study (a) Coaching group; (b) Waitlist control group.	Coaching enhanced goal attainment, resilience and workplace well-being and reduced depression and stress and helped participants deal with organizational change.

(*continued*)

Table 2.1 (*continued*)

Study	*Intervention overview*	*Type of study*	*Key findings*
Aust *et al.* (2010)	Seven intervention units (N=128) and seven non-randomized reference units (N=103) of a large hospital in Denmark participated in an intervention project with the goal of improving the psychosocial working conditions.	Quasi-experimental field study (a) Coaching group; (b) Control group.	In the intervention units there was a statistically significant worsening in 6 out of 13 work environment scales. The decrease was most pronounced for aspects of interpersonal relations and leadership. In comparison, the reference group showed statistically significant changes in only 2 scales. Process evaluation revealed that a large part of the implementation failed and that different implicit theories were at play.
Cerni *et al.* (2010)	14 secondary school principals: all school staff in the 14 schools were invited to rate their school principal using the MLQ (5X) questionnaire.	Pre-test, post-test control-group research design (a) Coaching group; (b) Control group.	This study provides initial evidence that by creating changes to rational and constructive thinking, it is possible to increase coachee's use of transformational leadership techniques.
Grant *et al.* (2010)*	44 high school teachers were randomly assigned to either SF-CB coaching or a waitlist control group.	This study was both an experimental (randomly assigned) and a WS (pre-post) study.	Participation in coaching was associated with increased goal attainment, reduced stress and enhanced workplace well-being and resilience. Pre-post analyses for the coaching group indicated that coaching enhanced self-reported achievement and humanistic-encouraging components of constructive leadership styles.
Kauffeld and Lehmann-Willenbrock (2010)	Spaced and massed training are compared using behavioral and outcome criteria; 64 bank employees (N=32 in each training group).	Quasi-experimental follow-up research design with a sample of 64 bank employees (N=32 in each training group) is used.	Spaced rather than massed training practice resulted in greater transfer quality, higher self-reports of sales competence and improved key figures. Spaced training did not surpass massed training in terms of transfer quantity.

Kines *et al.* (2010)	Foremen in 2 intervention groups are coached and given bi-weekly feedback about their daily verbal safety communications with their workers.	A pre-post intervention-control design with 5 construction work gangs: foremen-worker verbal safety exchanges (experience sampling method, N=1693 interviews), construction site safety level (correct vs. incorrect, N=22,077 single observations), and safety climate (7 dimensions, N=105 questionnaires), measured over 42 weeks.	Coaching construction site foremen to include safety in their daily verbal exchanges with workers has a significantly positive and lasting effect on the level of safety, which is a proximal estimate for work-related accidents.
Kochanowski *et al.* (2010)	Experimental group of managers received individual coaching several weeks after attending a feedback workshop. The control group of managers also attended a feedback workshop but did not receive the follow-up coaching.	Quasi-experimental field study (a) Feedback plus coaching group; (b) Feedback only control group.	Coaching significantly increased the use of collaboration with subordinates, but results for the other three "core" tactics were mixed.
Leonard-Cross (2010)	Investigated the impact and process of developmental coaching evaluating coaching which took place over a two-year period.	The study used action research (Lewin, 1946) and a quasi-experimental method. Coachees and the comparative group of non-coached staff completed questionnaires.	Participants that had received developmental coaching (N=61) had higher levels of self-efficacy than the control group of participants (N=57) who had not received coaching.

Notes: SF-CB=solution-focused cognitive behavioral; * =randomized controlled study.

executive that used established and validated self-report quantitative measures of anxiety (Beck and Steer, 1993), depression (Beck *et al.*, 1996), and core self-evaluations (Judge *et al.*, 2003), in addition to objective measures of sales performance, including the number of client leads, client loan interviews, loan applications, and number of loans approved each week. This case study of the efficacy of coaching serves as a useful case study exemplar of the blending of the psychological with the pragmatic in that the case reports both on quantitative psychological facets and workplace performance.

The second case study, that in many ways is the antitheses of the Libri and Kemp (2006) paper, is Freedman and Perry's (2010) qualitative report. This detailed and highly descriptive paper describes the development and trajectory of an initially non-voluntary shadow coaching and consulting engagement with a somewhat reluctant client in the nuclear industry. The case study explores the efficacy of coaching from both the coach's and the client's perspective, and the paper is somewhat unusual in that both coach and client jointly contributed to its writing. This paper gives the reader detailed insight into the actual process of shadow coaching and consulting, including access to the cognitive and emotional responses of both the coach and client, and in this way sheds light on inner workings of the executive coaching relationship. From the perspective of Freedman and Perry's (2010) paper, investigation of the efficacy of coaching is more than just reports of coaching outcomes or goal attainment.

Such narrative accounts of the coach's and client's internal process provide valuable information about the efficacy of coaching from a completely different perspective to that offered by numerical data, and are of great value to those seeking such insights. However, they do not allow us to make more generalized evaluations of the efficacy of coaching or compare results between different coaching interventions. For that type of evaluation we need to turn our attention to group-based evaluations of the efficacy of coaching.

Within-subject Outcome Research

Within-subject studies are those that compare the impact of coaching on a group of individuals. The group was assessed before and following the coaching interventions. The 74 within-subject studies published to January 2011 represent the largest single group-based methodological approach to quantitative empirical coaching research. This group of studies into the efficacy of coaching cover a wide range of issues including: workplace coaching to reduce waste (Sergio, 1987); improvement in managers' leadership skills as a result of feedback and coaching (Conway, 2000); the impact of life coaching on goal attainment, insight and mental health (Grant, 2003); the use of team coaching in supporting team reflection and learning in global research and development project teams (Mulec and Roth, 2005); the cognitive and behavioral flexibility in executives who received coaching (Jones *et al.*, 2006); the attainment of organizational quota and personal goals within an army recruiting organization (Bowles *et al.*, 2007); changes in leadership competencies and learning agility amongst senior executives in the IT industry (Trathen, 2008); increases in measures of operational and fiscal performance in medical settings (Bacigalupo *et al.*, 2009) and the impact of peer coaching on well-being amongst psychology undergraduate students (Short *et al.*, 2010).

Of particular interest in the group of within-subject studies is Solansky's (2010) evaluation of two key leadership development program components. This paper is of interest to those concerned with the development of the literature base on the efficacy

of coaching as it is one of few coaching-related empirical papers published in a top-tier academic journal. To date, the vast majority of coaching research has been published in second-or third-level journals. Whilst the level of prestige accorded to a journal by an elitist section of the academic community may have little or no relevance for the vast majority of readers interested in coaching, the small but increasing number of coaching publications in top-tier journals indicates that coaching as a human change methodology is finding increasing acceptance within the academic community. To the extent that such publications are an indicator of the increasing recognition of coaching as a valid approach to facilitating human change, this trend is welcome and it is hoped it will continue.

Within-subject studies can 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. However, by comparing the results of the intervention to a matched group that did not receive coaching, a between-subject design can give greater assurance that the results are due to the coaching intervention itself, and not to some broader influence such as the mere passage of time or changes in, for example, workplace culture or environment. The use of random assignment to a coaching or non-coaching control group means greater control over extraneous, individual differences, and gives some sections of the coaching community and interested onlookers greater comfort in the certainty of reported coaching efficacy.

Between-subject and Randomized Controlled Studies

Conducting evaluations of real-life coaching intervention is a complex and time consuming process. Recruiting participants, managing the process of collecting data, organizing the coaches and coachees, and ensuring that there is a broad consistency in the way that the actual coaching is conducted presents unique and difficult challenges. These are made particularly complicated when the coaching is conducted in organizational settings where there are often competing political or operational agendas, and the structure and priorities of the organization may change substantially over the course of the coaching engagement.

It is thus not surprising that there are few between-subject studies in the coaching literature. As of January 2011 in the PsycINFO database there are only 25 published between-subject studies and only 14 of those used randomized controlled designs. The 14 randomized controlled studies of coaching that have been conducted to date indicate that coaching can indeed improve performance in various ways.

Four of these fourteen studies have been in the medical or health areas of work. Taylor (1997) found that solution-focused coaching fostered resilience in medical students. This study appears to be the first reporting on the impact of solution-focused coaching. Solution-focused approaches parallel the aims of appreciative inquiry (Cooperrider *et al.*, 2000), in that solution-focused coaching focuses specifically on the individual's strengths and goals, rather than taking a reductionist, diagnostic approach.

Gattellari *et al.* (2005) found that peer coaching by general practitioners improved the coachee's 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. Spence *et al.* (2008) found that goal attainment in a health coaching program was greater in the coaching condition when compared to an education-only intervention.

Four outcome studies have been in the life (or personal) coaching domain with community samples and with students. These have indicated that coaching can improve or indeed facilitate goal attainment and reduce anxiety and stress (Grant, 2003), enhance psychological and subjective well-being (Green *et al.*, 2006; Spence and Grant, 2007) and resilience, while reducing depression, stress, or anxiety (Green *et al.*, 2007).

There have been only two randomized controlled studies of workplace coaching. Deviney (1994) examined the efficacy of supervisors acting as internal workplace coaches, finding no changes in supervisors' feedback skills following a multiple-rater feedback intervention and coaching from their managers over nine weeks. The reason for this is not clear, but it may be because the training processes for giving the supervisors' workplace coaching skills was not effective. The difficulties of developing managers' coaching skills is well-recognized (Grant, 2010).

Duijts *et al.* (2008) examined the effectiveness of coaching as a means of reducing sickness absence due to psychosocial health complaints and on well-being outcomes and found that coaching led to significant improvements in health, life satisfaction, burnout, and psychological well-being, but found no improvement in self-reported sickness absence, concluding that coaching can enhance the general well-being of employees. There has been only one randomized controlled study of the effectiveness of executive coaching, with participants receiving 360-degree feedback followed by four sessions of executive coaching. The coaching was found to improve goal attainment, increase resilience, and reduce stress and depression (Grant *et al.*, 2009).

For some observers the small number of randomized controlled outcome studies may be considered to be the major shortcoming in the literature on coaching efficacy. Although the data obtained from quantitative, randomized, controlled outcome studies cannot provide the rich detailed insights afforded by well-written qualitative case studies (e.g., see Peterson and Millier, 2005), and many might contest their practical utility, they are currently held to be the "gold standard" in quantitative outcome research (for discussion on this issue in relation to coaching see Cavanagh and Grant, 2006). Certainly there is a considerable section of the coaching and general scientific community that sees randomized controlled studies as essential for establishing the credibility of coaching interventions, and in this author's view such research indeed provides one extremely important part of the foundation for an evidence-based approach to coaching.

However, in real-life coaching research, unlike laboratory-based studies or clinical drug trials, genuine randomized allocation to intervention or control is often extremely difficult, if not impossible. Because of these difficulties many coaching outcome studies have used single group, pre-post, within-subject designs (e.g., Grant 2003, Jones *et al.*, 2006; Olivero *et al*, 1997; Orenstein, 2006).

There have been a number of quasi-experimental studies that have used pre-test and post-test comparisons with non-randomized allocation to a coaching or control group. Miller (1990) examined the impact of coaching on transfer of training skills, but the drawing of conclusions was restricted by a high rate of participant drop out: 91 participants began the study but only 33 completed the final measures. Gyllensten and Palmer (2005) found that, compared with a no-coaching control group, coaching was associated with lower levels of anxiety and stress. Evers *et al.* (2006) found that executive coaching enhanced participants' self-efficacy and their beliefs in their ability to set personal goals, but they did not measure actual goal attainment. Barrett (2007) used a quasi-experimental, modified post-test only control group design, finding that group coaching reduced burnout but did not improve productivity.

In an interesting use of workplace coaching to improve safety in the building industry, Kines *et al.* (2010) found that coaching construction site foremen to include safety in their daily verbal exchanges with workers had a significant positive and lasting effect on the level of safety. Kochanowski *et al.* (2010) compared a feedback only group with a feedback plus coaching group of managers on a leadership development program, finding that coaching significantly increased the use of collaboration with subordinates. Recent research also includes quasi-investigations into the differential effects of spaced versus massed training and coaching strategies, finding that spaced rather than massed training practice resulted in greater transfer quality, higher self-reports of sales competence and improved key performance criteria (Kauffeld and Lehmann-Willenbrock, 2010).

Longitudinal Studies: Is Coaching Effective Over Time?

In order to truly assess the efficacy of coaching interventions we need to know if any reported effects maintain over time. However, thus far there have been very few longitudinal studies. The few that have been conducted indicate that coaching can indeed produce sustained change.

In a 12-month follow-up, Miller *et al.* (2004) found coaching with feedback was superior to training-only conditions in maintaining clinicians' interviewing skills. Green *et al.* (2006) found that gains from participation in a ten-week solution-focused cognitive-behavioral life coaching were maintained at a 30-week follow-up. Using an A-B-A-B design in a signal subject case study with an 18-month follow-up, Libri and Kemp (2006) found that cognitive-behavioral coaching enhanced sales performance and core self-evaluations.

Gauging Efficacy Through Measuring Outcomes of Coaching

It would appear from this review that coaching outcome research, as a relatively new area of empirical study, is progressing through the "natural" stages of research development, from descriptive or qualitative case studies, through to quantitative within-subject studies, and on to quasi-experimental and randomized, controlled between-subject designs. Indeed, the 234 outcome studies published between 2000 and January 2011 provide a useful foundation for future research and are indicative of the emergence of an evidence base for coaching, and the amount of research is increasing over time.

However, a major potential problem for the development of a coherent body of knowledge about the effectiveness of coaching, and further establishment of an evidence-based framework for coaching, is the fact that there is little consistency in the use of outcome measures in coaching research. Indeed, the lack of consistency could prove to be a significant barrier to the development of an evidence base for coaching, and could even possibly lead to the decline of a coherent coaching literature as onlookers struggle to make sense of a potentially amorphous mass of data.

For example, in relation to executive coaching, the topics addressed within the coaching interventions vary widely and include interpersonal skills, stress management, strategic thinking, time management, dealing with conflict, leadership and management styles, delegation, staffing issues, as well as sales or financial performance (Bono *et al.*, 2009). Not surprisingly the ways such goals are measured also vary considerably. However, there is considerable variation between studies in the use of outcome measures, which makes it

very difficult to draw meaningful comparisons between studies, and this is an important issue that researchers into coaching will need to address if a coherent body of knowledge about coaching efficacy is to be developed over time.

An overview of the outcome literature in executive and workplace coaching illustrates the diversity of variables used to measure the outcome of executive coaching. The following are some representative examples of outcome measure from the literature.

Executive Coaching Efficacy Measures

Peterson (1993) provides a valuable example of how to develop coaching assessments to suit the idiosyncratic goals of individual coaching clients. Peterson used multiple customized rating inventories and rating scales based on each coachee's individual training objectives, and drew data from a number of raters to assess the effectiveness of an individualized coaching program for managers and executives. Steinbrenner and Schlosser (2011) and Orenstein (2006) have reported on the use of similar techniques.

Not surprisingly in executive coaching, customized surveys targeting the specific goals of the coaching intervention, and reports completed by the coachee, their managers, or peers form the largest single group of outcome measures in executive coaching outcome research. For example, Jones *et al.* (2006) developed a customized self-report inventory based on aspects of transactional and transformational leadership (Bass and Avolio, 1994), and self-reported measures of managerial flexibility. Although in this case such measures were theoretically grounded, no reliability or validity data (beyond face validity) was reported – a common shortcoming in much of this literature. Olivero *et al.* (1997) used behavioral, task-specific outcome measures (the timely completion of patient evaluation forms), to assess the relative impact of training and coaching, reporting that coaching and training combined was more effective than training alone. Gravel (2007) investigated the efficacy of executive coaching workshops with high school principals using customized surveys assessing time spent on administrative tasks and overall job satisfaction.

Given that most executives and senior managers participate in 360-degree assessments, and that such assessments are frequently used at the beginning of a coaching assignment in order to define the coaching goals (Coutu and Kauffman, 2009), it is surprising that more outcome studies do not use 360-degree assessments or validated leadership style assessments as outcome measures. Of those that did, Kampa-Kokesch and Anderson (2002) used the Multi-factor Leadership Questionnaire (MLQ; Bass and Avolio, 1990), a well-validated and widely-used leadership assessment tool (Lowe *et al.*, 1996), to assess changes in leadership style. However, only coachees' self-ratings were taken following the coaching program – probably due to the complexity of conducting follow-up research with non-participants (Grant *et al.*, 2010).

Thach (2002) used a customized 360-degree feedback tool which drew on previously validated items to assess the impact of executive coaching, collecting ratings from the coachees themselves, their mangers, and their direct reports, finding that coaching increases leadership effectiveness. Moving beyond merely assessing outcomes, Thach (2002) also conducted a number of additional analysis including exploring and reporting positive correlational relationships between the number of coaching sessions attended and increases in self-reported leadership effectiveness, giving possibly useful insights into some of the mechanisms underpinning effective coaching.

Also exploring both outcomes and the mechanisms underpinning effective coaching, Trathen (2008) used Choices Architect®, a research-based 360-tool designed to measure learning agility (Lominger, 2009), collecting data from both participates and their managers before and after coaching, finding a meaningful and significant association between changes in leadership competences and learning agility among those participating in executive coaching.

In a randomized controlled study of executive coaching in the health industry Grant *et al.* (2009) reported on the use of the Human Synergistics Life Styles Inventory (LSI; Lafferty, 1989) for 360-degree feedback, and on the use of the Depression, Anxiety and Stress Scale (DASS; Lovibond and Lovibond, 1995), and the Workplace Well-being Index (WWBI; Page, 2005) for assessment of the impact of coaching on individual participants' mental health. For an assessment of the impact of coaching on goal attainment Grant *et al.* (2009) used goal attainment scaling (see Spence, 2007), a process in which participants set personal goals and rate their goal progression before and after the coaching intervention. Coaching was associated with improved outcomes on all these measures.

More recently Cerni *et al.* (2010) used a pre-test, post-test control-group research design to assess the impact of a ten-week coaching intervention program based on cognitive-experiential self theory on transformational leadership among 14 secondary school principals using the MLQ (Bass and Avolio, 1990), finding a significant difference between the pre-test and post-test scores for the intervention group, as rated by their school staff, whereas the control group remained unchanged. Cerni *et al.* (2010) reported qualitative findings indicating that school principals in the intervention group became more reflective about their thinking processes and leadership practices.

However, although the aforementioned studies that have employed 360-degree feedback assessments show that such assessment is indeed a viable outcome measure in coaching, it is nevertheless true that one key barrier to the common use of 360-degree assessments, as an assessment of the efficacy of coaching interventions, is that the collection of such data pre- and post-coaching intervention is often an extremely time consuming and challenging process, involving coordinating time-poor employees and senior executives at multiple time points. Nevertheless, when reliable and well-validated 360-degree tools are used appropriately, such research can provide important standardized data about the efficacy of coaching that is important for the advancement of coaching. It is recommended that far more research be conducted long these lines.

Workplace and Personal Coaching Measures

A similarly diverse pattern is evident in the outcome literature on workplace coaching with non-executive employees. It is also notable that a number of these studies have employed objective outcome measures, important indices in assessing the efficacy of coaching interventions. For example, Sergio (1987) reported on a workplace coaching intervention aimed at modifying six specific behaviors of 24 male forming-machine operators in a mid-sized fastener manufacturing organization with the outcome measures being actual observed behaviors, and most importantly, a reduction in actual wasted material.

Another interesting study that used actual observable behaviors as a measure of the efficacy of workplace coaching was Kines *et al.* (2010) who explored the use of coaching to improve safety behaviors on construction sites. Foremen were coached to increase the

number of times that they included safety-related comments in their day-to-day dealings with construction site workers. The foremen set specific personal goals about the number of times they wished to refer to safety behaviors in their interactions with workers, and the foremen then received bi-weekly feedback and coaching on their actual performance. Compared to control groups the coaching condition increased safety on a number of observable measures, including the number of times workers reported having had a safety-related conversation with their foreman, observed safety performance, and the authors concluded that feedback-based coaching to construction site foremen regarding the content of their daily verbal exchanges resulted in significant increases in workers' safety performance and the physical safety level of the work site.

Also exploring the effect of coaching on objective measures of performance in university students, Franklin and Doran (2009) conducted a well-designed, double-blind, random, control trial in which participants were randomly allocated to either a preparation, action, adaptive learning (PAAL) coaching condition, or to a self-regulation co-coaching program with blind assessment of subsequent academic performance – an objective behavioral measure of the efficacy of the coaching intervention. A third no-treatment condition was used for additional comparison and control of expectancy effects. Participants in both coaching conditions reported significant improvements in self-efficacy and resilience, but only those in the PAAL condition experienced significant increases in decisional balance, hope, self-compassion, and belief in the incremental theory of change. Moreover, participants in the PAAL condition experienced significantly greater increases in six of the seven dependent variables than participants in the self-regulation condition. Relative to the no treatment control group, PAAL participants performed 10 percent better in independently assessed academic performance, whereas those in the self-regulation coaching condition only performed 2 percent better.

Other workplace coaching studies have used self-reported measures of workplace performance and mental health to good effect. Duijts *et al.* (2008) conducted a randomized controlled study into the impact of coaching on employees' sickness absence due to psychosocial health complaints and on the general well-being of employees using self-reported measures including the Short Form Health Survey (Ware and Sherbourne, 1992), the General Health Questionnaire (Koeter and Ormel, 1991), the Dutch Questionnaire on Perception and Judgment of Work (Veldhoven and Meijmen, 1994), and the Dutch version of the Maslach Burnout Inventory (Schaufeli and Dierendonck, 2000), which are all well-validated measures.

In a quasi-experimental study examining the impact of workplace coaching on mental health with finance industry employees, Gyllensten and Palmer (2005) used the DASS (Lovibond and Lovibond, 1995) as an outcome measure and found that levels of anxiety and stress had decreased more in the coaching group compared to the control group, and were lower in the coaching group compared to the control group at the end of the study.

Evers *et al.* (2006) report on an executive coaching intervention with managers of the US federal government using self-report measures of self-efficacy beliefs and outcome expectancies that were linked to three central domains of functioning: setting one's own goals, acting in a balanced way, and mindful living and working.

Comparing the relative impact of a feedback workshop with attendance at the workshop followed by coaching sessions, Kochanowski *et al.* (2010) found that coaching significantly increased manager's use of collaboration with subordinates, which was assessed using the Influence Behaviour Questionnaire (IBQ; Yukl *et al.*, 2008) which measures 11 proactive influence tactics.

In relation to coaching in non-workplace settings, the outcome measures used to assess the efficacy of coaching interventions have been similarly varied and have included personality inventories (Norlander, 2002), students' well-being (Short *et al.*, 2010), improvement of techniques in Aikido (Negi and Shimamline, 2010), goal self-concordance (Burke and Linley, 2007), and body mass index (Zandvoort *et al.*, 2009), as well as measures of mental health (Spence and Grant, 2007), well-being (Green *et al.*, 2007), and self-refection and insight (e.g., Grant, 2008).

The observed extensive variations in outcome measures is to be expected given that coaching is a highly individualized human change methodology and is used in a wide range of contexts. Coaching outcome measures are purposefully aligned with individual client's goals; thus, it is inevitable that outcome measures will vary considerably between studies. However, as previously mentioned, the idiosyncratic use of measures means that it is difficult for a coherent body of knowledge to develop over time. For such a body of knowledge to develop we need to augment the idiosyncratic measures necessary to assess the efficacy of specific coaching engagement with common standardized, validated, and psychometrically reliable measures (Passmore, 2008).

Using Validated Measures to Assess Efficacy: Mental Health and Goal Attainment

It is surprising that few studies have used commonly-available, well-validated measures of mental health and well-being given that coaching is frequently promoted as being effective as a means of enhancing both goal attainment and well-being (e.g., Levine *et al.*, 2006; Passmore and Gibbes, 2007). This is despite the fact that there are many such measures designed for use in non-clinical populations. Such measures include the Depression, Anxiety and Stress Scale (Lovibond and Lovibond, 1995), the Psychological Well-being Scale (Ryff and Keyes, 1996), the Satisfaction With Life Scale (Diener *et al.*, 1985), and the Cognitive Hardiness Scale (Nowack, 1990).

Coaching is a goal-orientated change methodology. Thus, goal attainment is an important outcome measure in coaching. However, few outcome studies have used goal attainment scaling as a measure of coaching efficacy. Goal Attainment Scaling (GAS) techniques offer a useful methodology for measuring goal progression towards predetermined objective success benchmarks. For a comprehensive discussion of the use of GAS in coaching see Spence (2007). The broader use of GAS could provide a means of making comparisons between studies and its use in coaching efficacy research would significantly help to further build a coherent body of knowledge about the efficacy of coaching. GAS would also help address the serious limitations of the few studies that have examined return on investment (ROI) in coaching using subjective post-coaching ratings of success (e.g., McGovern *et al.*, 2001).

Is Return on Investment a Reliable Measure of Coaching Efficacy?

Return on investment is often presented as being the most important indicator of coaching efficacy in organizational coaching contexts. Return on investment data is calculated using metrics such as growth in sales, market share, or organizational profitability, and is

frequently used by coaching and consulting organizations as a marketing tool in order to promote and sell their coaching and consulting services. Return on investment figures of 788 percent (Kampa-Kokesch and Anderson, 2001) and 545 percent (McGovern *et al.*, 2001) are commonly reported as being *the* ROI for executive coaching and are frequently touted as being a key rationale of the use of coaching in organizational settings (Grant *et al.*, 2010).

But is ROI a reliable measure of coaching efficacy? On the surface the idea that spending money on coaching services will make the organization more money in return, seems like a persuasive argument for the use of ROI as both a measure of coaching efficacy and as a means of promoting coaching as a viable and reliable change methodology. However, I believe that there are some significant problems in using ROI as a measure of coaching efficacy.

To understand these problems we need to examine how ROI is typically calculated. In essence, ROI is calculated by subtracting the value of the outcomes of coaching from the costs of coaching and then expressing this as a percentage (((coaching benefits – costs of coaching)/costs of coaching)) x 100 percent). There are a number of different variations on this formula, for example, including factoring into the calculation a rating of the coachee's level of confidence that all or some of the perceived benefits are in fact due to coaching, or deliberately underestimating the financial return (Grant *et al.*, 2010).

However, whilst ROI can provide some indications about the impact of a specific coaching intervention in a specific context, I argue that ROI has serious limitations as a benchmark outcome measure for coaching effectiveness. The use of ROI may well give purchasers of coaching services and those who seek to market their coaching and consultancy services a sense of comfort and some reassurance that their coaching is effective and valuable, but does ROI really measure the true impact of coaching? Most definitely not.

It is important to note that the ROI metric depends on two key things: (1) the costs of the coaching intervention, including the amount that the coaches charge and associated costs of implantation, and (2) the financial benefit obtained by the organization. These are highly idiosyncratic factors. Thus at best ROI can only be indicative of a single specific coaching engagement, and is a somewhat spurious measure of coaching outcome.

Do We Yet Have an Evidence Base for the Efficacy of Coaching?

It is clear from this review of the literature on the efficacy of coaching that the amount and quality of coaching outcome research is increasing and, importantly, applications are becoming more diverse over time. The quality and sophistication of the research is increasing, but it is also clear that there are no standardized or even particularly commonly used measures of coaching efficacy. The indicators of efficacy reviewed here include leadership style, reductions in wastage in manufacturing settings, psychological well-being, employees' absence due to sickness, personal resilience, workplace well-being, sales performance, safety behaviors on construction sites, ROI, and goal attainment, to name just a few. It is indeed heartening to see coaching methodologies being used so broadly. But the wide success of coaching also brings its own problems. The questions remain: Do we yet have an evidence-base for the efficacy of coaching? Can we now say that coaching is an effective human change methodology?

I suggest that the above review indicates that we do indeed have an emergent evidence base for the efficacy of coaching, and that we can certainly say that coaching can be a very effective human change methodology.

But we must also recognize that the evidence base at present is somewhat unsophisticated in comparison to areas such as medicine and health – domains typically taken to represent aspirational benchmarks as other disciplines move towards their own evidence base (for discussion on this point in relation to the debate on an evidence base for industrial and organizational psychology see Potworowski and Green, 2011). Indeed, alternative perspectives could suggest that we do not have sufficient well-conducted between-subject studies to constitute a true evidence base for coaching and, furthermore, the notion of evidence-based coaching is highly unrealistic because coaching does not have and is unlikely to ever develop a sophisticated knowledge base such as that found in the domains of medicine and health. In short, they might argue, the notion of an evidence-base for coaching is simply not achievable.

However, such an argument is based on the assumption that a discipline of professional coaching should aspire to development along the lines of evidence-based practice (EBP) as delineated by the medical model. I am not at all convinced that this should be the case. Where much of the medical, health, and clinical psychological literature appears to hold tightly to the medical model of EBP, prizing randomized controlled trials above other forms of empirical enquiry, there has been considerable debate about the applicability of evidence based approaches to "real world" organizational contexts in the industrial and organizational (I/O) psychology literature (e.g., Briner and Rousseau, 2011) – contexts highly familiar to much coaching research and practice. It is important to note that an evidence base *per se* does not purport to prove that any specific intervention is guaranteed to be effective, nor does it require that a double-blind, randomized, controlled trial is held as being inevitably and objectively better than a qualitative case study approach.

Inclusivity in Establishing Efficacy

An evidence-base for coaching should recognize that, as in the case of I/O psychology, real-world research is not easy. In the real world, allocation to intervention or control is not always possible, and moreover, as this chapter's earlier discussion of the Freedman and Perry (2010) case study clearly shows, well-conducted qualitative research into coaching can provide important insights that are simply not possible with quantitative approaches – and a true evidence base for any discipline should recognize and respond to diversity of practice by providing reliable information for a wide range of applications, contexts, and methodologies. This view of evidence-based approaches is deliberately broad, and this broad perspective represents current thinking in this area (Cronin and Klimoski, 2011) – and I posit that it is this view that should inform the development of an evidence base for coaching.

Within this view many forms of enquiry are welcome and valued. The key criteria for evaluation and tests of efficacy should thus be the rigor and coherence of the enquiry, the insights it generates, and its contribution to the broader knowledge research and practice of coaching, rather than whether it is a qualitative, single case study or a large-scale randomized controlled study. Each has its place and each can contribute to the continued development of our understanding of the efficacy of this exciting human change methodology that we call coaching.

Conclusion

There can be little doubt that the academic and research base for coaching has grown substantially, and all signs indicate that this growth will continue into the near to mid future at the very least. Coaching has definitively moved from fad to fixture in organizational contexts, and in the areas of personal and developmental coaching, too. Applications of coaching are highly diverse and measures of coaching efficacy are similarly varied. The lack of consistency associated with such diversity could prove to be a significant obstacle in the development of an evidence base for coaching as onlookers struggle to make sense of a potentially amorphous mass of data.

In order to move the evidence base for coaching further forward we need to increase the use of standardized outcome measures and this will give greater consistency to the research literature. This is not to decry the use of idiosyncratic measures that reflect the individualistic goals that often lie at the heart of the coaching endeavor. Rather, it is a call to augment those so that a common language of coaching efficacy can develop. Goal attainment scaling may be one measure of efficacy that can provide the syntax necessary to enable this language, and could well provide the framework to facilitate communication across the broad range of contexts in which contemporary coaching is practiced and researched. In this way we have the opportunity to demonstrate that the diversity of coaching is indeed its key strength.

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