“The scientific mind does not so much provide the right answers as ask the right questions”

– Claude Lévi-Strauss

This chapter is partially based on:

In 2004, Harvard Business Review published an article in which the field of coaching was compared to the Wild West of yesteryear, and in which the field was described as “chaotic, largely unexplored, and fraught with risk, yet immensely promising” (Sherman, 2004, p.1). When I started this PhD project in 2011, the situation was not that different. Although the literature on coaching had been growing steadily since the early 2000’s (Passmore & Theeboom, in press), research on coaching was and still is far behind on its popularity in practice.

With the empirical and theoretical work in this dissertation, we aimed to contribute to the development of the coaching research and theory by focusing on two central themes: 1) summative research on the effectiveness of coaching in organizational settings (Chapter 2 and 3) and 2) formative research on the (psychological) processes that underlie effective coaching (Chapter 4 and 5). We approached these themes from different perspectives and embraced a variety of research methodologies. Below, I will first discuss the core findings and theoretical insights from this dissertation in relation to these two central themes. Then, I will review our contributions to the coaching literature and reflect on the limitations of our work and future research opportunities. Finally, I will outline the practical implications for the different stakeholders (coaches, coachees and organizations) of coaching interventions.

The effectiveness of coaching in organizational settings

Although the first two chapters of this dissertation focused on the effectiveness of coaching in organizational settings, the reported studies approached this theme from different perspectives. First, with our meta-analysis (chapter 2), we aimed to provide a quantitative summary of previous studies on the effectiveness of coaching in organizational (and educational) settings. The results showed that coaching can indeed be effectively applied in organizational settings and has positive effects on 5 types of outcomes: performance/skills (e.g., performance ratings), well-being (e.g., stress), coping (e.g., resilience), work-related attitudes (e.g., job satisfaction) and goal-directed self-regulation (e.g., goal-attainment). Further, our results showed that a large number of sessions is not necessarily needed for coaching to have such positive effects (a finding that was replicated by Jones et al., 2015), although a larger number of coaching sessions did result in more robust effects (less heterogeneity in effects). In sum, the results of our meta-analysis indicate that coaching can be effectively applied in organizational and educational settings.

Our meta-analysis, however, also confirmed that the literature on coaching effectiveness is fragmented (Grant, 2013). That is, the wide variety of outcome
The processes that underlie effective coaching

Chapters 4 and 5 of this dissertation focused on uncovering the psychological mechanisms and processes that underlie effective coaching. With our experimental studies (chapter 4), we aimed to investigate the processes that underlie the effectiveness of solution-focused coaching questions. Previous research had shown that solution-focused questions can yield positive effects (e.g., goal-attainment; Grant, 2012b) but did not reveal how such positive outcomes were attained. Our study showed that solution-focused questions (as opposed to problem-focused questions) increase positive affect and enhance a coachee’s cognitive flexibility: the ability to think “out of the box”. Although we did expect PF questions to lead to a drain in attentional resources because PF questions might cause people to ruminate about their problem, the results did not support this expectation.

Whereas our experimental work focused on a specific part of the coaching process (in which the coachee has to come up with his/her own solutions to a problem), our theoretical article (chapter 5) focused on the coaching process as a whole. As coaching is in essence a methodology aimed at facilitating self-directed change, we argued that coaching proceeds via the same stages as other behavioral change processes. Specifically, we argued that coaching generally follows the stages outlined by the
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Trans Theoretical Model of Change (Prochaska & Velicer, 1997) and described the focal aim of coaching during each stage. In the precontemplation stage, the coach can help the coachee to become aware of the need for change. In the contemplation stage, the coach can aim to enhance the coachee’s willingness and perceived ability to change. In the preparation stage, the coach can help the coachee to plan for action. Finally - after the coach has independently made the necessary or desired changes in the action stage - the coach can try to foster the transfer of coaching in the maintenance/termination stage. Based on the literature on behavioral change and self-regulation and previous research on coaching, we suggested that coaches could target “focal competencies” of the coachee during specific stages, to facilitate the transition to the next stage (e.g., mindfulness in the contemplation stage).

Main contributions to the coaching literature

The empirical and theoretical work described in this dissertation contributes to the development of the coaching literature in several ways. First, our research reveals several shortcomings of the current research on coaching and provides important insights for the future conceptualization and measurement of coaching effectiveness. For instance, while the results of our meta-analysis may have raised optimism about the effectiveness of coaching, the literature review that we conducted to find suitable studies for inclusion revealed that the coaching literature is in need of longitudinal studies that focus on the long-term effectiveness of coaching interventions and the use of multiple sources rather than only self-report measures. Further, our concept-mapping study indicates that the input of experienced practitioners is valuable toward developing a comprehensive set of coaching effectiveness measures. In particular, two “new” coaching success indicators (CSI) that were identified by the practitioners seem valuable additions to the literature: autonomy/responsibility (feeling ownership of a problem), and metacommunication (being able to verbalize and explain one’s own change process). The first is relevant for sustained motivation (Joo et al., 2011) and the latter is relevant for deep-level learning (van Blankenstein et al., 2011).

Another contribution of our work is that it shows that broader psychological theories (e.g., on creativity and behavioral change) are needed for a better understanding of how coaching works. That is, by unraveling psychological mechanisms that underlie effective coaching, coaching practitioners are better able to develop and utilize interventions that “push the right button at the right time”. In this sense, I hope that our work shows that good (psychological) theories are indeed very practical (Lewin, 1951). In addition, the use of strong and well-researched theoretical (psychological) work is crucial for the development of theory and research on coaching. Without theoretical
frameworks to guide and organize future research efforts, building a coherent and cumulative knowledge base may be near to impossible and the literature will remain as “scattered and fragmented” as it was (Grant, 2013).

Finally, the research in this dissertation illustrates that the coaching literature could benefit from the incorporation of a wide variety of quantitative and qualitative research methodologies. Specifically, we used two research methodologies that are relatively new in the coaching literature and could be valuable additions to the literature. First, the concept-mapping procedures that we used proved to be useful to capture what is in the mind of coaching practitioners and could be equally useful in capturing what is in the mind of other stakeholders of the coaching process. For example, insight into what the coachee and/or coachee’s organization expect from coaching services (e.g., in terms of its outcomes) may help coaches to align their interventions with those expectations. Additionally, concept-mapping procedures could also be used for more formative purposes such as asking coachees what – in their view – makes coaching effective.

Second, our experimental studies are (to our knowledge) among the first studies to bring coaching “into the lab”. This enabled us to single out the effects of specific coaching questions while minimizing the influence of factors that are known to impact the effectiveness of coaching interventions and are hard to untangle in less controlled research environments (e.g., the relationship between the coach and the coachee; de Haan, Duckworth, Birch, & Jones, 2013). Isolating the effects of specific factors within the coaching process is crucial for investigating causal relationships, and thus for uncovering the psychological mechanisms that underlie effective coaching. While we recognize the limitations of our experimental approach (e.g., in terms of generalizability beyond our lab-setting, see Chapter 4 for an elaborate discussion), it is important to point out here that the fact that we obtained results that are largely in line with our theory in a rather artificial setting is quite remarkable in itself. Perhaps these results would be even stronger if the questions we examined would be part of more realistic coaching sessions (see Mook, 1983 for a discussion). Moreover, it is important to note here that that whether research findings generalize beyond the context or population sampled in a specific study (be it a laboratory or a field study) is ultimately an empirical question (Berkowitz & Donnerstein, 1982).

**Limitations and future research**

Besides its strengths and contributions, we recognize that the empirical and theoretical work in each of the chapters has its own limitations. Although these limitations and their implications have been previously discussed in the respective
chapters, I will give a few examples here. First, the results of our meta-analysis are based on studies that almost exclusively used self-report measures that were administered directly after the last coaching session. Among practitioners, these types of evaluation measures are often called “happy sheets” because they may be more likely to reflect the initial enthusiasm about the coaching session and the coach rather than the durable positive effects of a coaching intervention. Likewise, while our experimental studies show that solution-focused coaching questions can enhance a coachee’s ability to come up with creative solutions to their problems by influencing their cognitive flexibility, we realize that cognitive flexibility does not guarantee that coachees will actually come up with solutions that are realistic and/or that these solutions will be implemented in the coachee’s life. In other words, both the conclusions of our meta-analysis and the experimental studies are limited in the sense that they only capture the short-term effects of coaching.

The major limitation of our concept-mapping study is that the results may not be generalizable to situations outside the Dutch coaching context. For example, the finding that coaches are mainly concerned with individual level outcomes related to well-being rather than organizational outcomes related to functioning might be typical for the Dutch/European context in which coaching is known to be rooted in the humanistic tradition and is very psychologically oriented (Kets de Vries, 2011). Finally, we recognize that our temporal model of coaching is truly a starting point and that our propositions need empirical testing.

In sum, there are several limitations that need to be addressed in future research and there are some important themes that beg the attention of future research. First, as coaching seems to become common practice in contemporary organizations, it is important to investigate the way in which coaching can supplement and fit into existing human resource development (HRD) systems (e.g., training and mentoring programs). Second, besides the traditional notion of coaching as an activity performed by professionally trained external coaches, coaching is increasingly seen as a specific facilitative (rather than directive) leadership style for managers (managerial coaching).

The intergration of coaching in HRD systems. Currently, coaching is mostly studied as a stand-alone intervention. From an academic perspective, this approach is understandable. As mentioned above, studying coaching as an isolated intervention (as we did in chapter 4) reduces the chance that effects can be ascribed to factors other than coaching and such clean and “context-free” research is often preferred by academics and more likely to get published in high-impact academic journals (Johns, 2006). However, such an approach does not necessarily align with contemporary HRD practices. In most (large) organizations, human resource development interventions
(such as coaching, mentoring and training) are embedded in broader strategic HRD systems that are aligned with the organization’s mission and goals. For example, a typical leadership development program could include training programs to develop specific skills (e.g., project-management), courses aimed at developing specific knowledge (e.g., about the product or service that the organization delivers) and individual coaching to cope with the daily challenges that young leaders meet in competitive and highly dynamic working environments.

While fundamental (experimental) and context-free research is needed to broaden our understanding of the causal mechanisms underlying effective coaching, a more holistic and integrative approach is needed to understand coaching as part of an integrated HRD system. In this regard, one topic of future research that seems especially promising is the potential synergy between training and coaching. For example, research has shown that eight weeks of coaching following a one-day training program helped to increase productivity of managers by 88% as compared to 22% by just the one day of training (Olivero, Bane, & Kopelman, 1997). Moreover, mindfulness training in combination with cognitive behavioral solution-focused coaching yielded stronger positive effects on (health-related) goal-attainment than mindfulness training or coaching alone (Spence et al., 2008).

These results are hardly surprising. First, coaching conversations allow coachees to actively reflect on their training experiences. As described in chapter 5, theory and research in the area of learning and education indicate that reflection fosters sustainable and deep-level learning (Burke & Linley 2007; Mann, Gordon, & MacLeod, 2009). Second, coaching conversations could help coachees to discuss strategies for incorporating what has been learned into their everyday life. Specifically, coaches could help coachees to formulate attainable goals, and to form implementation intentions (Gollwitzer & Sheeran, 2006, see also chapter 5). That is, coaching might help coachees to identify potential obstacles to goal-striving and strategies to deal with those obstacles. In sum, it could be fruitful to investigate how coaching fits into and could supplement existing HRD strategies and systems in order to attain sustainable positive results.

**Managerial coaching.** Another topic that needs to be addressed in future research is managerial coaching. In the literature, managerial coaching is often contrasted with more traditional “command and control” leadership, and refers to a management style that is facilitative, collaborative, and empowering (Ellinger & Bostrom, 1999). Managerial coaching has been related to other facilitative leadership concepts such as transformational leadership behaviors (Bass & Steidlmeier, 1999; Mühlberger & Traut-Mattausch, 2015).
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The demand for programs that help managers to develop a coaching leadership style is increasing. However, research on managerial coaching is scarce. Some initial findings suggest that leaders can indeed be effective coaches. For example, managerial coaching seems to be positively related to role clarity, work satisfaction, commitment and (self-rated) performance of employees (Kim, Egan, Kim, & Kim, 2013). Likewise, it has been found that intermediate levels (rather than exhaustive application) of coaching interventions by managers are positively related job performance, commitment, and organizational citizenship behaviors (Ellinger, Ellinger, & Keller, 2003).

Interestingly, a meta-analysis found that managerial coaching had a stronger overall effect (aggregated over all outcomes) than external coaching (Jones et al., 2015). While these results should be interpreted with caution because only three studies in the analysis made use of internal coaches, they do suggest that there can be substantial differences between internal and external coaching. These differences might be explained by the fact that the manager-employee relationship differs significantly from the (external) coach-coachee relationship in terms of power and status (Mühlberger & Traut-Mattausch, 2015). That is, these relationships might impact the issues that can be addressed by external and internal coaching. For example, a coachee might be willing to share his/her doubts about the quality of his manager with an external coach, but not with the manager him/herself. On the other hand, an internal coach might be much more able to point out the steps the coachee should take in order to get promoted because he or she (the coach) is familiar with the political climate in the organization (Strumpf, 2002). In future research, it would be interesting to investigate how managerial coaching can complement external coaching services.

Practical implications

The research and theoretical work in this dissertation has implications for all stakeholders of coaching interventions: coaches, coachees, and the organizations that invest in coaching services (Ely et al., 2010). For instance, the results of our meta-analysis show that seeking the assistance of a coach can help individuals to deal with a wide variety of issues. Specifically, seeking the assistance of a coach can positively impact a coachee’s performance/skills, well-being, coping, work attitudes, and goal-directed self-regulation. This is good news for both coachees and their organizations.

Another finding that is interesting for both coachees and organizations is that coaches seem to be inclined to focus on the coachee’s well-being (chapter 3). However, as organizations are usually the ones to invest their financial resources, it
can be expected that they are particularly interested in the degree to which coaching impacts outcomes that directly benefit the organization (e.g., increased functioning). In other words, the needs and priorities of coaches, coachees and the coachee’s organizations may not always align. Our research confirms that in the contracting stage, it is crucial to find a balance between the individual's and the organization's needs and to manage the expectation of all parties involved in the coaching process (Lee, 2013).

Another, more indirect implication of our concept-mapping study is that collaboration between researchers is desirable if our goal is to advance coaching effectiveness research. However, such collaboration does not only require researchers to be sensitive to the needs of practitioners, but it also requires practitioners to be sensitive to the needs of researchers. Over the years, countless practitioners have offered me to help me with data-collection for my research. Unfortunately, many of them lose interest as soon as I explain that my aim as a researcher is not to “prove” that interventions work and that I will need resources (e.g., time and financial resources), a control group and last but not least, a coherent theoretical rationale in order to conduct meaningful research that can truly deepen our understanding of coaching. In my opinion, a fruitful way to move forward could be to create more opportunities and platforms (e.g., events and conferences) for coaching researchers and practitioners to engage in constructive conversations that can establish a foundation for collaboration. That is, conversations that are open, allow for a multitude of perspectives and help to explore the best ways to move forward.

The results of our experimental studies show that a solution-focused approach to coaching can be effectively applied to enhance the creative problem solving capabilities of coachees. That is, rather than asking questions that help a coachee to search for the root-cause of a problem, it seems more useful to ask questions that help a coachee to search for the root-causes of a solution. Solution-focused questions may be especially suited for this purpose because they can help coachees to temporarily break loose from the problematic situation and think about their problems in creative ways. In sum, our results show that solution-focused techniques can be a useful addition to coaches’ repertoire of interventions.

Finally, our theoretical framework could help both coaches and coachees to approach coaching as a change process. The framework could help coachees to recognize where they are in their own change processes and as a result, to better communicate their specific needs and goals for the coaching process to their coach and/or organization. For example, a coachee that is in the contemplation stage may seek for a coach to build confidence that change is possible (self-efficacy), while
a coachee in the preparation stage may seek for a coach to help him/her to make specific plans. Likewise, the framework may help coaches to align their interventions with the specific needs of coachees during each stage. In the contemplation stage, a coach could ask a coachee to tell success stories in order to build their self-efficacy, while interventions aimed at goal-setting and forming implementation intentions could be used during the preparation stage.

Concluding remarks
I started this chapter with a quote that characterized the field of coaching as the Wild West, and described it as “chaotic, largely unexplored, and fraught with risk, yet immensely promising” (Sherman, 2004, p.1). I believe that this dissertation confirms that coaching is indeed promising. As noted in the introduction, we live in a time where change is the only constant and it is encouraging to see that workplace coaching can effectively be used to facilitate change and adaptation processes. Further, I hope that the empirical and theoretical work in this dissertation has made the field a bit less chaotic by outlining psychological theories that could serve as organizing frameworks and inspire future research and practice. Most importantly however, I hope that this dissertation helps to set waypoints for future exploration by formulating the questions and issues that need to be addressed. After all, after being engaged in science and coaching in the past 5 years, I now realize that both science and coaching alike are more about asking the right questions than providing the right answers. Therefore, I hope that my dissertation is a significant step in formulating questions that can guide the further development of the coaching literature and ultimately the development of an evidence base for coaching.