

Taming the Wild West of Coaching through Meta-Analytical Research

About a decade ago the *Harvard Business Review* featured an article called the *Wild West of Executive Coaching* (Sherman and Freas, 2004) where the authors likened executive coaching to the wild west of the past which was “chaotic, largely unexplored, and fraught with risk, yet immensely promising” (pg. 84). It was an appropriate image of where organizational/executive coaching stood then. But much has changed since. In 1999 there were only about 2,100 coaches worldwide, but by 2014 that number had grown to almost 50,000 coaches who earned an estimated 2 billion dollars in annual revenue in 2014 (ICF website). This change was driven by the dramatic increase in demand for coaching services. Grant et al. (2010) reported that 93% of the US-based Global 100 companies and 88% of the UK organizations use Executive Coaching. The practice of executive coaching has grown so fast that it has developed ahead of established theory or research. However there is reason to believe that we are beginning to tame the wild west of coaching. This is evidenced by the growth in the academic literature on coaching.

The growth of the coaching literature has been dramatic. Grant (2011) identified only 38 coaching related articles that had been published between 1937 and 1989; 41 articles between 1990 and 1999; 102 articles between 2000 and 2004; and then 532 articles from 2005 through 2010. Part of the reason for this growth was the emergence of five peer-reviewed coaching journals appearing between 2003 and 2008. These five journals alone published 334 coaching related articles in the four years between 2011 and 2014.

Few of the earlier articles published were research based however. In their 2001 review of the literature Kampa-Kokeach and Anderson (2001) found only 7 empirical studies done prior to the year 2000. Grant (2011) could find only 18 empirically-based articles published between 2000 and 2004 but found 213 articles published between 2005 and 2010. As a percentage, that says that about 90% of the research based articles published up through 2010 were published in the last 6 years of that period. That number has continued to grow in the last 5 years.

Passmore & Fillery-Travis, (2011), identified three phases of research and knowledge development new disciplines, like coaching, pass through. The first phase focuses on defining the focus of study, which involves an exploration of the phenomenon with practitioners sharing best practices. The second phase shifts attention to theory building, methods, and measures. Initially this is done through use of case studies and small qualitative research projects. The second part of this phase shifts to large sample randomized controlled trials (RCT) and then to meta-analysis reviewing results from many RCT papers to explore the efficacy of the intervention across studies. Three meta-analysis of coaching research have been conducted recently (Theeboom et al. 2014; Jones et al. 2015; and Sonesh et al. 2015). They have all shown that, without doubt, coaching works. In the third and final phase, the focus shifts to exploring which groups benefit most from variations of the intervention. In the last five years there has been a number of ‘stage three’ studies published using experimental and quasi-experimental designs (Theeboom et al., 2014; Jones et al., 2015; Sonesh et al., 2015). This suggests that coaching is no longer in its ‘wild west’ stage of development.

The publication of 3 meta-analytic studies of coaching in the last 2 years is particularly significant because unlike literature reviews, meta-analytic studies focus only on empirical research which measure outcomes. It allows us to not only answer the question of whether coaching has an impact but also how big an impact it has.

In this review we will provide a brief introduction to meta-analytic studies and the meaning of ‘effect size’ used to determine the size of the impact that coaching has. We will then review the three recently published meta-analyses of coaching (Theeboom et al., 2014; Jones et al., 2015; and Sonesh et al., 2015).

Meta-Analysis and the meaning of ‘effect size’

Meta-Analysis is a technique frequently used in medical and educational research to evaluate the effectiveness of a particular intervention. It combines data from multiple studies to determine the amount of improvement

(effect size) there is from that intervention. It is particularly useful when many of the studies have small sample sizes and each on its own might not be sufficient to confidently state that the outcome wasn't due to chance. By combining the studies you can increase their statistical power and determine if the outcome was meaningful or due to chance. It has become 'the method of choice' for summarizing and evaluating research investigating a particular question.

Effect Size is a measure of how much impact a particular intervention had when you compare the experimental group which had the intervention (in our case, coaching) vs. the control group that didn't have the intervention (coaching). It can also be measured as the difference between pre-test and post-test scores within a single test group. It goes beyond whether the intervention worked and tells us how much impact it had. Effect size is usually measured using a statistic called Cohen's *d*. The standard interpretation offered by Cohen is that .8 = large effect (8/10 of a standard deviation unit); .5 = moderate effect (1/2 of a standard deviation); and .2 = small effect (1/5 of a standard deviation). An alternate measure of *effect size* is Hedge's *g* which controls (better than Cohen's *d*) for the impact of an unusually large sample size among one of the studies in the data set. The three studies reported below use Hedge's *g* and sometimes both. Hedge's *g* can be interpreted much the same way as Cohen's *d*.

The Three Coaching Meta-Analytic Studies

The first reported Meta-Analysis of coaching was done by De Meuse, Dai, and Lee from Korn/Ferry Leadership and Talent Consulting and published in *Coaching: An International Journal of Theory, Research and Practice* in 2009 (Vol. 2, No. 2, 117-134). Because it was based on only 6 studies it will not be reviewed here. However it was one of the early articles to begin to question the usefulness of ROI as a measure to evaluate coaching effectiveness. The three Meta-Analytic studies that will be reviewed are:

1. Theeboom, T., Beersma, B., & van Vianen, A. E. M. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, 9-18. (Reviewed 18 studies)
2. Jones, R. J., Woods, S. A., & Guillaume, Y.R.F. (2015). The Effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology*, Published on line 15 April 2015. (Reviewed 17 studies)
3. Sonesh, S.C., Coultas, C.W., Lacerenza, C. N., Marlow, S. L., Benishek, L. E., Salas, E. (2015) The power of coaching: a meta-analytic investigation. *Coaching: An International Journal of Theory, Research and Practice*. Vol. 8 No. 2. 73-95. (Reviewed 24 studies).

Summary of the three studies

Theeboom et al. (2014) Article: This meta-analysis was based on 18 empirical studies of coaching in a variety of contexts; in both educational (including student coachees and coaches) as well as organizational contexts. They also included outcomes like personal well being and life-coaching outcomes as well as organizational outcomes. The overall reported positive effects using Hedge's *g* statistic was 0.66 (moderate level). The outcomes were assessed according to the following categories: Performance and skills ($g = .60$); well-being ($g = .46$); coping ($g = .43$); work attitudes ($g = .54$); and goal-directed self-regulation ($g = .74$). The study also found that certain moderator variables impacted the outcome. If the study design used control groups the effect was smaller than for before and after studies without controls ($g = 1.15$ vs. $g = .39$). The number of coaching sessions had no effect on outcomes, which means that a few sessions were as effective as a lot of sessions. However, that relationship was dependent on what outcome measure was being tested. A larger number of coaching sessions was more beneficial for coping and goal-directed self-regulation outcomes while fewer coaching sessions was more beneficial for work/career attitudes and performance/skills outcomes. The authors speculated that a possible reason for this might be that solution-focused coaching techniques which typically use fewer sessions may be the reason. Whether true or not, their suggestion highlights the need for future research that compares the effectiveness of various coaching approaches. The conclusion drawn by the researchers was that since the evidence makes it very clear that coaching does work, we need to now shift our focus to studies which focus on 'how does it work'?

Jones et al. (2015) Article:

This study has not yet appeared in the print edition of the journal but had been released online April 2015. They built upon the work of Theeboom et al. (2014) by focusing only on workplace coaching provided by either internal or external coaches. They excluded manager-as-coach, peer coaching, and non-workplace studies. They started with a model of possible coaching outcomes that could be classified as: Affective Outcomes (sense of well being, job satisfaction, etc.), Cognitive Outcomes (knowledge based outcomes), Skill-Based Outcomes (leadership, technical skills, and competencies), and Results (Individual, Team, and Organizational). In the 17 studies they reviewed (10 of which were included in Theeboom et al.'s study) they were only able to test for Affective ($g = .51$), Skill based ($g = .28$) and Individual-level results outcomes ($g = 1.24$), with an overall effect size of $g = .36$ (moderate effect). They found that certain moderators had an effect as well. Internal coaches had more impact than external coaches, and (VERY SURPRISINGLY) the use of 360 feedback resulted in smaller positive effects. But how the coaching was delivered (face-to-face, phone, e-coaching, or some blended version) had no effect, nor did the number of sessions or the overall length of coaching.

Sonesh et al. (2015) Article:

This meta-analysis was based on 24 studies but only 2 of which were reported by Theeboom et al. and 1 by Jones et al.! To be included the study had to deal with leadership, business, or executive coaching (however, they reported a number of studies about MBA and undergraduate students). Studies that explored life, managerial, or peer coaching were excluded. The findings suggest that coaching has a stronger effect on eliciting relationship outcomes with the coachee ($g = .32$) than goal-attainment outcomes ($g = .11$). Of the goal attainment outcomes there was a stronger effect for behavioral outcomes ($g = .19$) as opposed to work related attitude change ($g = .18$) or personal attitude change ($g = .07$). They found greater effect ($g = 1.0$) for undergraduate student coachees than for executive coachees ($g = .10$) and they did not find any effect of study design (within subject vs between subjects) unlike Theeboom et al. (2014). Some of their findings are hard to interpret and therefore suspect. For example, they say that coaches with a background that has a mix of psychology and non-psychology ($g = .08$) are more effective in producing coachee outcomes than those with a psychology background ($g = 1.41$) or those with a non psychology background ($g = 1.39$). The numbers seem to contradict their statement. They also report that 'Novices ($g = .14$)are as effective as experts ($g = .31$) in achieving coachee goal-attainment outcomes'. It is hard to understand how they draw these conclusions if we interpret the g statistic as indicating the magnitude of the impact, with the higher number meaning greater impact.

Comments on the three studies

All three meta-analyses make a significant contribution to the profession of coaching. They do this by summarizing the key and consistent findings from the research that others have produced. But more than that, they allow us to evaluate the relative impact of coaching on various outcomes. They also allow us to evaluate the relative impact of moderators such as various coach characteristics (background, experience, training), how coaching was done (face to face vs. phone or other medium), use of various diagnostics such as 360's and/or psychometrics, characteristics of the coachee, length of coaching engagement, type of coaching intervention, etc, etc. etc.

Of the three meta-analyses, I found the Theeboom et al., and the Jones et al. articles most useful. Their findings were clearly presented and they identified the studies they used in their meta-analysis in their reference list. Sonesh et al. do not identify which studies they included in their meta-analysis leaving us unable to go to the primary sources to explore details. I also found it unusual that Sonesh et al. referenced, and therefore used, only 2 of Theeboom et al.'s and 1 of Jones et al.'s articles in their meta-analysis. After having difficulty in understanding their interpretation of effect size, this leaves me even more curious.

Having said that, these three articles provide ample evidence that coaching has come of age, and it's Wild West era has been tamed.

References (Please note: All but the Jones et al. (2015) article can be found through the Global ICF Research Portal):

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