
SPECIAL SECTION: TECHNOLOGY AND THE CONSULTING PSYCHOLOGIST

I'M ONLY HUMAN: THE ROLE OF TECHNOLOGY IN COACHING

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Accelerated growth in the use of technology has prompted a tremendous change in working environments over the last decade. As coaching gets implemented against the backdrop of continued technological advancement, an opportunity to understand how technology is being leveraged is presented. We suggest that technology has the potential to impact coaching in 5 specific ways: coach selection, business/process management for the coaching engagement, supplementing face-to-face coaching, replacing face-to-face coaching, and coach/coaching engagement evaluation. Advantages and pitfalls of using technology in coaching are discussed. Opportunities for future research exploring the interaction of coaching and technology are presented.

Keywords: executive coaching, coaching engagement management, coaching management system, telecoaching

Rapid developments in technology over the last decade have not only changed the nature of working environments, but also the norms and expectations of work and the way organizations conduct business. “Always on” technology has altered what it means to go to work. For many, the lines between work and personal time have been blurred, sometimes for better and sometimes for worse. Web conferencing and online meeting systems such as WebEx (Cisco Systems) and GoToMeeting (Citrix) allow employees to work and collaborate remotely, making it easy and convenient to work from home or halfway around the world. Readily available and affordable cloud-based solutions have made work faster, cheaper, and easier to conduct from anywhere, any time. Technology has also changed many facets of the work done by consulting and industrial/organizational (I/O)

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psychologists, including integrated and automated talent management systems, assessment technology and hiring platforms for job selection and placement, and e-learning systems for leadership development.

Current and potential coaching clients are likely accustomed to virtual meetings, remote work relationships, and leveraging technology in lieu of face-to-face interaction. From a client perspective, it seems only reasonable that coaching providers also should be able to effectively leverage the same type of technology. If nothing else, it is unlikely that the use of and reliance on technology will diminish any time in the near future, so coaches who hesitate to embrace the value of technology may quickly become outdated and out of touch. Although the hallmark of traditional coaching is a 1:1 trust-based and development-orientated relationship (Gregory & Levy, 2010), generally conducted face-to-face, this expectation, too, continues to evolve. Already, coaches are evolving their practices beyond face-to-face to include phone coaching, video conferencing, instant message (IM) and text communications, and e-mail (Moreme, 2013; Rossett & Marino, 2005). Rossett and Marino (2005) pointed out many of the benefits of leveraging technology for coaching, noting that it eliminates geographic barriers or access to individuals with specialized expertise, and enables individuals in the even the most remote locations to obtain the 1:1 development support that they need. Technology enabled coaching also can be more cost-effective than face-to-face coaching, eliminating the need for costly travel and time away from the office for the coach.

Our goal in the current article is to contribute to the conversation about the use of technology in coaching and raise some questions about the potential impact of technology replacing face-to-face coaching entirely. We begin by reviewing ways in which technology is currently being used in the coaching space. We then present a framework for how technology might be better integrated into executive coaching engagements, both to better manage and monitor large- and small-scale coaching initiatives and to use technology to enhance the effectiveness of coaching engagements. Implications and recommendations for consulting psychologists with executive coaching practices are addressed along with directions for future research. Our goal in writing this article is to provide coaches and human resources (HR) practitioners who rely on coaching as a strategic development tool with some practical, actionable ways to leverage technology for more effective coaching engagements.

What We Already Know About Technology in Coaching

Technology has already become a regular part of executive coaching with telecoaching and online coaching platforms. Clutterbuck and Hussain (2010) reported that phone coaching is a common practice, with more than half of U.S. coaches surveyed indicating that phone coaching is a regular part of their practice. Executive coaches such as Marshall Goldsmith and Linda Miller, who conduct coaching sessions over the phone and online, have helped to debunk the myth that coaching needs to happen face-to-face to be personalized and effective. Miller suggested that her coaching process, comprised of over-the-phone coaching sessions along with access to online resources including assessments, coaching notes, and assignment and meeting reminders allows participants to “see the progress that’s been made, deepen the learning that occurs during coaching, and think about how to apply concepts more effectively” (as cited in Rossett & Marino, 2005, p. 45). Coaching done entirely through e-mail or IM chat functions may even have one advantage over face-to-face coaching because it creates a record that can be reviewed over the course of the coaching engagement to recognize trends and themes (Rossett & Marino, 2005). In addition, research by Berry, Ashby, Gnilka, and Matheny (2011) demonstrated that distance coaching and mentoring are equally effective as face-to-face coaching and mentoring.

A recent white paper by Moreme (2013) pointed out several advantages to technology enabled coaching. One advantage is access to a large pool of potential coaches. The authors noted that virtual coaching eliminated geographic constraints on finding an effective coach-coachee match, thereby increasing the likelihood that the client would find the coach who best meets his or her needs. A second major advantage is that technology enabled coaching is convenient, flexible, and both time and cost-effective. A virtual coaching relationship can include asynchronous communications, such as e-mails and other modes of communication that can be both sent and answered at the coach’s or

client's convenience. IM, e-mail, and texting make it easier for clients to get immediate feedback or do a quick check-in with a coach, rather than waiting for a monthly face-to-face appointment (Ahrend, Diamond, & Webber, 2010). In sum, technology is already being put to good use to enhance or replace traditional coaching methodologies. In the next section, we present our framework for integrating technology into coaching.

A Framework for Technology in Coaching

Coaching can take a variety of forms, including traditional executive coaching, manager as coach (aka employee coaching), and life coaching. For the purposes of this article, we focus on executive coaching, according to Kilburg's widely referenced definition:

A helping relationship formed between a client who has managerial authority and responsibility in an organization and a consultant who uses a wide variety of behavioral techniques and methods to assist the client to achieve a mutually identified set of goals to improve his or her professional performance and personal satisfaction and consequently to improve the effectiveness of the client's organization within a formally defined coaching agreement. (Kilburg, 2000, p. 65)

Executive coaching is distinctive from managerial coaching in that it involves a professional coach rather than a leader using skills and competencies to coach a direct report. Executive coaching traditionally involves a coach from outside the organization, though there are some professionally trained executive coaches who also have HR/OD (organizational development) positions within organizations and participate in formal coaching engagements with leaders in the same organization. Executive coaching also is usually contracted through the organization, which generally means that development goals are connected to organizational strategies and outcomes, the engagement is funded by the organization, and typically takes place over 6 to 12 months.

Despite the widespread use of coaching as a developmental activity in organizations, there is limited empirical evidence to support best practices for structuring executive coaching engagements. Liljenstrand and Nebeker (2008) created a five stage coaching model based on narratives collected from coaches. The five stages are (a) setting the foundation by defining the context, establishing the contract, and building a working alliance; (b) assessing the individual; (c) strategizing the engagement and developing a plan based on assessment feedback and goals; (d) implementing the plan; (e) and in some cases, evaluating the intervention and reassessing the initial target areas. These stages seem to be consistent across coaching engagements and programs, but there is no evidence to support the effectiveness of its use. In some cases the steps are not followed linearly. For example, evaluation can occur at various points throughout the engagement and not just at the end.

In the pages that follow, we present a framework (see Figure 1) for how technology can fit into this coaching process. We suggest that coaching can benefit from increased use of technology in five specific ways: coach selection, business/process management for the coaching engagement, supplementing face-to-face coaching, replacing face-to-face coaching, and coach/coaching engagement evaluation.



Figure 1. A model of where in the coaching process technology can add value.

Coach Selection

Matching a coachee with the right coach is both an art and a science. The ultimate goal of the coach selection process is to set both the coachee and the coach up for success. The coach selection process can vary widely across organizations, and it is in many cases constrained by having a finite pool of available coaches. There are a number of logistical variables used as part of the coach selection process, including coach and coachee geographic location, the coach's knowledge of the client's industry, the extent (years) of the coach's experience, and the coach's experience and certifications with specific assessments. In practice, coachees may simply be presented with biographies or personal statements from two to three coaches, and permitted to select their coach from those who have been vetted or preselected by a coaching program lead or HR manager.

The matching process can, in some cases, be more elaborate and include a number of other variables such as coach ratings based on previous coaching engagements, personality characteristics of both coach and coachee, and shared interests or experiences. The executive coaching literature contains a number of factors that have been shown to relate to coaching outcomes. These include personality characteristics of coach and coachee, coaching techniques, relationship quality, and coachee self-efficacy (Baron & Morin, 2009; de Haan, Duckworth, Birch, & Jones, 2013). Consistent with previous research, de Haan and colleagues (2013) found that the quality of the coaching relationship is one of the strongest predictors of coaching outcomes. They also found personality characteristics were not a reliable predictor of coaching outcomes, which was inconsistent with previous research by Scoular and Linley (2006), who found personality characteristics to be predictive of coaching outcomes. Coach selection research is still in its infancy, and the use of technology in coaching management presents a unique opportunity to leverage large subsets of data to identify factors that predict coaching success.

Coaching management technologies also can potentially aid in coach selection by using advanced algorithms to match coaches and coachees based on variables that prove to predict success.

Business Management

Managing coaching can be a complex and laborious process for an organization without access to the appropriate coaching management tools. The coaching process includes a number of different constituencies, all with a different set of roles, needs, and expectations for the coaching process. On the one hand there are the organizations that purchase coaching services from coaches and coaching providers in addition to, in many cases, managing an internal coach cadre. These organizations are primarily concerned with tracking and monitoring coaching to ensure a clear understanding of its value and impact. In addition, they need to enforce a set of vendor management processes to avoid rogue spending on coaching. Without a centralized platform to manage executive coaching, the talent management function may struggle to standardize the organization's use of coaching and ensure consistency and quality across coaching engagements. On the other hand, coaches and coaching providers also have to keep track of and monitor coaching engagements for the purpose of running their business and to comply with the ever-increasing reporting requirements of their client organizations. In addition, depending on the organization, coachees will have a varying degree of involvement in the coaching process outside of their regular coaching sessions. In particular, coachees can take an active role in the coach matching process, actively schedule sessions, keep track of their goals, and even share their development plan with key stakeholders.

There are a number of technology platforms in the market that help organizations, coaching providers, and coaches manage executive coaching programs and engagements. These platforms are often referred to as coaching management systems (CMS). A well-architected CMS serves two overarching purposes: (1) to enhance operational efficiency and (2) to enhance the impact and value of coaching for both the coachee and the organization. The former is achieved through features such as coach cadre management that allows organizations to manage their pool of available internal and external coaches, to automate the evaluation process, and to have a centralized tool to schedule coaching sessions. Such features allow the individuals in charge of coaching operations to automate

most of the processes required to manage coaching programs or multiple engagements. The latter is achieved through features such as goal planning that allow coaches and coachees to keep track of their goals, notes, and any other resources that aid in the creation and use of a development plan. From an organizational perspective, providing a set of integrated tools to aid in development planning within the coaching process allows for a better understanding of the issues people deal with within coaching engagements, which can therefore be extrapolated to calculate return on investment (ROI) and other important measures related to coaching outcomes. CoachLogix (www.coachlogix.com) is an example of a CMS that provides an integrated technology platform to manage all of the disparate executive coaching processes highlighted in Figure 1. In addition to facilitating the management of coaching initiatives, CoachLogix is built as a network so that coaching buyers (i.e., enterprises), coaching vendors (i.e., coaches and coaching providers), and content publishers (e.g., CPP; www.cpp.com) can interact to provide a more cohesive and efficient coaching experience. There are a number of other coaching management solutions that focus exclusively either on helping coaches manage their own practice (e.g., CoachesConsole; <https://coachesconsole.com/>), or helping enterprises and coaching providers manage engagements and programs (e.g., CoachingDirector; <http://coachingdirector.com/>).

An advantage of leveraging a technology platform to run coaching is the centralization of the coaching practice in organizations. The emergence of the talent management function in the early 2000s, coupled with the formalization of coaching as a development tool in organizations today, has led to the need of centralizing the coaching practice in organizations. A centralized coaching practice in an organization entails a clear process for approving coaches that can be deployed with executives, establishing a consistent approach to coaching, as well as establishing clear expectations for coaching outcomes. This is important because much of the coaching in organizations is purchased at the business unit level, which makes it difficult for the talent management function to control without the use of a technology platform that is required for managing all coaching engagements within an organization.

Technology as a Supplement to Coaching

Technology has much to offer as a supplement to traditional face-to-face coaching engagements. Many forms of virtual or technology enabled coaching are currently being used to supplement and even replace traditional coaching. For instance, many coaches already use e-mail and texting to follow up with or have quick check-ins with their clients. Other coaches use online scheduling systems that allow clients to see their available appointment times and schedule their next session quickly and easily through the online system. Coaches incorporate a wide variety of other technology based tools and resources, such as using online assessments or sending clients web-based articles or on-demand learning videos, such as TED talks or YouTube videos, that are relevant to their needs or interests. E-coaching has been used successfully to supplement more traditional learning and development activities. A study by Wang and Wentling (2001) found that e-coaching used as a supplement to a 3-week training program led to significantly higher transfer of training. Another study found that a computer-based coaching program helped participants to better define their career goals, set work–life balance objectives, and establish priorities (Cornelius, Schumann, & Boos, 2009). After establishing initial goals, participants met with coaches via an online chat room. Follow-up evaluation 3 months later revealed significant improvements in participants' work–life balance and management of priorities.

Other tools, such as PDRI/CEB's DevelopmentCoach (www.pdri.com) rely on a virtual coach to lead users through establishing development goals, identifying appropriate development activities, and tracking and evaluating progress on development. Such automated virtual coaches enable organizations to provide coaching resources and opportunities broadly to employees at a variety of levels, roles, and geographies at a fraction of the cost of traditional face-to-face coaching. Likewise, the Institute of Creative Technologies at the University of Southern California (<http://ict.usc.edu/>) has developed SimCoach (<http://ict.usc.edu/prototypes/simcoach/>), which they describe as a “virtual human support guide” for military personnel and their families. When witnessed in action, SimCoach is essentially a virtual coach or counselor that can actively engage with clients, asking

open-ended and thought-provoking questions and leading clients through a series of assessments and other exercises. SimCoach has been used to build leadership skills, promote STEM education, facilitate rehabilitation efforts, and build both communication skills and cultural awareness, among other things. Not unlike other virtual coaching tools, both DevelopmentCoach and SimCoach are advantageous because of their reach and accessibility, but their impact likely does not match that of a human coach. These technologies will help organizations offer coaching and high-touch development to more employees because of time and costs savings, but more research is needed to understand the ROI and effectiveness of these technologies when used in lieu of a human coach.

In 2013, the Rady School of Management at the University of California (UC) San Diego, in collaboration with Rembisz and Associates launched VirBELA (<http://www.virbela.com/>), an innovative 3-D learning platform, created specifically to increase international collaboration among business students and to provide them with opportunities to work on multinational teams. The platform is web-based with multiple content upload options, collaborative white boards, real-time document sharing, chat, recording capabilities, and even customizable avatars. Such gaming technology may very well have a place in executive coaching in the future. According to Robert Sullivan, dean of the Rady School of Management at UC San Diego (as cited in “UC San Diego Rady School Launches VirBELA,” 2013),

VirBELA provides an opportunity for students to learn about the benefits and challenges of leading distributed multinational teams in a low risk, fun atmosphere. By participating, students will be provided with just-in-time learning, have their performance observed and gain valuable insights with personal coaching.

One advantage of this platform is the ease with which virtual collaborators can share information and interact. However, one challenge that is relevant not only to this technology, but to many others is how effectively and consistently the system works, and how often and how much individuals fully utilize it. The most sophisticated technologies on earth are only as effective as their users allow them to be. In other words, if coaches and coachees (or other users) do not fully leverage technology platforms—including all of the features and in the way they were intended to be used—the impact of the technology on both efficiency and effectiveness is stifled.

David Powell, the assistant director of the Innovation Lab at the Center for Creative Leadership (CCL; www.ccl.org), created LeaderCorps (<http://leadercorps2.ccllabs.org/>), a project designed to record, share, and preserve the stories of leadership from CCL clients, staff, and citizens across the globe. Members can record their own stories of leadership, interview a colleague, coworker, mentor, or other corporate and civic leaders, or record a conversation between two people who work together and who have a joint story of leadership to tell. Such a video library of leadership stories could be used to supplement coaching as ways of challenging thinking and supporting coachee development during the “void” period Ahrend and colleagues (2010) referred to—the period between goal setting and evaluation—when employees are actually doing the work to make behavior changes. The videos also may work in a secondary capacity: They teach the value of sharing, listening, and understanding, something even the best of employees struggle to do while balancing responding immediately to daily “work fires” and also trying to slow down enough to make thoughtful, strategic decisions. As with the other technologies we have discussed, the impact of these tools will only be fully realized when they are actually used by coachees or employees—both often and as intended.

Evaluation

Technology and program evaluation go hand in hand. Computer-based survey tools, such as SurveyMonkey (www.surveymonkey.com) and Qualtrics (www.qualtrics.com) provide quick, easy, and accessible methods for collecting feedback and input from populations large and small. Evaluation is essential for ensuring the quality of coaching. When clients and client organizations provide candid feedback on their experience working with a coach, the coach gains clear insights into what worked well and where there is or was room for improvement in the coaching engagement. Otte, Bangerter, Britsch, and Wuthrich (2014) found that individuals with a preference for systemic

approach to coaching—such as having measurable goals and outcome evaluation—were more likely to believe that technology can facilitate and enhance the coaching process. These authors suggested that coaches and clients who prefer a systemic approach to coaching will be more likely to embrace the use of technology for establishing coaching engagements, monitoring interactions between the coach and client, and tracking goals and task attainment throughout the engagement.

Historically, the evaluation of coaching has focused on process and satisfaction rather than impact or perception of behavior changes of the coachee (Grant, 2014; Lowman, 2005). Typical coaching evaluations are self-report scales that ask about coach competence and enjoyment and overall usefulness of the coaching engagement with questions such as “Rate your level of satisfaction of the coaching engagement” and “Indicate how likely you would be to recommend your coach to another employee in your organization.” Part of the challenge in evaluation of coaching engagements is that, unlike other leadership interventions like programmatic training, the uniqueness of coaching requires that its evaluation is able to focus on the targeted objectives of the coachee.

CCL is currently validating an assessment called the Coaching Evaluation Assessment (CEA; www.ccl.org). Touted as the first of its kind in the market, the CEA will help organizations and individuals determine the impact of their executive coaching engagements. It is an online customizable tool that assesses change resulting from coaching including progress toward goals, behavior change of the leader, and impact of that behavior change at the individual, direct report and group levels. The assessment relies on input from the coach, leader, and other key stakeholders/observers so it essentially serves as a 360 feedback tool around a particular coaching engagement. The unique element of this assessment is that it is able to specifically target and measure behavior change as a result of a coaching engagement but also is standardized enough that one day, organizations will be able to compare across engagements, coaches, and even coaching programs. This is a coach-driven process that requires a level of comfort with the platform technology, as coaches are responsible for setting up the assessment online during the beginning of the coaching engagement, and updating any changes in goals, behavior competencies and outcomes throughout the engagement. If the CEA does what it aims to do, this new assessment will help answer questions such as the following: Do you need a PhD to be a great coach? Do you need particular industry experience to be effective with coachees? How long does a coaching engagement need to be to be effective and impactful? Is virtual coaching as effective as face-to-face coaching?

In our Conclusion section we discuss the tradeoff between efficiency and effectiveness that could be an issue in coaching that replaces many traditional practices with technology. In choosing to replace traditional practices with technology, coaches may want to ask themselves if they are favoring efficiency at the expense of effectiveness, and also what unique value technology is adding to the coaching engagement. Coaches should attend not only to the impact of adding technology to their practice, but also to the consequences of losing face-to-face interactions.

Conclusions

Incorporating smart use of technology into a coaching practice offers many new opportunities for both coaching practitioners and their current and potential clients. However, despite the many advantages of virtual or technology enabled coaching, this practice is not without its challenges. Here, we present several key considerations for incorporating increased use of technology into coaching.

Important Considerations for Incorporating Technology Into Coaching Practice

Efficiency versus effectiveness. One important question to ask in any virtual coaching engagement is whether effectiveness is being compromised for the sake of efficiency. In other words, the convenience and cost effectiveness of virtual coaching may be very appealing, but without the appropriate level of client commitment and engagement in the session, the coaching engagement will not be set up for success. Engagement may be stifled or enhanced by both the coach and client’s

level of proficiency with their chosen technology. For example, if a coach–client pair opt to use Skype for their virtual sessions, but lack a full understanding of and comfort level with this technology, they may struggle to be fully present and engaged in their sessions. In fact, [Otte and colleagues \(2014\)](#) found a significant relationship between technology self-efficacy and beliefs that technology can enhance the coaching process. In particular, these authors found that higher feelings of competence with basic computer and Internet-based activities (e.g., using a search engine, sending e-mails) are associated with more positive beliefs about the value of technology for enhancing coaching.

Legal and ethical concerns. For years, coaching as a practice has been criticized for a lack of oversight and standardization. Although coach certification programs have had a significant impact on the rigor and professionalism of the field, some aspects of the “wild west” ([Sherman & Freas, 2004](#)) of coaching remain. Incorporating technology more heavily into coaching practice introduces new concerns—such as security and cross-state legislation issues—that have recently been the subject of concern and even controversy for many licensed psychologists ([DeAngelis, 2012](#)).

Currently, there are no laws or regulations that require licensing of coaches. However, existing laws that license psychologists have the potential to create barriers to practice in some states. Because the 10th amendment of the [Constitution of the United States](#) gives licensing to individual states, laws and regulations differ greatly across these jurisdictions. Some states have begun to create laws that limit telepractice by psychologists who are not licensed in its jurisdiction. If executive coaching were to be included in such regulations, this could create serious problems. Although there are current efforts to improve in-person and technological mobility for psychologists who practice across state lines, existing laws and regulations have not kept up with the realities of 21st century practice.

Context. Another important consideration to using technology is the tendency to react, rather than provide a thoughtful response. Text messages, IMs, and e-mails enable immediate responses that might not necessarily be the best responses. In addition, the use of these technologies can allow for misinterpretations of tone or emotion ([Moreme, 2013](#)). Lacking emotional context in text-based communications may lead to misunderstandings or less effective interactions. As in traditional face-to-face coaching engagements, technology enabled coaching still demands a few critical success factors, such as the basic level of effectiveness and motivation of the coach, the client’s openness or receptivity to coaching, and the quality of the relationship established between the coach and client ([Rossett & Marino, 2005](#)). In addition, virtual or technology enabled coaching simply may not be appropriate for everyone—coaches and clients included—so the use of technology as either a supplement to or replacement for face-to-face interaction should be carefully discussed at the onset of any new coaching engagement. For coaches or clients who have concerns about missing out on the relationship and rapport-building opportunities of face-to-face interactions, virtual coaching engagements could “kick off” with one face-to-face session to lay that important foundation and establish a personal connection ([Rossett & Marino, 2005](#)).

Questions to Consider

The framework we present in this paper can be used by coaches or coaching program managers to think about how they can further infuse technology into their practice. In addition, we strongly encourage researchers to use this framework and the ideas presented in this paper to inform new research on the impact of technology on coaching practices. We believe that research should particularly target three key questions regarding the use of technology to replace or enhance traditional coaching engagements.

1. Does the quality of the coaching experience suffer if technology is used to replace face-to-face coaching sessions entirely? In other words, rather than simply focusing on the addition of technology, is the absence of face-to-face interaction a detriment to the quality of coaching and important client outcomes?

2. We know that the relationship between coach and coachee is critical to the success of the coaching engagement. Can coach–coachees pairs cultivate an equally effective coaching relationship virtually as they can in person?
3. Do technology platforms (Skype, IM, etc.) present confidentiality or data security concerns? In other words, are there risks of others intentionally or unintentionally accessing coaching records, conversations, and so forth that are presumed to be private and confidential?

Certainly, dozens of other questions remain to be answered about the increasing use of technology in coaching, but we believe that these three questions are essential for getting a better understanding of the efficacy of technology based coaching. We believe that technology—when used appropriately—has a lot of promise for enhancing coaching practices, particularly coach selection, business/process management for the coaching engagement, supplementing face-to-face coaching, replacing face-to-face coaching, and coach/coaching engagement evaluation. We encourage coaching researchers and practitioners to contribute to our understanding of where and how technology best complements traditional coaching, as well as where it could lead to potential pitfalls.

References

- Ahrend, G., Diamond, F., & Webber, P. G. (2010). Virtual coaching: Using technology to boost performance. *Chief Learning Officer*, 9, 44–47. Available at [http://www.cedma-europe.org/newsletter%20articles/Clomedia/Virtual%20Coaching%20-%20Using%20Technology%20to%20Boost%20Performance%20\(Jul%202010\).pdf](http://www.cedma-europe.org/newsletter%20articles/Clomedia/Virtual%20Coaching%20-%20Using%20Technology%20to%20Boost%20Performance%20(Jul%202010).pdf)
- Baron, L., & Morin, L. (2009). The coach–coachee relationship in executive coaching: A field study. *Human Resource Development Quarterly*, 20, 85–106. <http://dx.doi.org/10.1002/hrdq.20009>
- Berry, R. M., Ashby, J. S., Gnilka, P. B., & Matheny, K. B. (2011). A comparison of face-to-face and distance coaching practices: Coaches' perceptions of the role of working alliance in problem resolution. *Consulting Psychology Journal: Practice and Research*, 63, 243–253. <http://dx.doi.org/10.1037/a0026735>
- Clutterbuck, D., & Hussain, Z. (2010). *Virtual coach, virtual mentor*. Charlotte, NC: Information Age.
- Constitution of the United States, Amendment 10.
- Cornelius, C., Schumann, G., & Boos, M. (2009). Time and goal-management for junior researchers: Evaluation of online coaching. *Organisationsberatung, Supervision, Coaching*, 16, 54–65.
- DeAngelis, T. (2012). Practicing distance therapy legally, and ethically. *APA Monitor on Psychology*, 43, 52.
- De Haan, E., Duckworth, A., Birch, D., & Jones, C. (2013). Executive coaching outcome research: The contribution of common factors such as relationship, personality match, and self-efficacy. *Consulting Psychology Journal: Practice and Research*, 65, 40–57. <http://dx.doi.org/10.1037/a0031635>
- Grant, A. M. (2014). The efficacy of executive coaching in times of organisational change. *Journal of Change Management*, 14, 258–280. <http://dx.doi.org/10.1080/14697017.2013.805159>
- Gregory, J. B., & Levy, P. E. (2010). Employee coaching relationships: Enhancing construct clarity and measurement. *Coaching: An International Journal of Theory, Research and Practice*, 3, 109–123.
- Kilburg, R. R. (1996). Toward a conceptual understanding and definition of executive coaching. *Consulting Psychology Journal: Practice and Research*, 48, 134–144. <http://dx.doi.org/10.1037/1061-4087.48.2.134>
- Kilburg, R. R. (2000). *Executive coaching: Developing managerial wisdom in a world of chaos*. Washington, DC: American Psychological Association. <http://dx.doi.org/10.1037/10355-000>
- Liljenstrand, A. M., & Nebeker, D. M. (2008). Coaching services: A look at coaches, clients, and practices. *Consulting Psychology Journal: Practice and Research*, 60, 57–77. <http://dx.doi.org/10.1037/1065-9293.60.1.57>
- Lowman, R. L. (2005). Executive coaching: The road to dodoville needs paving with more than good assumptions. *Consulting Psychology Journal: Practice and Research*, 57, 90–96. <http://dx.doi.org/10.1037/1065-9293.57.1.90>
- Moreme. (2013). *White paper on virtual coaching and mentoring: The value of coaching and mentoring over distance*. Copenhagen, Denmark: Author.
- Otte, S., Bangerter, A., Britsch, M., & Wuthrich, U. (2014). Attitudes of coaches towards the use of computer-based technology in coaching. *Consulting Psychology Journal: Practice and Research*, 66, 38–52. <http://dx.doi.org/10.1037/a0035592>
- Riddle, D. (2011). *Carpentry or poetry? Measuring coaching impact on individuals and organizations*. Greensboro, NC: Center for Creative Leadership.

- Rossett, A., & Marino, G. (2005). If coaching is good, then e-coaching is . . . *Training & Development*, 59, 46–49.
- Scoular, A., & Linley, P. A. (2006). Coaching, goal-setting and personality type: What matters? *The Coaching Psychologist*, 2, 9–11.
- Sherman, S., & Freas, A. (2004). The wild west of executive coaching. *Harvard Business Review*, 82, 82–90, 148. Available at <https://hbr.org/2004/11/the-wild-west-of-executive-coaching>
- UC San Diego Rady School launches VirBELA, a virtual world for business education. (2013, September 4). *Marketwired*. Available at <http://www.marketwired.com/press-release/uc-san-diego-rady-school-launches-virbela-a-virtual-world-for-business-education-1827102.htm>
- Wang, L., & Wentling, T. L. (2001, February–March). *The relationship between distance coaching and the transfer of training*. Paper presented at the Academy of Human Resource Development, Tulsa, OK.

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