What Do Coaches Actually Do?

A Context-Sensitive Approach to Workplace Coaching

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Abstract

This cumulative dissertation is based on three distinct studies that have been published in peer-reviewed journals or are submitted for publication. The three studies investigate different facets of coach behavior and contextual factors relevant to gain a better, more differentiated understanding of workplace coaching.

Against the background that research on coaching outcomes has advanced notably but influencing factors have received considerably less attention, this dissertation aims to fill the research gaps outlined by recent works, especially concerning coach behavior and contextual factors. In order to broaden the perspective on contextual factors relevant for workplace coaching, the focus is on coach behavior in two distinct types of context: the beginning of coaching processes (i.e., the initial exploration) and coaching directed at entrepreneurs (i.e., entrepreneurial coaching; EC). Coach behavior during the initial exploration is suggested to be decisive for coaching success but research on what coaches actually do has been largely neglected. Coaching in the context of entrepreneurship is increasingly practiced and research is called for. However, little is known on the characteristics of EC and substantial confusion exists between coaching and related formats in this particular context.

The goals of this dissertation are thus twofold. First, it seeks to explore and systematize coach behavior in these two kinds of contexts, that is, during the beginning the initial exploration and in EC. Second, it aims to evaluate and comprehensively characterize EC in order to extract its specifics. Considering the current state of research that can be considered nascent in terms of coach behavior 1) during the initial exploration and 2) when coaching entrepreneurs, an explorative research approach was chosen for both study 1 and study 2, using in-depth semi-structured interviews and subsequently qualitative content analysis. Building on the findings of study 2, a Systematic Literature Review (SLR) was conducted in study 3 in order

to draw a holistic picture of EC where the research landscape was formerly characterized by several scattered studies lacking integration.

Analyzing the interview data in study 1 and study 2 yielded frameworks systematizing coach behavior along several dimensions. Coaches' roles were identified for entrepreneurial coaching in study 2 allowing to characterize EC as a sub-format of workplace coaching and to position it with respect to related formats. The SLR in study 3 corroborated findings of study 2, teased out distinguishing features of EC and revealed important directions for future research.

Taken together, the findings of the three studies point to potential differences in coach behavior depending on the respective context and thus hint at its relevance for coaching success. This dissertation contributes to the literature on coach behavior, contextual factors, and entrepreneurship and advances coaching research several steps forward on its journey to move away from a "one size fits all" approach.

Zusammenfassung

Diese kumulative Dissertation basiert auf drei verschiedenen Studien, die in englischsprachigen Fachzeitschriften mit Peer-Review-Verfahren veröffentlicht oder zur Veröffentlichung eingereicht wurden. Die drei Studien untersuchen verschiedene Facetten des Coach-Verhaltens und kontextueller Faktoren, die für ein besseres und differenzierteres Verständnis von *Workplace Coaching* relevant sind.

Vor dem Hintergrund einer Forschungslandschaft, in welcher die Forschung zu Wirkfaktoren von Coaching bedeutend weniger Aufmerksamkeit erhalten hat als die Wirkungsforschung, widmet sich diese Dissertation dem Verhalten von Coaches sowie Kontextfaktoren als zwei Kategorien möglicher Wirkfaktoren. Um den Blickwinkel auf relevante Kontextfaktoren zu erweitern, liegt der Fokus auf dem Verhalten von Coaches in zwei verschiedenen Arten von Kontext: dem Beginn von Coaching-Prozessen (d.h. der Eingangsdiagnostik) und Coaching für Gründer*innen. Es wird angenommen, dass das Verhalten der Coaches während der Eingangsdiagnostik entscheidend für den Coaching-Erfolg ist. Die Forschung dazu, wie Coaches sich in diesem Kontext tatsächlich verhalten, wurde bislang aber weitgehend vernachlässigt. Coaching im Kontext von Entrepreneurship wird zunehmend praktiziert und der Ruf nach Forschung wird lauter. Allerdings ist wenig über die Charakteristika von Coaching für Gründer*innen bekannt und Coaching und verwandte Formate in diesem speziellen Kontext werden nicht deutlich genug voneinander unterschieden.

Diese Dissertation verfolgt dementsprechend zwei vorrangige Ziele. Erstens soll das Verhalten von Coaches in diesen beiden Kontexten, nämlich während der Eingangsdiagnostik und im Coaching für Gründer*innen, exploriert und systematisiert werden. Zweitens soll das Coaching für Gründer*innen evaluiert und umfassend charakterisiert werden, um dessen Spezifika zu extrahieren. In Anbetracht des bislang wenig fortgeschrittenen Forschungsstandes hinsichtlich des Verhaltens von Coaches 1) während der Eingangsdiagnostik und 2) beim

Coaching von Gründer*innen, wurde sowohl für Studie 1 als auch für Studie 2 ein explorativer Forschungsansatz gewählt, der auf halbstrukturierten Tiefeninterviews und einer anschließenden qualitativen Inhaltsanalyse beruht. Aufbauend auf den Ergebnissen von Studie 2 und hinsichtlich einer Forschungslandschaft, die durch vereinzelte, wenig integrierte Einzelstudien geprägt ist, wurde in Studie 3 ein Systematic Literature Review (SLR) durchgeführt. So soll ein ganzheitliches Bild des Coachings für Gründer*innen entwickelt werden.

Durch die Analyse der Interviewdaten in Studie 1 und Studie 2 konnten Rahmenmodelle entwickelt werden, die das Verhalten der Coaches entlang mehrerer Dimensionen systematisieren und clustern. Die Rollen der Coaches wurden für das Coaching von Gründer*innen in Studie 2 herausgearbeitet. Dies ermöglichte es, Coaching für Gründer*innen als ein Subformat von Workplace Coaching zu charakterisieren und es in Bezug auf verwandte Formate zu positionieren. Das SLR in Studie 3 konnte die Ergebnisse von Studie 2 größtenteils bestätigen, charakterisierende Merkmale aufzeigen und wichtige Hinweise für die zukünftige Forschung geben.

Insgesamt weisen die Ergebnisse der drei Studien auf Unterschiede im Verhalten von Coaches in Abhängigkeit vom jeweiligen Kontext hin und verdeutlichen damit dessen Relevanz für den Erfolg von Coaching. Diese Dissertation leistet einen wichtigen Beitrag zur Forschungsliteratur bezüglich Coach-Verhalten, Kontextfaktoren und Entrepreneurship. Sie bringt die Coaching-Forschung auf ihrem Weg voran, eine weniger globale und stärker kontextbezogene Perspektive einzunehmen.

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List of Abbreviations

EC	Entrepreneurial coaching
QCA	Qualitative Content Analysis
SET	Social Exchange Theory
SLT	Situational Leadership Theory
WPC	Workplace coaching

1. General Introduction

Coaching works! This belief has been increasingly underpinned by empirical evidence in recent years. Researchers have stepped up efforts in order to keep pace with a very fast-growing coaching industry with an estimated global revenue of US$2.849 billion, an increase of 21% compared to 2015 (International Coaching Federation, 2020). Indeed, five meta-analyses provide evidence that coaching is a successful tool for the further development of professionals worldwide (Burt & Talati, 2017; De Meuse et al., 2009; Jones et al., 2016; Sonesh, Coultas, Lacerenza et al., 2015; Theeboom et al., 2014). We can now be relatively confident that coaching induces certain effects – both positive and negative (e.g., De Meuse et al., 2009; Graßmann & Schermuly, 2016; Jones et al., 2016) – and that the working alliance between coaches and coachees is important as an influencing factor (Graßmann et al., 2019).

When a field of research develops, the questions to be asked necessarily change. Although research on coaching outcomes has reached a stage of research that can be called mature, research on influencing factors still has to be considered nascent (Edmondson & McManus, 2007). We still do not know enough about *how* coaching works. In particular, research has largely neglected to study coach behavior and contextual factors (Athanasopoulou & Dopson, 2018; Pandolfi, 2020; Theeboom et al., 2014). However, understanding what coaches actually do during a coaching process and which contextual factors are at play is crucial to more precisely characterize coaching as a social interaction and to do justice to its suggested context-sensitivity (Athanasopoulou & Dopson, 2018).

Regarding research on coach behavior, there are two major shortcomings: First, extant studies investigating specific methods or behavior are mostly isolated and barely relate to each other (e.g., Graßmann & Schermuly, 2020). However, the few existing studies point to the relevance of coach behavior for establishing a high-quality working alliance (Graßmann & Schermuly, 2020) and eventually for coaching success (e.g., Behrendt & Greif, 2018). Second,

research has till now approached coach behavior rather globally, without indicating the contexts that might be relevant for coaches to show specific behaviors (e.g., Bono et al., 2009; Newsom & Dent, 2011).

As for contextual factors, research has thus far paid scant attention to them compared to other research areas (e.g., Pandolfi, 2020). In spite of calls to treat coaching as an organizationally embedded rather than a dyadic intervention, research on the organizational context of coaching is still scarce. Moreover, research on contextual factors does not – to the best of the author's knowledge – go much beyond organizational factors (e.g., supervisory support, organizational culture) and studies oftentimes neglect to consider contextual influences (Athanasopoulou & Dopson, 2018).

Understanding both coach behavior and contextual factors is essential as they both appear to be sources for negative effects on coachees and coachee drop-out (Graßmann & Schermuly, 2016; Schermuly, 2018; Schermuly & Graßmann, 2019). Most notably, coaches' behavior at the beginning of a coaching engagement (e.g., contracting, goal alignment, exploration of coachees' context and assessment) and the coachees' organizational context (e.g., missing support, noticeable interference, obligation to participate) are indicated as being crucial. What coaches do at the beginning of a coaching engagement, such as exploring the suitability of coaching for potential coachees (Grant & Green, 2018), their readiness for coaching (De Haan et al., 2019), and coaching goals (Vandaveer et al., 2016), plays a pivotal role in the coaching's success. In spite of that, to the best of the author's knowledge, there is a lack of empirical research explicitly focusing on coach behavior during this initial phase.

The existing literature points to variations in coaching for different target groups (Schein, 2012; Schreyögg, 2010) and in different phases of the coaching process (Schreyögg, 2017). In addition, initial insights hint at differential effects of coach behavior towards distinct target groups (e.g., Sonesh, Coultas, Marlow et al., 2015). In practice, coaching is established in

diverse contexts and offered to a wide range of occupational groups (Lippmann, 2013; Wegener et al., 2016; Witherspoon & White, 1996). Even the scope of workplace coaching (WPC) is not restricted to managers or executives (e.g., Jones et al., 2016). Whereas practitioner-oriented literature captures the importance of coaching for different target groups and contexts (Berninger-Schäfer, 2018; Böning & Kegel, 2015; Wegener et al., 2016), empirical research and theory development are lagging. Complicating matters further, the coaching industry remains largely unregulated as to the coaches' level of training and regarding criteria for the labeling of "coaching" (e.g., Garvey, 2011; Grant & Green, 2018; Lancer et al., 2016). This is particularly true for coaching in the context of entrepreneurship where confusion exists between coaching and related formats (especially mentoring and consulting) and a clear definition of coaching for entrepreneurs is missing (Brinkley & Le Roux, 2018; Kutzhanova et al., 2009; Müller & Diensberg, 2011). Whereas coaching for entrepreneurs is increasingly demanded and practiced, research is only emerging and a coherent understanding of the field is missing (e.g., Crompton, 2012; Saadaoui & Affess, 2015).

The ultimate aim of this dissertation is to broaden the perspective on contextual factors and to advance research on coach behavior in different contexts. It pursues this goal by exploring and systematizing coach behavior in two particular contexts that have till now been greatly neglected: coaching for entrepreneurs and the beginning of a coaching engagement (i.e., the initial exploration). It comprehensively further characterizes coaching in a particular environment (i.e., entrepreneurial coaching) in order to elaborate on similarities and differences to general WPC. Teasing out the peculiarities of different contexts is deemed an important step on the journey to abandoning a "one size fits all" (Grant & Cavanagh, 2004, p. 2) approach and instead inducing a more differentiated understanding of and micro-perspective on WPC. There is a suggestion that capturing the great diversity of coaching contexts and practices will advance rather than oversimplify the field (Garvey, 2011). By employing qualitative research to

investigate the *how* of coaching processes, namely coach behavior and contextual factors, this dissertation pays attention to the state of research that can still be considered nascent (Edmondson & McManus, 2007) and responds to calls for qualitative research to go beyond case studies and instead concentrate on finding patterns across cases (Athanasopoulou & Dopson, 2018). It complements the qualitative findings by conducting a Systematic Literature Review (SLR) on entrepreneurial coaching in order to grasp this emerging field of research in its entirety and extract distinguishing features.

This dissertation is the first empirical work that systematically explores coaches' behavior during the initial exploration and in coaching for entrepreneurs. It builds on the framework for coaching evaluation (Blackman et al., 2016; Greif, 2013) to fill the outlined research gaps, especially for coach behavior, in hitherto neglected contexts. It refers to the Social Exchange Theory (Blau, 1964; Cropanzano et al., 2017) to discuss the relevance of coach behavior in coaching interactions and draws on the Situational Leadership Theory (Hersey & Chevalier, 2012; Thompson & Vecchio, 2009) to explain that coaches' behavior might vary according to different contexts.

2. Theoretical Background

2.1. A Definition of Workplace Coaching

In the extant research literature on coaching in professional contexts, the term *workplace coaching* (WPC) is often used synonymously with executive coaching (e.g., De Haan, 2019; Sonesh, Coultas, Lacerenza et al., 2015; Theeboom et al., 2014). Whereas some authors define executive coaching more clearly as a sub-format of WPC (e.g., Berman, 2019; Böning, 2015; Kilburg, 1996) that is directed towards a specific target group, namely executives, WPC remains a rather broad term comprising different organizational contexts, occupational groups, and hierarchical levels. Differentiating it from coaching interventions that are primarily focused on private issues (e.g., life coaching; Grant, 2003), this dissertation is based on the term

workplace coaching that is directed at coachees with professional issues and without psychotherapeutic needs (Grant & Green, 2018). In accordance with definitions commonly used in the extant literature, WPC can be defined as a formal, highly individualized intervention of support and development that is based on a trustful and collaborative one-on-one relationship between a coachee and a professional coach (Bozer & Jones, 2018; Graßmann & Schermuly, 2020; Jones et al., 2016; Smither, 2011) in which coaches help their coachees to engage in self-directed learning and thus to achieve positive professional outcomes (Graßmann & Schermuly, 2020; Kilburg, 1996; Witherspoon & White, 1996). With the stimulation of the coachees' (self-)reflection as a core feature (e.g., Behrendt & Greif, 2018; Bozer & Jones, 2018; Jones et al., 2016) in a collaborative relationship at eye level (e.g., Blackman et al., 2016; Graßmann & Schermuly, 2020; Jones et al., 2016), WPC is rather process-consultation (i.e., non-directive) than expert-consultation (i.e., directive) (Schein, 1990; Schreyögg, 2010). However, it may contain directive elements of expert consultation depending on the coaching phase and situational aspects (Schreyögg, 2010). This definition explicitly excludes coaches with managerial responsibilities for their coachees due to fundamentally different power dynamics and dependencies (also referred to as managerial or supervisory coaching; e.g., Bozer & Jones, 2018; De Meuse et al., 2009; Jones et al., 2016).

2.2 Evaluating Coaching

Evaluating coaching is a complex endeavor. As coaching is a highly individualized and confidential intervention that is based on the interpersonal relationship between coach and coachee, it is challenging for researchers to access this confidential space (e.g., De Haan, 2019; Ely et al., 2010; Kampa-Kokesch & Anderson, 2001). Several efforts have been made to capture and systematize the multitude of potential influencing factors by suggesting conceptual frameworks based on a review of the coaching literature (Blackman et al., 2016; Cox et al., 2014; Ely et al., 2010; Greif, 2013; Joo, 2005; Kilburg, 1996). Some of these frameworks

distinguish input factors on the part of coaches and coachees, process factors, and different outcome categories, and mention the coachees' organizational context as pertaining to the input (i.e., coachee) category (Ely et al., 2010; Joo, 2005). Other, more recent works classify context as a separate category among influencing factors, thereby giving it more weight (Blackman et al., 2016; Cox et al., 2014; Greif, 2013). With context being considered a separate category of influencing factors, the framework also more closely resembles the model of coaching transfer (Stewart et al., 2008) that is built on the model of training transfer (Baldwin & Ford, 1988) and illustrates factors relevant for the sustainable application of what has been learned and changed through coaching.

The resulting, increasingly used evaluation framework draws its inspiration from mentoring research (Greif, 2013; Wanberg et al., 2003). It comprises input (i.e., characteristics of coaches, coachees, and coaching antecedents), process (i.e., relationship between coach and coachee, coach behavior, and coachee behavior), and contextual factors (i.e., organizational culture and transfer climate), and distinguishes proximal and distal outcomes for coachees, coaches, and organizations (Greif, 2013). Because coaching and training in a professional context are similar in that they both aim to achieve learning outcomes as well as improve skills and performance, among other things, coaching outcomes are increasingly categorized using the established taxonomy of training evaluation. This taxonomy distinguishes the four levels of reactions, learning, behavior, and results (Kirkpatrick, 1976, 1994), with a further differentiation of learning-level outcomes into cognitive and affective learning (Kraiger et al., 1993).

2.2.1 Research on Coaching Outcomes (Summative Evaluation)

Several reviews and meta-analyses provide evidence that coaching is effective and generates certain outcomes, with a growing number of them categorizing outcomes according to training research (De Meuse et al., 2009; Ely et al., 2010; Feldman & Lankau, 2005; Jones

et al., 2016; Müller & Kotte, 2020). Positive coaching effects are indicated across all outcome levels. On the learning level, for example, low to moderate effect sizes are reported for coaching when it comes to increasing coachees' motivation and self-efficacy (Jones et al., 2016; Sonesh, Coultas, Lacerenza et al., 2015), well-being (Burt & Talati, 2017; Sonesh, Coultas, Lacerenza et al., 2015; Theeboom et al., 2014), coping, work attitudes, and goal-directed self-regulation (Burt & Talati, 2017; Theeboom et al., 2014). On the level of behavior, there is evidence that coaching improves technical and leadership skills (De Meuse et al., 2009; Jones et al., 2016; Sonesh, Coultas, Lacerenza et al., 2015; Theeboom et al., 2014). As to the level of individual results, meta-analyses suggest that coaching enhances coachees' work performance (De Meuse et al., 2009; Jones et al., 2016; Theeboom et al., 2014). In contrast to training outcomes that tend to diminish from the reactions to the results level, coaching outcomes turned out to be strongest on the level of individual performance, thus not indicating a transfer problem (Jones et al., 2016). However, the analyzed studies most often capture coaching results solely on the individual level (Jones et al., 2016). Very few studies consider organizational-level results (Athanasopoulou & Dopson, 2018; De Meuse et al., 2009; Sonesh, Coultas, Lacerenza et al., 2015) despite coaching being defined as an organizationally embedded intervention (e.g., De Meuse et al., 2009; Jones et al., 2016; Sonesh, Coultas, Lacerenza et al., 2015; Theeboom et al., 2014). Furthermore, effect sizes for coaching outcomes vary (see Kotte et al., 2016, for a detailed discussion of the coaching meta-analyses up to 2016) and in spite of the overall positive conclusion, not every coaching intervention is successful. In fact, there may also be negative effects from coaching or no effects at all (De Meuse et al., 2009; Graßmann & Schermuly, 2016; Schermuly & Graßmann, 2019). In contrast to the advancement in coaching outcome research, factors influencing these outcomes have been far less systematically researched, though a trend reversal is gradually emerging (e.g., Bozer & Delegach, 2019).

2.2.2 Research on Influencing Factors in Coaching (Formative Evaluation)

The varying effectiveness of coaching points to the importance of possible influencing factors (Kotte et al., 2016) and investigating coaching beyond outcomes (i.e., mere summative evaluation). However, studies frequently do not provide sufficient information on intervention parameters (e.g., De Meuse et al., 2009) and a systematic evaluation of influencing factors, that is, a formative evaluation, is largely missing. Yet such an evaluation capturing input, process, and contextual factors is needed to improve coaching processes and to consider coaching effectiveness in a differentiated way (Ely et al., 2010).

When investigating factors that influence coaching effectiveness, researchers have till now mostly concentrated upon input (coach and coachee characteristics) factors (Pandolfi, 2020). Among input factors on the part of the coachees, self-efficacy beliefs and readiness or motivation for coaching are among the most-researched characteristics (e.g., Athanasopoulou & Dopson, 2018; Blackman et al., 2016; Bozer & Jones, 2018; Pandolfi, 2020). On the coaches' side, among other things, their expertise, (perceived) competence and credibility are claimed to be important (e.g., Athanasopoulou & Dopson, 2018; Blackman et al., 2016; Ely et al., 2010; Feldman & Lankau, 2005; Graßmann & Schermuly, 2020). Less than half as much research has been conducted on process factors (Pandolfi, 2020), for example on coaches' and coachees' behaviors and interaction (e.g., De Haan, 2019; Graßmann & Schermuly, 2020; Grover & Furnham, 2016). An exception is the working alliance between coach and coachee; this has been extensively researched and its impact upon coaching success has been confirmed meta-analytically (Graßmann et al., 2019). Goal-setting activities, another well-researched process factor, have recently been the focus of a systematic literature review and results are much less clear than might be expected. In fact, how goal-setting activities affect the coaching process and its outcomes cannot be clearly established (Müller & Kotte, 2020). Contextual factors that might influence coaching outcomes are by far the least-commonly researched (Pandolfi, 2020).

However, there is research stating that organizational support for coachees is of importance for coaching effectiveness (e.g., Athanasopoulou & Dopson, 2018; Blackman et al., 2016; Bozer & Jones, 2018).

2.3 Contextual factors

What is meant when talking about the context of coaching? Generally speaking, context is defined as the circumstances surrounding an occurrence (Bazire & Brézillon, 2005). More specifically, based on a comprehensive interdisciplinary analysis of different definitions, Bazire and Brézillon (2005) suggest that context is the conditions and limitations impacting upon behavior. Similarly, in the scope of research on organizational behavior, Johns (2006) concludes by characterizing context as conducive as well as obstructive circumstances influencing behavior and its meaning. The author further elaborates different dimensions of context including the occupation of those involved, the location and time of, and the rationale for, what is happening. Owing to its breadth and complexity, context is hard to measure in its entirety but important for understanding and not misinterpreting behavior and thus also the outcomes of a situation or interaction (Bazire & Brézillon, 2005; Johns, 2006).

Contextual factors relevant for the coaching process and its success have not yet been systematically and intensively studied but recent research has called for a focus on this (Athanasopoulou & Dopson, 2018; Pandolfi, 2020). Based on their systematic literature review on executive coaching, Athanasopoulou and Dopson (2018) clearly point out the urgent need to consider the social context of a coaching intervention as it is assumed that coaching is quite sensitive to contextual influences. Contextual factors are suggested to dynamically influence how coaching processes unfold and recognizing them is a necessary precondition to truly understand coaching (Erdös et al., 2020). Research has mostly been conducted on a specific area of context, that is, the coachees' organizational context, focusing on organizational or supervisory support (e.g., Athanasopoulou & Dopson, 2018; Blackman et al., 2016; Bozer &

Jones, 2018). However, the range of relevant contextual elements also includes the coachees' wider environment as well as space and time, for example the temporal progress of a coaching process (e.g., Athanasopoulou & Dopson, 2018; Cox et al., 2014).

Out of the multitude of potentially important contextual facets, this dissertation focuses on organizational embeddedness, target groups of coaching, and the phase of a coaching process, that are elaborated on in the following.

2.3.1 Organizational Embeddedness as a Contextual Factor

Coaching as a social intervention does not take place in a vacuum but is always embedded in a certain context that is at least influenced by coaches' and coachees' background and characteristics (e.g., Athanasopoulou & Dopson, 2018; Shoukry & Cox, 2018). More specifically, WPC is always embedded in an organizational context (i.e., coachees' professional environment) as the coaching process by definition is initiated for professional reasons and is oriented towards the coachees' professional goals (e.g., Athanasopoulou & Dopson, 2018; Bozer & Jones, 2018; Jones et al., 2016). Several recent systematic literature reviews infer that organizational factors, such as supervisory support for coachees and the organizational culture, will influence coaching success (Athanasopoulou & Dopson, 2018; Blackman et al., 2016). The importance of supervisors from the coachees' organization supporting coaching participation and learning transfer is further emphasized (Bozer & Jones, 2018; Joo, 2005). Moreover, research proposes that the interaction of coachees' cultural context and the organizations' purpose for coaching to be remedial or developmental might be relevant for coaching motivation and effectiveness (Bozer & Delegach, 2019).

Another important aspect is that involving representatives from the coachees' organization (as the client sponsoring the coaching) in contracting and clarifying goals and interests at the beginning of a coaching engagement has proven to affect coaching effectiveness (e.g., Athanasopoulou & Dopson, 2018; Blackman et al., 2016; Ely et al., 2010). Research explicitly

emphasizes the importance of considering multiple actors and relationships in coaching (i.e., between coaches, coachees, and organizational representatives; Burger & Van Coller-Peter, 2019; Louis & Fatien Diochon, 2014, 2018) and the coaches' challenge in recognizing and working with the organizational stakeholders' potentially divergent goals, (hidden) agendas and resulting dynamics (Louis & Fatien Diochon, 2014). However, when it comes to research on goal activities in coaching, contextual issues have been largely neglected (Müller & Kotte, 2020). It remains an open question if and how coaches involve organizational stakeholders in setting and aligning goals at the beginning and what part the organizational context plays throughout the coaching engagement.

2.3.2 Coaching Target Group as a Contextual Factor

By raising the question of whether including different kinds of professionals as coachees into the definition of executive coaching has an impact on the coaching process and whether the distinctiveness of the coaching clients, of the coaching process, or of a combination of both defines what coaching is, Kampa-Kokesch and Anderson (2001) point out that contextual factors, in particular the coaching target group, might indeed make a difference. Consistent with this, a longitudinal study provides evidence that coachees' hierarchical level influences coaching effectiveness (Bowles et al., 2007). Furthermore, Joo (2005) argues that the situational context and coachees' needs should impact upon the coaching process and its focus for the coaching to be successful. This means that what coaches do and how they do it should differ depending on the coachees' context (e.g., their occupation and workplace characteristics).

Extant reviews and meta-analyses either explicitly focus on executive coaching (Athanasopoulou & Dopson, 2018; De Meuse et al., 2009; Ely et al., 2010; Feldman & Lankau, 2005; Joo, 2005; Kampa-Kokesch & Anderson, 2001; Pandolfi, 2020) or do not clearly define the target group of coaching. They either use the terms *executive coaching* and *WPC* interchangeably or define WPC very broadly, for example to cover executives and non-

executives as well as different occupational groups (Blackman et al., 2016; Bozer & Jones, 2018; De Haan, 2019; Graßmann et al., 2019; Graßmann & Schermuly, 2020; Grover & Furnham, 2016; Sonesh, Coultas, Lacerenza et al., 2015; Theeboom et al., 2014). Research on coaching for coachees in different professional situations, more precisely different target groups, has recently been called for (e.g., coaching for entrepreneurs; Jones & Bozer, 2018), but evidence is scarce. An exception is research on coaching directed at different kinds of elite performers (Cooper, 2019), with executive coaching being particularly prominent (e.g., Berman, 2019; Böning, 2015; Kilburg, 1996). Due to differing coachee needs and work characteristics, the literature suggests that coach behavior in executive coaching is different from coaching employees without managerial responsibility. For example, coaches tend to apply more elements of expert consultation in comparison to general WPC and focus more strongly on the executives' organization, their work and responsibilities, and the intersection of both (e.g., Berman, 2019; Stern, 2004).

Coaching for entrepreneurs is another emerging field. Although research is progressing, it does not yet provide a comprehensive picture that clearly depicts what characterizes such a coaching process (e.g., Brinkley & Le Roux, 2018; Saadaoui & Affess, 2015). Similar to research on WPC in general and executive coaching in particular, research on coaching for entrepreneurs, which is termed *entrepreneurial coaching* (EC) in this dissertation, has by now mostly concentrated upon outcomes for entrepreneurs whereas less consideration has been given to process and contextual factors (e.g., Brinkley & Le Roux, 2018; Kutzhanova et al., 2009). Coaching offers for entrepreneurs are spreading fast and, especially in the entrepreneurship environment, the use of the term *coaching* is inflationary (e.g., Brinkley & Le Roux, 2018; Koopman, 2013; Müller & Diensberg, 2011) – even more than is the case for coaching in general.

Consequently, it is apparent that there is a gap in research regarding coaching for different professions and target groups beyond executive coaching and that research on coaching for entrepreneurs is specifically required (e.g., Jones & Bozer, 2018).

2.3.3 Coaching Phase as a Contextual Factor

As coaching is by its nature an interaction process and individually tailored support relationship, the course of the process depends on several factors that cannot be precisely predicted (e.g., coach and coachee actions and reactions, evolvement of trust, power; Cropanzano et al., 2017). However, coaching is also described as a "structured process" (Lee, 2016, p. 48) consisting of different phases. Even though these phases are not necessarily sequential in practice, researchers have made several efforts to capture the overall course of a coaching process. Reviewing the extant literature on coaching processes (e.g., Barner, 2006; Executive Coaching Forum, 2015; Feldman & Lankau, 2005; Gettman et al., 2019; Lee, 2016), we[1] developed a coaching process model that not only conflates existing models but is also the first to position the initial exploration (i.e., coaching diagnostics) as an integrated process step. Figure 1 below depicts this synthesis comprising four phases that follow a pre-coaching phase, namely contracting, assessment, intervention, and evaluation.

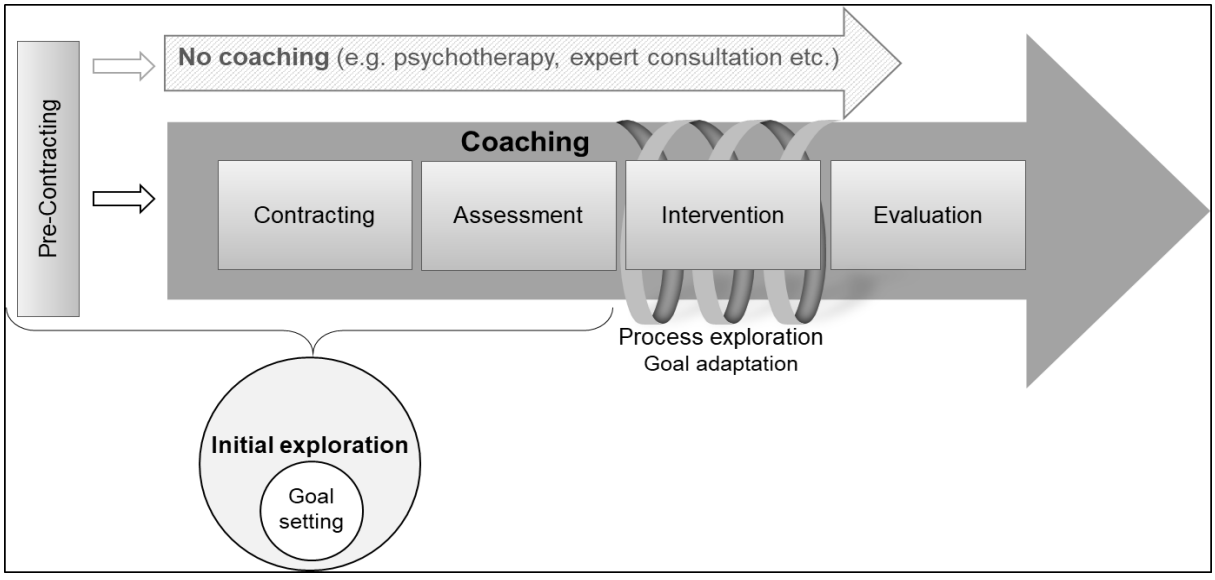
The pre-coaching phase (The Executive Coaching Forum, 2015) contains the first contact between coaches and coachees (and possibly the sponsoring organization) and is aimed at determining the suitability of coaching for the potential coachees, the fit between the parties involved, and the coachees' preconditions (Lee, 2016). If the decision is made in favor of a coaching engagement, the process starts with the contracting phase. This involves setting formalities (e.g., frequency and costs of coaching sessions) and also an initial content-related basis (Feldman & Lankau, 2005) including assessing the coachees' and sponsoring

[1] I use the first-person plural throughout this dissertation since the three studies involved in this dissertation were prepared in collaboration with other co-authors.

organizations' expectations, clarifying the goals, rules, possibilities, and boundaries of the coaching engagement as well as establishing a working alliance between the parties involved (Gettman et al., 2019; Lee, 2016). The assessment phase is characterized by systematically collecting information necessary to understand both the coachees' core issues and the context of the coaching engagement with the aim of solidifying specific goals for the coaching engagement (Feldman & Lankau, 2005). The following intervention phase builds on the previously collected and discussed information and involves the activities by coaches that aim to achieve the desired changes, that is, professional outcomes for the coachees' benefit (Feldman & Lankau, 2005). Lastly, the evaluation phase relates to the last session(s) and a potential follow-up meeting between coach, coachee, and possibly a representative of the sponsoring organization. This phase is geared towards assessing the coaching effects on several levels (e.g., individual, team, organizational level; Feldman & Lankau, 2005).

Figure 1.

A Coaching Process Model



Note. Own figure based on Feldman & Lankau (2005), Gettman, Edinger, & Wouters (2019), Lee (2016), The Executive Coaching Forum (2015).

Every coaching phase implies distinct coach behaviors and might require that coaches either can or must involve organizational parties as stakeholders, for example in contracting,

assessment practices, goal-setting and/or monitoring, or coaching evaluation (e.g., Carter et al., 2017; Feldman & Lankau, 2005; Vandaveer et al., 2016). As coaching is by its nature an interactive process, each coaching phase might also imply different levels of commitment and trust between coaches and coachees (Horvath & Greenberg, 1989) as well as readiness to change on the part of the coachees (Hersey & Chevalier, 2012). Each coaching phase thus sets different conditions and makes different demands on coaches' competence and behavior. However, to the best of the author's knowledge, empirical evidence on different phases of a coaching process is scarce.

2.4 Coach Behavior as a Process Factor

Research on coach behavior and how different behavior relates to coaching outcomes has been scantly researched thus far (e.g., Behrendt & Greif, 2018; Gettman et al., 2019). From the perspective of the Social Exchange Theory (SET), coach behavior is one part of a process of interdependent actions that potentially creates positive, trust-based relationships over time (Blau, 1964; Cropanzano et al., 2017; Cropanzano & Mitchell, 2005). As it is inherent to the coaches' role, they should guide their coachees through the coaching process (e.g., Louis & Fatien Diochon, 2018; Stein, 2009). This guiding function and the concomitant power underlines the importance of coach behavior against the backdrop of the SET because of its potential to evoke either positive or negative behavioral and attitudinal responses on the coachee side (Cropanzano et al., 2017).

In the following, the state of research is described in relation to coach behavior, in particular their content-related focus, and their methodological approach and roles.

2.4.1 What Do Coaches Focus On?

WPC is by definition geared towards the coachees' learning and development which in turn should lead to positive changes in the work environment (e.g., Bozer & Jones, 2018; Graßmann & Schermuly, 2020; Jones et al., 2016). Consequently, the content-related focus in

WPC lies on the individual coachees (i.e., personal development) as well as on their work as the interface between individual and organization (e.g., coachees' organizational roles, work tasks, and relationships; i.e., professional development) and, at least indirectly, WPC also deals with the organization as such (e.g., Lippmann, 2013). Kilburg (1996) illustrates these three foci (individual-work-organization) for executive coaching and concludes that the primary focal point should be on the individual coachees, shifting from there to organizational and work-related issues. Other researchers suggest that executive coaching is slightly more concerned with the coachees' organization and global performance issues than is classical WPC (Berman, 2019; Stern, 2004). Leadership coaching, for example, is concentrated upon improving the executives' leadership capabilities, and thus on the executives' and organization's performance at the same time (Ely et al., 2010). When asked about their coaching interventions' focus, executive coaches themselves state that this usually changes in the course of a coaching process (Coutu & Kauffman, 2009). Additionally, a coaching engagement's focus and associated outcomes are suggested as being related to the communication and alignment of goals among all stakeholders involved, both at the beginning of the engagement and throughout (e.g., De Meuse et al., 2009). Thus, what coaches focus on during a coaching engagement is expected to vary according to several factors, for example the coachees' individual needs, the goals as agreed upon for the coaching, and the course of the coaching process (De Meuse et al., 2009), as well as the coachees' hierarchical level and role and correspondingly their interconnectedness with the organization (Schein, 2012).

2.4.2 How Do Coaches Do What They Do?

Research on how coaches navigate the coaching process can be broken down roughly into the concrete methods and techniques they use (e.g., asking different kinds of questions, using specific tools) and the consultation philosophy (process- vs. expert-consultation) that guides their intervention practices and thus the roles they assume. Whereas concrete methods refer to

directly observable behaviors, the consultation philosophy refers to a more abstract level and should further affect the choice of adequate methods.

Concerning concrete methods, several studies explore the frequency with which coaches use specific techniques, for example goal-setting techniques and psychometric tests (e.g., Bono et al., 2009; Del Giudice et al., 2014; Jansen et al., 2003; McDowall & Smewing, 2009; Newsom & Dent, 2011; Vandaveer et al., 2016). Moreover, there is research on common factors adapted from psychotherapy that describes behavioral success factors in coaching (De Haan et al., 2013; De Haan et al., 2019; Greif et al., 2010) and on how specific yet mostly isolated coach behaviors relate to coaching success and/or the quality of the working alliance (e.g., De Haan et al., 2019; Henriques et al., 2017; Ladegard & Gjerde, 2014; Sonesh, Coultas, Marlow et al., 2015). For example, coaches' behavior directed at stimulating the coachees' performance (e.g., giving feedback on performance) as well as coaches' planning and structuring activities regarding coaching sessions and coachees' goals were found to be positively related to coachees' performance and the quality of the working alliance. Furthermore, coaches' contracting behavior (e.g., discussing goals, expectations, and rules for the coaching engagement) turned out to be related to the quality of the working alliance between coaches and coachees (Gettman et al., 2019). Coaches' acting patiently and kindly correlated positively with the quality of the working alliance but negatively with coachees' performance (Henriques et al., 2017). Generally, there is little empirical research on coaches' behavior (e.g., Athanasopoulou & Dopson, 2018; De Haan & Nilsson, 2017) and evidence on the influence of distinct behaviors on coaching effectiveness is still needed (Pandolfi, 2020).

De Haan and Nilsson (2017) validate the Coach Behavior Questionnaire that was originally developed by Heron in 1975 (2001) and apply this questionnaire to investigate workplace coaches' behavior and how it is perceived by their coachees. The six behavioral categories in this model are assigned to be either facilitative (i.e., non-directive) or authoritative (i.e.,

directive), with confronting, prescribing, and informing being authoritative behaviors and releasing, exploring, and supporting being facilitative behaviors (De Haan et al., 2019; De Haan & Nilsson, 2017). Accordingly, the behaviors are directly related to the underlying consultation philosophy, namely process-consultation and expert-consultation (Schein, 1990; Schein, 2012). In this regard, De Haan et al. (2019) found coaches' confronting and supporting behavior to be positively correlated to the quality of the working alliance whereas a negative correlation was shown for prescribing behavior. Interestingly, female coaches and older coaches assess their own behavior to be less directive (De Haan & Nilsson, 2017) and evidence suggests that coachees rate the effectiveness of female coaches a little higher than male coaches (De Haan et al., 2019). However, overall findings indicate that coachees perceive more directive behaviors than coaches themselves think they show (De Haan & Nilsson, 2017). In a similar vein, video analyses of coaching processes demonstrate that coaches use more directive elements than their own statements consider appropriate in a coaching setting (Deplazes, 2016). This is especially remarkable as coaching is generally described as primarily following the philosophy of process-consultation, with coaches refraining from taking on the roles of experts or being directive (e.g., Greif, 2005; Greif et al., 2018; Schreyögg, 2010). Matters might however not be as clear as it seems when trying to differentiate coaching and consulting. Rather, it is suggested that including elements of expert-consultation in a coaching process is beneficial depending on the coachees' needs and issues and also on the phase of the coaching process (e.g., De Haan & Nilsson, 2017; Schein, 2012; Schreyögg, 2010, 2017).

2.4.3 What Roles Do Coaches Assume?

Analyzing coaches' roles in a coaching engagement means to look at coach behavior on a more aggregated level in order to cluster behaviors according to the predominant function coaches perform for their coachees (Witherspoon & White, 1996). When talking about roles in coaching, this dissertation refers to a (social) role defined as a certain range of behaviors that

individuals consider appropriate and expected of them in a certain situation or social context (e.g., Lippmann, 2013; Sime & Jacob, 2018). Research on the roles that coaches assume during a coaching process is still at a very early stage, consisting mostly of theoretical propositions not yet backed by rigorous research or based on small qualitative samples (e.g., Sime & Jacob, 2018). Attempts to cluster coach behaviors into functions or roles lack consensus and differ regarding content focus and levels of abstraction. For example, researchers differentiate coach functions that refer to developmental vs. skill vs. performance coaching approaches (Grant & Green, 2018; Segers et al., 2011; Witherspoon & White, 1996) or describe more concrete behavioral categories transferred into roles (see references listed in the previous sub-chapter). For example, Sime & Jacob (2018) describe 20 coach roles by means of a small qualitative study that refer to rather fine-grained behavioral categories (e.g., supportive friend, thinking partner, active listener, brainstormer, sitting back). Stein (2009) identifies 16 different coach roles that are described as *conversational identities* and are categorized according to coaches' three principal tasks, namely managing process, content, and the coach-coachee-relationship.

Reviewing the existing literature, the different categorizations can be tentatively summarized into four overarching, though not entirely distinct, coach roles or functions: supportive, developmental, optimizing, and connective (Berman & Bradt, 2006; Brinkley & Le Roux, 2018; Grant & Green, 2018; Pohl, 2010; Segers et al., 2011; Sime & Jacob, 2018; Stein, 2009; Witherspoon & White, 1996). Based on this literature, the different coach roles can be roughly characterized as follows. The coaches' supportive role implies helping coachees in dealing with difficulties, in times of crisis, and to provide emotional support. The developmental coach role means that coaches help their coachees to identify and work on their skills and abilities and to foster their personal and professional development. Coaches taking on an optimizing role are involved in the monitoring and improvement of their coachees' performance and work with them on critical performance factors. Lastly, the connective coach

role prioritizes reflecting and working on the coachees' relationships within their organization and across organizational levels.

On a superordinate, more abstract level, coach roles are distinguished according to the consultation philosophy (see previous sub-chapter) into acting as a process-consultant and as an expert (e.g., Schein, 2012). It is suggested that coaches constantly switch back and forth between these two extremes during the coaching process, though the starting point should always be process consultation (Schein, 2012; Schreyögg, 2017).

2.5 Coach Behavior in Different Contexts

Contextual factors and individual behavior mutually influence each other (Athanasopoulou & Dopson, 2018). Specifically, the roles coaches assume are influenced by organizational factors, for example by the power relationships between coachees and other organizational stakeholders and how these power dynamics limit or expand the coaches' scope of action (Louis & Fatien Diochon, 2014, 2018). This goes along with the necessity for coaches to be sufficiently skilled in handling different power dynamics and actively involving organizational representatives, both in triangular contracting and throughout the coaching intervention. Generally, contextual factors are expected to influence not only coaches' but also coachees' behavior. In light of the SET, both actors' behaviors are interdependent and positive interactions may cause a sound working alliance (Blau, 1964; Cropanzano & Mitchell, 2005). However, coaches typically assume a guiding function for the coaching process (e.g., Behrendt & Greif, 2018; Louis & Fatien Diochon, 2018; Stein, 2009) and evidence suggests that coach behavior is particularly critical for the quality of the working alliance, and thus coaching success (Gettman et al., 2019; Graßmann & Schermuly, 2020).

Coaches' change of roles is theoretically proposed by the Situational Leadership Theory (SLT) applied to the coaching context (Hersey & Chevalier, 2012). Originally, the SLT proposed that leaders' behavior (directive vs. supportive) should vary according to their

employees' developmental level, that is, the latter's competence and commitment. Research on a restatement of the SLT further indicates that different levels of employees' job experience and autonomy require different leader behaviors (Thompson & Glasø, 2018; Thompson & Vecchio, 2009). Moreover, one of the SLT's authors proposes applying the theory to the coaching context. It is assumed that the degree to which coaches engage in relationship (supportive) behavior or task (directive) behavior is dependent on their coachees' situation and level of readiness (Hersey & Chevalier, 2012). Even though the coachees' developmental level, autonomy, experience, and readiness are input factors, they are essentially dependent on contextual factors, meaning that they should vary according to the coaching target group and the respective organizational environment (e.g., entrepreneurs' specific job demands, lack of experience for first-time founders, and higher levels of autonomy of entrepreneurs compared to employed professionals) and the coaching phase (e.g., varying level of coachee commitment and trust during the coaching process). The SLT's distinction between supportive and directive behavior reflects the distinction of process- vs. expert-consultation as guiding principles in coaching concepts and the coaches' change of role that is associated with it (e.g., Schreyögg, 2017; Schreyögg & Schmidt-Lellek, 2017). However, the application of the SLT for coaching is a theoretical proposal that is not yet backed by empirical evidence.

In the following two sub-chapters, coach behavior is elaborated on in two distinct contexts relevant for this dissertation: the initial exploration as a phase in the coaching process and the entrepreneurial context.

2.5.1 Coach Behavior in the Context of the Initial Exploration

For any social interaction, the quality of the initial contact is crucial for developing trust between those involved (Schweer, 2008). Coaching can be regarded as a process which evolves through the social interaction of at least two partners, that is, coach and coachee (e.g., Graßmann & Schermuly, 2020; Ianiro et al., 2013), and their working alliance, an important factor

influencing coaching success, is dependent on mutual trust (e.g., Graßmann et al., 2019), so the initial contact between coaches and coachees can be considered crucial. Furthermore, coach behavior is suggested as being one of the most important factors influencing the quality of the working alliance in coaching (Graßmann & Schermuly, 2020). In particular, what coaches do at the beginning of a coaching process is indicated as being decisive for the quality of the working alliance between coaches and coachees (Gettman et al., 2019) and for coachees' goal attainment after completing the coaching (Ianiro et al., 2013). This reasoning is also reflected in the SET proposing that social exchange, that is fundamentally based on trust and perceived justice, commonly begins with an initiating action by the actor in the higher power position. The nature of this initiating action then again will influence the other actor's response in a positive or negative way (Cropanzano et al., 2017).

With regard to the coaching process model introduced in chapter 2.3.3 (Figure 1), this dissertation is predicated on the assumption that the initial exploration spans the pre-contracting phase to contracting and assessment as the first two phases of the actual coaching engagement. This means that it starts with the first contact between coaches, coachees, and possibly the coachees' organization, and involves all coach activities directed at aligning multiple stakeholders' goals and interests as well as getting a clear idea of the coachees', their situations and concerns, with the ultimate aim of a preliminary "diagnosis" upon which the following interventions can build.

There is hardly any research on coaches' behavior at the beginning of a coaching engagement (Gettman et al., 2019). Rather, the few studies that investigate coach behavior do not draw distinctions based on the phase or point in time within the coaching process (e.g., Bono et al., 2009; Del Giudice et al., 2014; McDowall & Smewing, 2009; Newsom & Dent, 2011; Vandaveer et al., 2016). Nor does research on sub-components of the initial exploration (e.g., contracting, goal-setting) draw a clear picture. The limited research that is available on

the subject of contracting indicates that contracting behavior is positively related to the quality of the working alliance in coaching and that coaches' and coachees' perceptions diverge (Gettman et al., 2019). Evidence further underlines the importance of considering all relevant stakeholders in contracting (Burger & Van Coller-Peter, 2019). Research on goal-setting and goal activities in coaching is more prominent. However, the meaning of goal-setting activities for coaching success remains unclear, as does an effective strategy on how to work with goals (Müller & Kotte, 2020).

By contrast, research clearly suggests that the reasons for several negative effects for coachees (Schermuly & Graßmann, 2019) and for coachee drop-out (Schermuly, 2018) pertain to the beginning of coaching processes. For example, negative effects occur due to coaches failing to conduct thorough diagnostics and not detecting or even treating psychological disorders (i.e., failing to carefully assess the suitability of coaching for the potential coachee). Additional causes relate to the coachees' misguided expectations about the coaching, lacking coaching goals, and coaches' insufficient knowledge about the coachees' organizations (Schermuly & Graßmann, 2019).

Considering the importance of coaches' behavior at the beginning of a coaching engagement together with the scarcity of research in this regard, further research is very much needed (Feldman & Lankau, 2005; Gettman et al., 2019).

2.5.2 Coach Behavior in the Context of Coaching for Entrepreneurs

EC is a young but vibrant field of research that found its way into research only about 15 years ago (e.g., Fayolle & Klandt, 2006). Whereas the body of research on EC is increasing, research studies are rather scattered and do not yet draw a clear, comprehensive picture of the field (e.g., Brinkley & Le Roux, 2018; Saadaoui & Affess, 2015). Research on EC does not yet employ evaluation frameworks established in WPC (e.g., Ely et al., 2010; Greif, 2013; Kilburg, 1996). However, even if evidence on coach behavior in EC is scant, researchers attempt to cluster

behaviors as roles (Crompton, 2012; Hagedorn, 2018; Hunt & Fielden, 2016) and describe concrete behavioral categories (Ben Salem & Lakhal, 2018; Kutzhanova et al., 2009). Reviewing the existing relevant literature results in a range of coach behavior, including acting as a sounding board or as an empathetic listener, giving feedback or advice, and facilitating entrepreneurs' networking.

Throughout the demanding entrepreneurial process, entrepreneurs may benefit from coaching when coaches stimulate their active learning and reflective thinking (Audet & Couteret, 2012; Brinkley & Le Roux, 2018; Crompton, 2012; Kutzhanova et al., 2009). At the same time, initial evidence indicates that entrepreneurs may appreciate coaches providing some guidance and advice (Ben Salem & Lakhal, 2018; Brinkley & Le Roux, 2018). Entrepreneurs' special entanglement with their organization creates particular topics and needs that differ from those of both employed professionals and executives (e.g., Jayaraman et al., 2000; Stephan, 2018). Whereas entrepreneurs' wish for expert advice generates commonalities between EC and start-up consultancy (i.e., the philosophy of expert-consultation), their need for experienced entrepreneurs to share their experience with them pulls EC towards entrepreneurial mentoring (e.g., Crompton, 2012; Crompton & Smyrnios, 2011). Indeed, there is confusion between the terms *coaching* and *mentoring* in the entrepreneurship context in practice as well as in research (e.g., Brinkley & Le Roux, 2018; Matotola & Bengesi, 2019). Moreover, initial research hints at conditions and limitations imposed on coaching by the incubator (i.e., an institution that supports nascent entrepreneurs by providing co-working spaces, start-up consultancy, coaching, mentoring, and others services facilitating the founding process) that the coaching processes may be part of (Mansoori et al., 2019) and at the particular influence of incubator managers on coaches' behavior and structural coaching characteristics (Audet & Couteret, 2012).

To conclude, the existing literature points to differences in coach behavior towards entrepreneurs compared to coach behavior with respect to other target groups. However, coaches' behavior in the scope of EC has not as yet been systematically researched. It remains unclear which roles coaches assume in EC and how these roles relate to the underlying consultation philosophy (process- vs. expert-consultation).

2.6 Goals of the Dissertation

Building on the literature described above and the state of the art, the aims of this dissertation are twofold. First, it seeks to advance research on coach behavior as a potential influencing factor in coaching by exploring and systematizing it in two different kinds of contexts, namely during the initial exploration (considering the coaching phase as a contextual factor) and in entrepreneurial coaching (considering the target group as a contextual factor). Coaches' behavior during the initial exploration is suggested as eventually being decisive for coaching success (e.g., Gettman et al., 2019; Ianiro et al., 2013) and for preventing negative effects for the coachees (Schermuly & Graßmann, 2019). It is however still largely unknown what coaches actually do during this coaching phase. Research on coaches' behavior in EC is critical for understanding the functions coaching might fulfill for entrepreneurs. Even though EC is increasingly used in practice and empirical studies are called for (Jones & Bozer, 2018), research has not yet sufficiently addressed these calls (e.g., Saadaoui & Affess, 2015). Second, this dissertation aims to advance research on contextual factors in coaching by comprehensively evaluating coaching directed at a specific target group (i.e., entrepreneurs) and by teasing out coach behaviors in two particular types of context, that is, in coaching entrepreneurs and at the beginning of coaching engagements. I draw on the SET (Blau, 1964; Cropanzano et al., 2017; Cropanzano & Mitchell, 2005) to elucidate the relevance of coach behavior in these contexts. I build on the SLT (Hersey & Chevalier, 2012; Thompson & Vecchio, 2009) to explain the results of the studies involved and to argue for a potential interplay of contextual factors and coach

behavior as well as a related shift of coach behavior and roles. The overarching goal of this dissertation is to provide initial evidence for a context-sensitive approach to coaching in general and coach behavior in particular by developing evidence-based, differentiated frameworks that can guide future research and practice. Table 1 displays the major research questions that guided this dissertation and the respective foci of the three studies that form part of it.

Table 1

Overarching Research Questions of the Cumulative Dissertation

RQ 1) Which behavior do coaches show and how can it be systematized in different contexts? a) Initial exploration b) Entrepreneurial coaching **RQ 2)** How (if at all) is coaching specific in the context of entrepreneurship, i.e. entrepreneurial coaching?		
Study 1: Initial exploration in workplace coaching	**Study 2:** Entrepreneurial coaching: A two-dimensional framework in context	**Study 3:** Entrepreneurial coaching: A systematic literature review
Coaches' focus and approach in specific contexts		Evaluation of coaching in an entrepreneurial context

3. Summary of Studies

The three studies that constitute the core of this cumulative dissertation are summarized in the following. The respective full-length manuscripts are provided in chapter 6.

3.1 Study 1: Initial Exploration in Workplace Coaching: Coaches' Thematic and Methodological Approach

Given the indicated importance of coach behavior at the beginning of a coaching engagement and the related lack of research, study 1 explores how coaches proceed during the *initial exploration*. 20 semi-structured in-depth interviews with workplace coaches in Germany were conducted focusing on what coaches do and how they proceed at the beginning of coaching engagements. Analyzing the interview data by means of qualitative content analysis in a team of researchers revealed a broad range of contents addressed, methods applied, and principles that guide coaches during the initial exploration. Moreover, specific patterns for categorizing coaches' approaches were identified. Concerning the content coaches address, three dimensions emerged: coachees' areas of life (private vs. professional, with the latter including individual vs. work-related vs. organizational aspects), temporal focus (past, present, future), and perspective (solution- vs. problem-orientation). Besides, the majority of coaches works on a case-by-case basis and half of them is guided by their intuition. In terms of their methodological approach, coaches' hardly resort to standardized methods and only a minority directly involves the coachees' organizational context. The findings are integrated into a taxonomy of the initial exploration in coaching and thereby provide a basis for future research as well as a guide for reflection and decision-making for coaches, coachees, and organizational stakeholders. Study 1 is the first empirical work that defines and integrates the initial exploration as an important step into a coaching process model and that explicitly explores coaches' behavior during this phase.

3.2 Study 2: Entrepreneurial Coaching: A Two-Dimensional Framework in Context

Coaching in the entrepreneurial context is increasingly practiced and suggested to be particularly well-suited to entrepreneurs' complex job demands and specific needs. However, especially in the entrepreneurial context, the term *coaching* lacks a clear definition and is frequently used interchangeably with other types of support. Study 2 therefore explores the characteristics of entrepreneurial coaching (EC) based on established frameworks for coaching evaluation. 67 semi-structured in-depth interviews with coaches (n = 44) and early-stage entrepreneurs (n = 23) experienced in EC were conducted. The interview data was analyzed using qualitative content analysis in a team of researchers employing a combination of concept-driven and data-driven approaches. The development of a comprehensive category system enabled to investigate input, process, and contextual factors, as well as outcomes of EC. Among process factors, seven coach roles/functions were identified that reflect specific coach behaviors. Contextual factors include entrepreneurial job demands and institutional conditions and limitations of "embedded" EC. Based on the analysis of the results, EC is positioned within a two-dimensional framework, consisting of the expert- vs. process-consultation approach and the individual-work-venture focus. The seven coach functions are located within this framework and thus, allow to characterize and define EC as a sub-format of workplace coaching. Relative to other interventions, EC stands between classical workplace coaching and start-up consultancy, closer to, yet distinct from, entrepreneurial mentoring and executive coaching. The two-dimensional framework lays the groundwork for future research to build on and entails practical implications for coaches, entrepreneurs, and organizational stakeholders.

3.3 Study 3: Entrepreneurial Coaching: A Systematic Literature Review

Study 3 builds on the findings of study 2 and their reflection against the background of the extant literature, and thus investigates entrepreneurial coaching (EC) comprehensively using a different method. As EC is an emerging field of research and a holistic overview on its outcomes, input, process, and contextual factors is missing, a Systematic Literature Review (SLR) was conducted. The SLR included quantitative and qualitative empirical studies on coaching for entrepreneurs with differing levels of entrepreneurial experience and during different stages of the entrepreneurial process. Ultimately, 31 empirical studies could be retained and a rigorous quality assessment was carried out. By means of the SLR, outcomes, input, process, and contextual factors of EC were identified mainly from the perspectives of entrepreneurs. Whereas a number of the included studies also involved coaches' perspectives, third-party perspectives were rarely captured. Consistent with EC still being a young field of research, slightly more than half of the studies used an exclusively qualitative study design. Overall, the quality assessment of the included studies demonstrated quite high heterogeneity ($M = 0.72$, $Min = 0.23$, $Max = 0.97$ for the total study quality). The pattern of outcomes and the focus on coach roles among process factors reflect the particularities of coaching in the field of entrepreneurship. Whereas outcomes of EC were extensively investigated, research on contextual factors lags far behind their potential importance. Directions for future research are derived based on the analysis of the respective evaluation category and practical implications are suggested for the stakeholders involved in entrepreneurial coaching.

4. General Discussion

The interplay of the findings of the three studies forming the core of this dissertation yield theoretical contributions, raise implications for future research and practice, and entail limitations that are discussed in this chapter.

4.1 Theoretical Contributions

This dissertation was guided by two major research questions concerning the exploration of coach behavior and contextual factors relevant for WPC. Answering these research questions contributes to the literature on coach behavior, contextual factors, and EC, and is elaborated on in the following.

4.1.1 Exploring and Systematizing Coach Behavior in Distinct Contexts

One of the main goals of this dissertation was to explore and systematize coach behavior in specific contexts, that is, during the initial exploration and in coaching for entrepreneurs (EC). A qualitative research design was chosen for the respective studies (study 1 and 2) in order to achieve these goals, paying attention to the respective state of research on coach behavior in these particular contexts (Edmondson & McManus, 2007). In both studies, qualitative content analysis (QCA; Schreier, 2012) was used with a mainly inductive approach to capture the full range of coaches' (and, in study 2, coachees') subjective perspectives on what coaches focus on and how they proceed. Working with QCA allowed to discover cross-cutting patterns within the interview data, thus providing the basis for the development of taxonomies for coach behavior.

Study 1 provides a taxonomy on coach behavior during the initial exploration phase in WPC and results in a distinction between content-related foci, methodological approaches, and guiding principles. In study 2, a framework for coach behavior in EC was developed that

explicitly conflates coaches' content-related foci and methodological approach into coach roles that are conducive to characterizing EC a specific sub-format of WPC.

Taken together, study 1 and study 2 are the first empirical studies that systematically explore coach behavior in the respective contexts, thereby yielding frameworks that provide a differentiated view on coaches' content-related focus and methodological approach to coaching. Certain categories emerged across both studies, namely coaches' tripartite content-related focus on their coachees as individuals, their work, and their organization. These foci are in line with the literature on executive coaching (Kilburg, 1996) and point to differences according to the respective contexts. During the initial exploration, coaches focus mostly on the individual coachees and their work. In EC however, coaches for the most part focus on the entrepreneurs' work issues and their venture. These findings are consistent with the previous literature suggesting that a coaching's focus might vary, for example depending on the coachees' needs (e.g., De Meuse et al., 2009) and on their position and hierarchical level (e.g., Schein, 2012).

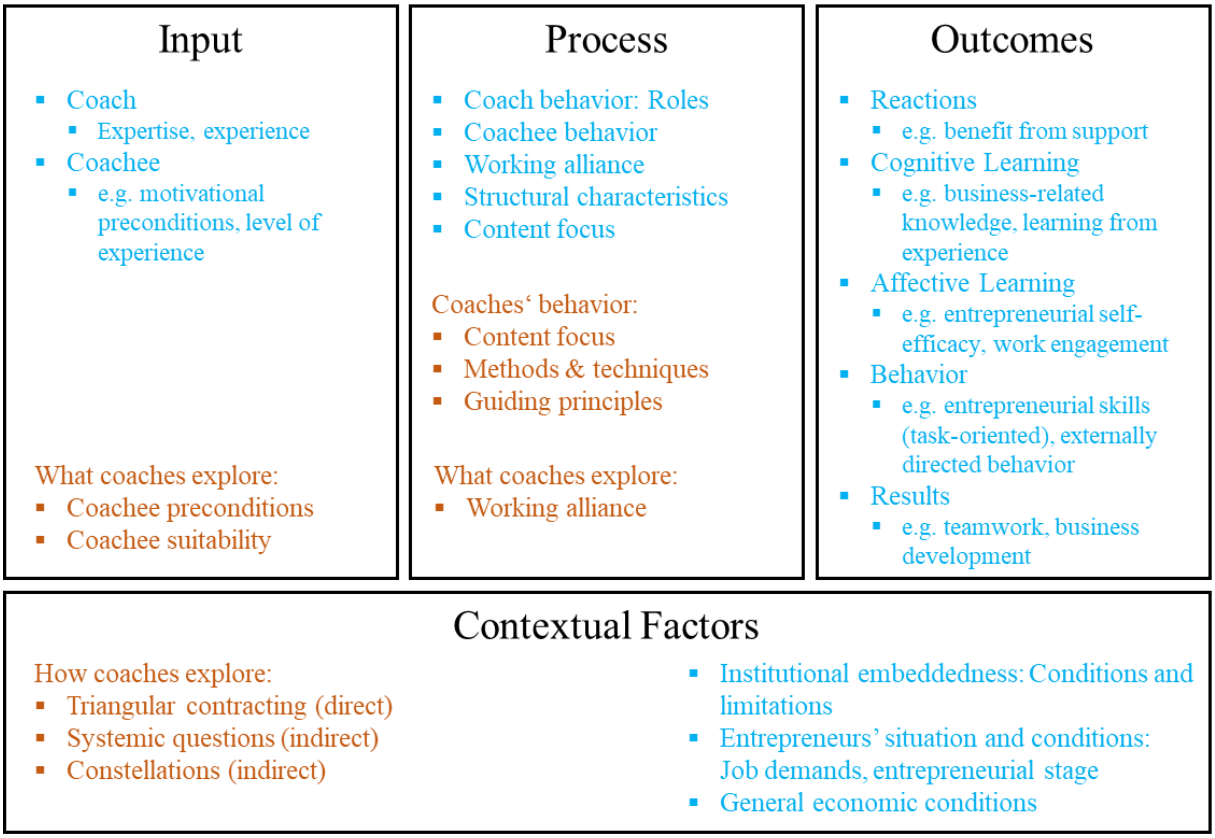
In study 2, the interview data allowed us to classify coach behavior in a two-dimensional framework consisting of the two dimensions *content-focus* and *underlying methodological approach* (in terms of consultation philosophy, i.e., expert- vs. process-consultation). The roles coaches might assume were till now only described from a theoretical and/or practice-based perspective but hardly backed by empirical evidence in general WPC (e.g., Berman & Bradt, 2006; Grant & Green, 2018; Pohl, 2010; Witherspoon & White, 1996) and have just started to be explored in EC (e.g., Crompton, 2012). To the best of the author's knowledge, study 2 is the first that systematically explores coach roles from both coaches' and coachees' perspectives and even relates the different roles to each other. It thus reveals the way in which coach roles can be classified, namely as a function of the basic methodological approach (i.e. expert- vs. process-consultation) and the content-related focus (i.e. individual vs. work vs.

organization/venture). Furthermore, classifying coach roles by means of this framework in a given context also allows for the positioning of specific sub-types of coaching. Consequently, the findings highlight the importance of coach behavior and roles in characterizing a specific sub-type of WPC and eventually for characterizing coaching processes.

Distinct from study 2, study 1 does not result in a clear classification of coach roles but instead describes several relevant dimensions for coaches' behavior in terms of the methodological approach and guiding principles. These dimensions however hint at the underlying consultation philosophy (process- vs. expert-consultation) which is further discussed below in the sub-chapter 4.1.3 on the "diversity of coach roles".

Figure 2

Synthesis of This Dissertation's Findings Integrated in the Framework for Coaching Evaluation



Note. Written in orange are findings of study 1 concerning the initial exploration. Written in blue are findings of study 2 and study 3 concerning entrepreneurial coaching. This figure does not display the findings in detail, but gives an overview on the categories and examples of what has been identified.

Relating to evaluation frameworks established in coaching research (e.g., Blackman et al., 2016; Greif, 2013), all three studies filled the research gap regarding coach behavior as a process factor as demonstrated in the existing literature (e.g., Athanasopoulou & Dopson, 2018; Behrendt & Greif, 2018; Graßmann & Schermuly, 2020; Pandolfi, 2020). The results of study 1 also reveal which potentially influencing factors coaches tend to explore during the initial exploration, namely mostly input factors (i.e., the coachees' motivational preconditions, their issues, personal and professional context and background) as well as the conditions for a sound working alliance as a process factor, and also – even if to a markedly lesser extent – contextual factors (i.e., the coachees' organizational context). Figure 2 provides an overview on how the three studies contribute to frameworks established for the evaluation of WPC.

4.1.2 Evaluating Entrepreneurial Coaching and Exploring its Peculiarities

The second major goal of this dissertation was to comprehensively evaluate EC in order to investigate if and how coaching in the specific context of entrepreneurship would be different from general WPC. Studies 2 and 3 both systematically extracted the characterizing features of EC using the evaluation framework established in general WPC research (e.g., Blackman et al., 2016; Greif, 2013), resulting in a comprehensive picture of input, process, and contextual factors as well as outcomes. Study 2 employed a qualitative approach that relied on coaches' as well as coachees' perspectives and was explorative in the sense that only broad categories (input, process, context, outcomes) were deductively drawn from the established frameworks, though the sub-categories filling the framework were inductively generated from the interview material. In study 3, an SLR was conducted following established and rigorous procedures (Boland et al., 2017; Briner & Denyer, 2012; Tranfield et al., 2003) that ultimately included 31 studies mostly based on coachees' and/or coaches' perspective and on qualitative designs as well as on third-party perspectives and quantitative designs depending on the exact research

questions, albeit to a minor extent. The combination of the different approaches used in study 2 and study 3 ensured the capture of all relevant influencing factors and outcomes that have been researched up to this point. Notably, the explorative approach to evaluating EC in study 2 yielded findings that are reflected and for the most part also confirmed by the use of the SLR in study 3.

Collating the evaluation outcomes of EC from both studies with the existing literature on general WPC and executive coaching reveals differences as to all main categories. In terms of EC outcomes, it is evident that these accentuate what is specific to entrepreneurs' needs and job demands (e.g., knowledge related to company start-up and entrepreneurship, entrepreneurial self-efficacy, entrepreneurial skills, externally-directed behavior). Furthermore, outcomes on the organizational level are considerably more frequently reported than in general WPC (Jones et al., 2016; Kotte et al., 2016; Kotte, 2019). Input factors of EC indicate that expectations upon entrepreneurial coaches are different in that their own entrepreneurial experience and expert knowledge is particularly appreciated by entrepreneurs. By contrast, expert knowledge and sharing experience is generally not said to be required from coaches in WPC (Jones et al., 2016).

Most notably, coach behavior/roles and contextual factors unveil the peculiarities of EC. The coach roles depicted in the two-dimensional framework in study 2 demonstrate that coaches' focus in EC shifts more to the coachees' work-related issues and their venture and that expert-consultation does not play a lesser role than process-consultation. The behaviors identified in study 3 confirm these roles, in part clearly and in part with more moderate support. Such rather directive coach roles do not play a major role in WPC, which is generally considered to be mainly process-consultation (e.g., Jones et al., 2019; Schreyögg, 2010). However, individual studies point to the occurrence of directive coach behavior for WPC as well (De Haan & Nilsson, 2017; Deplazes, 2016) and for executive coaching in particular (Berman, 2019; Stern, 2004). Research on contextual factors in EC is just as scarce as in WPC

(Athanasopoulou & Dopson, 2018; Pandolfi, 2020). Still, studies that consider contextual factors in EC point to the potential influence of the entrepreneurial ecosystem, and in particular the embeddedness of coaching in entrepreneurial programs (mostly incubators or accelerators). For example, the institutional embeddedness sets conditions and limitations that may even determine structural characteristics of the coaching as well as content and coaches' scope of behavior (e.g., Audet & Couteret, 2012; Mansoori et al., 2019). These findings emphasize the distinctiveness of the entrepreneurial context. At the same time, they reveal what both EC and general WPC have in common: the relevance of contextual (particularly organizational or institutional) factors for coaching processes and coach behavior, and the need for coaches to involve and align different stakeholders' interests and to handle the related power dynamics (Athanasopoulou & Dopson, 2018; Burger & Van Coller-Peter, 2019; Louis & Fatien Diochon, 2014).

In summary, both studies tease out the peculiarities of EC and illuminate a field of research that has not yet been systematically investigated. By modifying the target group coaching addresses – for which executives or professionals in general are chosen virtually by default in the existing literature – the studies elaborate on the specifics of the entrepreneurial ecosystem visible across all categories when evaluating EC. They provide evidence of the necessity to treat EC as a distinct sub-format of WPC and reveal the importance of considering different coaching target groups and their specific needs and environments. Study 2 further concludes with a definition of EC and positions EC relative to related formats based on the two-dimensional framework.

4.1.3 The Diversity of Coach Roles

As outlined in the previous sub-chapter, coach behavior/roles in EC are different from those reported in general WPC and reflect the peculiarities of entrepreneurs' needs and job demands. These differences become especially obvious regarding coaches' roles characterized

as predominantly expert-consultation and those characterized as a mixture of process- and expert-consultation. Coaches acting as advisors, implementation guides, and network brokers follow the philosophy of expert-consultation and focus on the coachees' work and their venture. Coaches in the role of skill trainers and business-development assistants use a combination of process- and expert-consultation elements and focus either on the coachees' work (skill trainer) or on their venture (business-development assistant). All these five roles are tailored to entrepreneurial needs and are not found in this vein in classical WPC.

Exploring coach behavior during the initial exploration yielded several categories depicting coaches' content-related focus, methods, and approach. While some aspects may also be characteristic of the coaching landscape in general (e.g., the clear focus on coachees' present context as well as on solutions is in line with the influence of positive psychology in coaching; Bachkirova, 2015), others reveal specifics of the initial exploration to be an important process step in coaching engagements. Certainly, coaches' behavior is supposedly affected by coach input factors, such as coaches' experience as a coach, educational background, and type of coaching training (e.g., Bono et al., 2009; De Haan & Nilsson, 2017; Del Giudice et al., 2014; Newsom & Dent, 2011). For example, with increasing age and experience, coaches are more likely to be guided by their own intuition (e.g., Sheldon, 2018) and use less directive behavior (e.g., De Haan & Nilsson, 2017). Still, the results of study 1 taken together indicate that coaches proceed in a rather flexible and explorative manner, use mainly open interview techniques (e.g., systemic questions, active listening) and experience activating methods (e.g., constellations, imaginative techniques) that stimulate the coachees' (self-)reflection. None of the methods and techniques coaches disclosed in the scope of our exploratory study hint at directive coach behavior (e.g., giving advice, informing, prescribing, De Haan et al., 2019; De Haan & Nilsson, 2017). Coaches' rare use of standardized methods and frequent recourse to experience-activating methods during the initial exploration is also corroborated in a subsequent

quantitative study that we conducted on a team of researchers (Müller et al., in prep.). Accordingly, considering the results of study 1 against the backdrop of the framework for coach roles of study 2 (i.e., approach × focus), coaches seem to focus mainly on the individual coachees and their work by using a process-oriented approach during the initial exploration. On the one hand, this is not surprising in light of the activities theoretically proposed for the exploration and assessment phase (e.g., Feldman & Lankau, 2005) and with regards to the aim of the initial exploration, that is, to generate a preliminary diagnosis (Hersey & Chevalier, 2012; Möller & Kotte, 2018). On the other hand, given that contracting forms part of the initial exploration and contracting behaviors are suggested as including setting conditions and limitations and giving information (e.g., on what to expect from coaching and the specific coach and on realistic expectations and responsibilities for all parties involved; Gettman et al., 2019), the absence of directive coach behavior is striking. The results are only partly consistent with suggestions made by the SLT as applied to coaching (Hersey & Chevalier, 2012). Explicitly, in this model, supportive/relationship-building behavior is predominant at the beginning of a coaching engagement but is further complemented by a combination of high relationship and high task behavior (Hersey & Chevalier, 2012). Looking at WPC irrespective of coaching phases, coaches predominantly engage in non-directive (i.e., process-consultation) behavior but occasionally use directive behavior elements as well (e.g., Schreyögg, 2010; Schreyögg & Schmidt-Lellek, 2017). The initial exploration thus seems to be more process-oriented/non-directive than the coaching process in general terms.

Considering the SET, coaches' behavior expressed in terms of the different roles they assume is likely to influence the coachees' weighing up costs and benefits of getting involved with coaching (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005). In particular for coachees who have to cope with great time pressure (e.g., entrepreneurs, top-level executives; Böning, 2015; Stephan, 2018), the time invested in coaching is a highly valued resource, such

that they in turn might expect coaches to perform an equally useful and individually tailored function. Both study 2 and study 3 elucidate that coachees' openness towards coaching and misguided expectations may be relevant for coaching success. Considering that coaches' behavior in the sense of initiating actions has the potential to elicit coachees' behavioral and attitudinal responses (Cropanzano et al., 2017), their behavior during the initial exploration (and even pre-coaching phase) is key to generate social exchanges that are positively valued by all parties involved, channel coachees' expectations and finally prevent negative effects (e.g., Graßmann & Schermuly, 2020; Schermuly & Graßmann, 2019).

4.1.4 The Potential Interplay of Coach Behavior/Roles and Contextual Factors

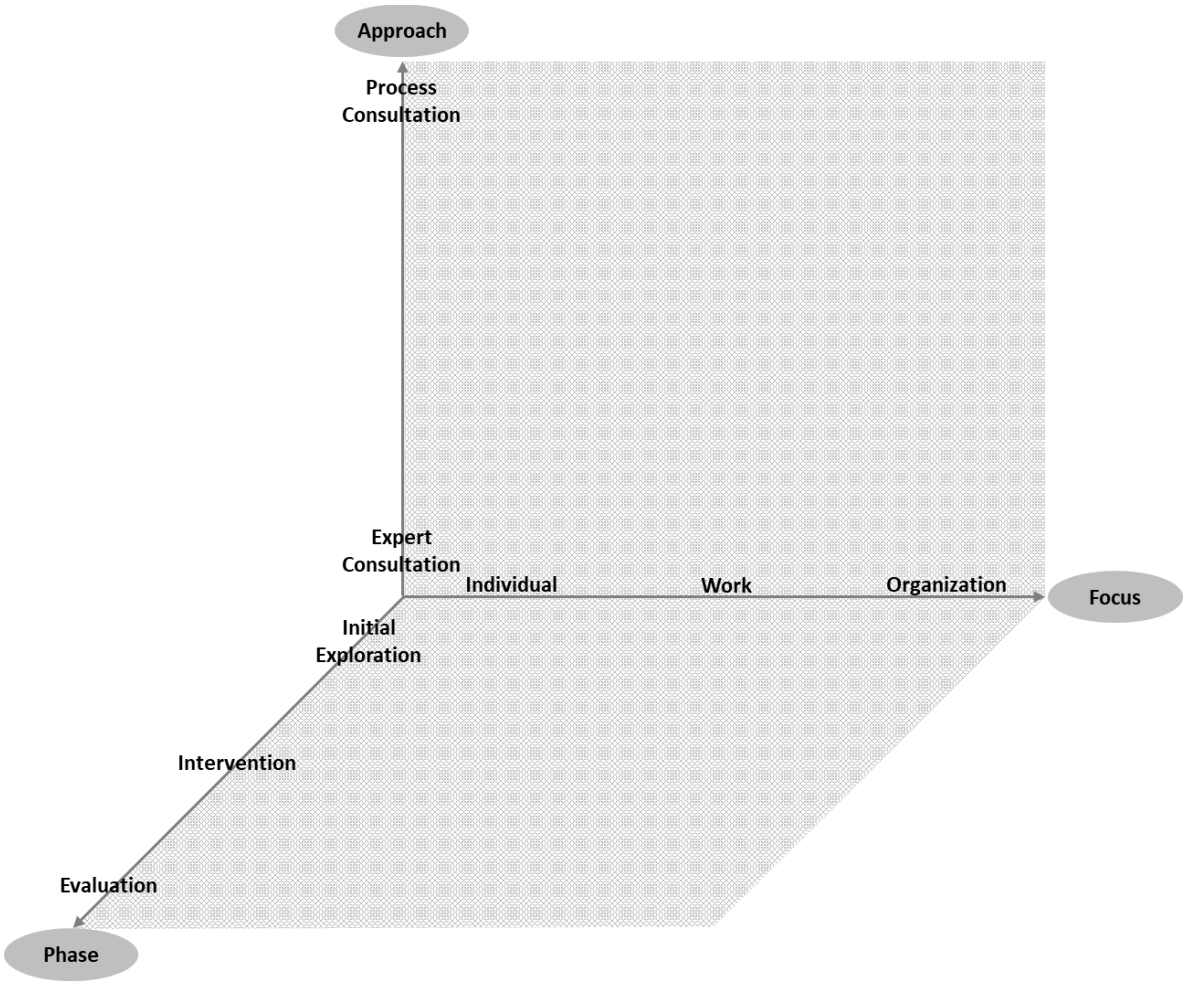
Taken together, the findings of all three studies provide hints that coaches' behavior and related roles might vary according to the coaching's context (i.e., target group and phase). This reasoning is in line both with individual references pointing to coaches changing their roles in the course of one coaching process (De Haan & Nilsson, 2017; Schein, 2012; Schreyögg, 2017) as well as with indications that coaches' behavior in executive coaching differs from general WPC (Berman, 2019; Stern, 2004). Consistent with this, initial findings suggest that coaches' behavior has differential effects depending on the target group, namely when comparing academic to executive samples (Sonesh, Coultas, Marlow et al., 2015). It further supports the assumption of the SLT (Thompson & Glasø, 2018; Thompson & Vecchio, 2009) and its adaptation to the coaching context (Hersey & Chevalier, 2012) that coaches adjust their behavioral approach (directive vs. supportive) according to the coaching phase and to their coachees' level of readiness. Pointing in a similar direction, research suggests the occurrence of negative effects due to a potential mismatch of coach behavior and coachee needs (Greif et al., 2010).

Thinking ahead about the study results and integrating them, this dissertation proposes a three-dimensional framework for the analysis of coach roles and contextual factors. Figure 3

illustrates this framework that directly builds on the two-dimensional framework developed in study 2 and likewise on the SLT described above. Yet it goes beyond the SLT as it considers additional influencing factors to be important. Providing the empirical basis that future research should draw upon and from which concrete testable pathways can be generated, this framework is further discussed in the section 4.3 “Implications for future research”.

Figure 2

Three-Dimensional Framework for Researching Coach Roles and its Interplay with Contextual Factors



4.1.5 The Importance of the Organizational Context and Its Lack of Consideration in Research and Practice

The relevance of contextual factors for successful coaching processes is indicated by all three studies. In study 1, only a few coaches reported considering their coachees' organizational context during the initial exploration by engaging in triangular contracting. Most of the coaches involved organizational stakeholders only indirectly (i.e., by looking at organizational stakeholders through the coachees' eyes, e.g., posing circular questions) while others did not mention considering the organizational context at all. In study 2, coaches as well as coachees point to the influence that contextual factors have on structural coaching characteristics and even on coaches' room for maneuver in case the coaching engagement is embedded in an incubator program. Consequently, these organizational constraints limit coaches' possibilities to respond to their coachees' needs and meet their expectations with regard to the SET (Cropanzano et al., 2017). Moreover, in case of coaching being mandatory, such organizational constraints are likely to affect the coachees' perceived trust and commitment and thus prevent a high-quality working alliance (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005).

However, as study 3 confirms, research on contextual factors in EC has been just as neglected as in general WPC (e.g., Athanasopoulou & Dopson, 2018; Pandolfi, 2020). This is in sharp contrast to the extant literature underlining the importance of considering coaching as an organizationally embedded intervention (e.g., Athanasopoulou & Dopson, 2018) as well as the need for coaches to establish (at least) triangular contracts and seek to align goals and interests of all stakeholders involved (e.g., Burger & Van Coller-Peter, 2019; Louis & Fatien Diochon, 2014) and to handle the demanding power dynamics and hidden agendas associated with this (e.g., Louis & Fatien Diochon, 2018). Involving multiple stakeholders at the beginning of the coaching process and throughout is likewise suggested as being both challenging and

important for coaching success (Burger & Van Coller-Peter, 2019; Louis & Fatien Diochon, 2014) and for avoiding negative effects for coachees (Schermuly & Graßmann, 2019).

Contemplating the results of the three studies in light of the existing literature delineates the gap between best-practice and actual coach behavior. For the beginning of coaching processes in general WPC (e.g., Burger & Van Coller-Peter, 2019) and for EC (e.g., Audet & Couteret, 2012; Mansoori et al., 2019), the importance of considering contextual influences is pointed out by researchers, as well as by coaches and coachees in this dissertation's studies. However, these contextual influences are insufficiently addressed in practice. For EC, studies 2 and 3 indicate particular challenges for coaches as coaching embedded in incubators or similar institutional programs are frequently highly structured and prescriptive.

4.2 Strengths and Limitations

This dissertation has important strengths as well as limitations that need to be considered when assessing the quality of its results.

The combination of study 2 and study 3 constitutes a particular strength of this dissertation as both studies comprehensively capture the state of research on EC in two methodically different studies. By evaluating and investigating the characteristics of EC from two perspectives, that is, from coaches' and from coachees' point of view, and additionally by conducting an SLR on this topic, the studies counteract common method variance and the single source bias (Söhnchen, 2009). Conducting an SLR further offers the advantage both of thoroughly penetrating a field of research as to the particular research questions and of systematically appraising the quality of the included studies (e.g., Briner & Denyer, 2012). The SLR in study 3 could thus corroborate and integrate the qualitative results of study 2 into a big picture of EC. It further extended the scope by integrating studies that were conducted regarding coaching with entrepreneurs with different levels of experience and at different stages of the entrepreneurial process.

Moreover, the qualitative design and QCA chosen for studies 1 and 2 can be considered an appropriate methodological fit as to the current state of research on coach behavior during the initial exploration and in EC, fields of research that have as yet barely been researched (Edmondson & McManus, 2007). QCA enabled us to capture both the breadth and the depth of coaching practitioners' subjective experiences while at the same time generating categories that render visible connections across cases (Schreier, 2012).

Notwithstanding that this dissertation could advance research on coaches' behavior, contextual factors, and EC several steps forward, there are limitations to be discussed. First, a predominantly qualitative approach was chosen for this dissertation (study 1 and study 2) as this was indicated by both a state of research that could be considered nascent (or intermediate at most in study 2; Edmondson & McManus, 2007) and the described research aim. However, the qualitative results provide in-depth insights into the distinctiveness of coaching in the chosen context but cannot claim to be representative. While the sample sizes of study 1 (N = 20) and study 2 (N = 67) are appropriate for QCA (Moser & Korstjens, 2018), they are still small compared to quantitative designs.

Second, while study 3 provides a greater methodological breadth and a quality assessment on relevant studies in the field of EC, study 1 and 2 rely on coaches' and/or coachees' self-reports and thus represent subjective theories of the two parties directly involved in a coaching process. As evidence suggests that the perspectives of different stakeholders involved in coaching might differ noticeably (e.g., De Haan, 2018; Theeboom et al., 2014) and coaches' actual observed behavior could be different from their self-reported behavior (e.g., Gessnitzer & Kauffeld, 2015; Ianiro et al., 2015), results (especially for study 1 that relies on coaches' self-reports only) can only be preliminary and further observational studies are required.

This dissertation broadens the perspective on contextual factors relevant for coaching. However, results regarding the distinctiveness of coaching target groups only apply to the

coaching for entrepreneurs as it cannot be inferred that differences are also relevant for other target groups. The same holds true for the coaching phase as a contextual factor. Whereas this dissertation explores coach behavior during the initial exploration, it cannot predict coach behavior and its changes in the following phases of the coaching process. Accordingly, the synthesis of this dissertation's findings can only reveal a tendency for coaches' behavior to vary depending on the context, but no causal relations between context and behavior can be determined.

4.3 Implications for Future Research

Building on these limitations and on the results of the three studies involved in this dissertation, several implications for future research can be deduced.

First, study 1 took an explorative approach to coach behavior during the initial exploration as this diagnostic phase has neither been explicitly defined or delimited previously, nor has coach behavior during this phase been researched. In order to determine how coach behavior during this initial phase may differ from the subsequent phases, comparative research on coach behavior across the different phases of the coaching process is needed. Existing research on coach behavior mostly concerns the coaching engagement as a whole without paying attention to the progress of the process (e.g., Henriques et al., 2017; Ladegard & Gjerde, 2014; Newsom & Dent, 2011). Future studies should thus build on the developed taxonomy to explore coach behavior during the intervention and evaluation phases and ultimately use a quantitative design to compare the frequency of coaches' behavior across the different phases.

Second, study 1 uncovers behavioral dimensions for coaches' behavior during the initial exploration that need to be tested factor-analytically in a large-scale quantitative study. As a team of researchers, we have responded to this need by developing a large-scale online survey based on the qualitative findings in study 1 (Müller et al., in prep.). Conducting a principal component analysis resulted in five dimensions that correspond to the content-related and

methodological categories described by our qualitative study. A next step should be to design a longitudinal study in order to assess how coaches' behavior concerning the explored dimensions relates to coaching success, ideally from the perspectives of both coaches and coachees.

This leads to the third suggestion that concerns the involvement of multiple perspectives in coaching research. As research studies indicate that different stakeholders' points of view might be quite different from each other (e.g., De Haan, 2018; Theeboom et al., 2014) and coachees might perceive coach behavior differently from how coaches do (De Haan & Nilsson, 2017), future research should explore coaches' behavior from the coachees' perspective in order to construct a full picture. Regarding EC, studies 2 and 3 clearly point to the contextual influences of the entrepreneurial ecosystem that are also mentioned in the existing literature (e.g., Audet & Couteret, 2012; Mansoori et al., 2019). Consequently, a further suggestion is to involve third-party perspectives (e.g., incubator managers, investors) on characteristics of EC by means of an initial interview study in order to validate findings beyond the coach-coachee-dyad.

Fourth, this dissertation took several steps to move away from a "one size fits all" approach to coaching and has highlighted the need to define WPC and its various forms in a more differentiated way. It also points to the important task for future research to consider further potential sub-formats and target groups beyond entrepreneurs (e.g., politicians, scientists, social workers; Böning & Kegel, 2015; Wegener et al., 2016) – as is already done with executive coaching (e.g., De Meuse et al., 2009; leadership coaching, Ely et al., 2010; Joo, 2005) – to keep pace with the practitioner-oriented literature and provide evidence-based suggestions for coaches on how to effectively support different target groups.

Fifth, the application of the SLT to the coaching field attempts to explain how coaches' behavior and roles should vary according to their coachees' level of readiness (i.e., willingness

and ability) and across coaching phases in order to be successful (Hersey & Chevalier, 2012). The coachees' readiness might in turn be related to contextual factors concerning coachees' specific environmental conditions (e.g., job demands and autonomy, mandatory participation) and to the phase in the coaching process (Horvath & Greenberg, 1989). For example, results from study 2 of this dissertation and from Audet and Couteret (2012) suggest that entrepreneurs' specific job demands and needs may entail misguided expectations towards coaching, by either expecting directive advice or, on the contrary, being resistant to change. Correspondingly, empirically testing the SLT's assumptions for coaching engagements separately for distinct target groups and across the different phases of a coaching process is suggested as being an important step in advancing future research.

Sixth, building on the SLT and the synthesis of this dissertation's studies, a three-dimensional framework for researching coach roles and their interplay with contextual factors has been developed (see Figure 3). By visualizing the possible interplay of coach roles (i.e., methodological approach × content-focus) and coaching phase, this three-dimensional framework lays the groundwork for future research to investigate coach roles in relation to several contextual factors. It provides concrete testable pathways for conducting a mediator analysis. For example, coach roles could be taken as the explanatory variable, coaching success as the dependent variable (e.g., operationalized as goal attainment), and the respective contextual factor(s) as the mediator (e.g., target group, coaching phase). The overarching research objective should be to examine empirically if there is a statistically significant interplay between coach roles and contextual factors. More specifically, it would be expedient to find out which coach roles used in which phase of the coaching process and for which target group lead to positive coaching outcomes (e.g., goal attainment, behavioral change, performance improvement). Ideally, observational studies regarding the analysis of recorded coaching sessions in a longitudinal setting could be chosen as a research design. This would

also circumvent the problem outlined by extant research that coaches' self-reported behavior may not correspond to the behavior actually exhibited (e.g., Gessnitzer & Kauffeld, 2015; Ianiro et al., 2015).

Seventh, proceeding from the aforementioned assumption that coaches take on different roles throughout the coaching process, moving between directive and non-directive behavior (Schein, 2012; Schreyögg, 2017), a further direction for future research concerns triggers that might explain coaches' change of roles (i.e., when and why). The ambidextrous leadership model assumes that leaders' opening vs. closing behavior should be adjusted according to situational demands in order to evoke certain employee behaviors and eventually create successful innovations (Rosing et al., 2011). Inspired by this theory, future research is encouraged to work towards a role-process model that investigates triggering actions or signals from coachees for the requirement of certain coach roles. Study 1 reveals that the majority of coaches frequently make use of intuition and only few of them employ standardized methods doing diagnostics. Consequently, the question arises whether coaches' intuition and related experience, that is considered an important coaching skill (Kotte et al., 2020; Mavor et al., 2010), is also a critical factor in deciding which roles are needed for a specific target group, a specific coachee profile, and for a specific coaching phase. Analyzing audio or video tapes of recorded consecutive coaching sessions might be a means of rating behavioral change in a longitudinal design.

4.4 Practical Implications

Coaching is a practice-driven field of research and its successful completion fundamentally depends on cooperation with coaching practitioners. The studies involved in this dissertation were feasible only due to coaches' and coachees' self-disclosure and their thorough analysis and integration generate implications for coaches', coachees', and organizational stakeholders that are delineated in the following.

For coaches, this dissertation provides a broad basis for reflection on their own behavior during the initial exploration of coaching processes in general and for EC in particular. Coaches should be aware of the different behavioral dimensions within which they may operate and the possible gap between best practice (especially as to involving multiple stakeholders) and actual behavior. The three-dimensional framework (see Figure 3) may help coaches to visualize the diversity of coach roles that exist when moving between process- and expert-consultation on the one hand, and between a focus on the individual coachees, their work, and their organization on the other. It further elucidates that different target groups might require coaches to take on different roles and that these requirements could even vary in the course of the coaching process. Consequently, situational agility and persistent attention is necessary in relation to the coachees' needs, level of trust, and commitment in order to adjust their own behavior throughout the coaching process. With regard to the initial exploration in particular, coaches are encouraged to not only listen to their intuition but complementarily use sound methods in order to get a profound understanding of their coachees (e.g., Grant & Cavanagh, 2004). Furthermore, in order to prevent negative effects, involving organizational stakeholders and assessing their potential influence is essential (Schermuly & Graßmann, 2019). In terms of EC, coaches are particularly challenged to navigate the coaching process with an appropriate balance of process- and expert-consultation. On the one hand, the aim should be to meet entrepreneurs' need for expert advice, while on the other, this entails the risk of being too directive or even letting oneself be instrumentalized by the coachees or the organization (Louis & Fatien Diochon, 2014, 2018). Furthermore, when assuming more directive roles coaches run the risk of creating asymmetry in the relationships to their coachees. With respect to the SET, such an asymmetry might lower the coachees' perceived level of control and thus negatively influences their internal cost-benefit analysis and ultimately the quality of the working alliance (Cropanzano et al., 2017; Cropanzano & Mitchell, 2005). Indeed, coaches' engaging in

prescribing behaviors was found to be negatively related to the quality of the working alliance (De Haan et al., 2019).

Regarding coachees, knowledge about the range of possible coach roles and behaviors might help to guide their expectations of the coaching process and the effects it may achieve (Schermuly & Graßmann, 2019). In light of the SET, being aware of the characteristics and possible costs and benefits of EC might help to prevent disappointment and to make an informed decision about whether investing in coaching is worthwhile. This is particularly relevant related to the entrepreneurial context where coaching, mentoring, and start-up consultancy appear to be more similar to each other than in other coaching contexts and substantial confusion exists on what distinguishes these formats (e.g., Brinkley & Le Roux, 2018; Müller & Diensberg, 2011).

Proceeding from this dissertation's findings that are in line with the model for coaching transfer (Stewart et al., 2008) and existing research (Athanasopoulou & Dopson, 2018; Louis & Fatien Diochon, 2014), organizational representatives (i.e., supervisors, HR) should be aware of their own influencing power regarding coaching success. Knowing that the active involvement of organizational stakeholders at the beginning of a coaching process is essential (e.g., Burger & Van Coller-Peter, 2019; Gettman et al., 2019) but rarely practiced, they could proactively ease coaches into the process of stakeholder involvement. Ideally, they should find a balance between providing sufficient information and refraining from interfering in the coaching engagement with their own agendas. In terms of EC, incubator managers play an important role. In many cases of institutionally embedded EC, they set the conditions and limitations and can even affect coaches' (scope of) behavior. They should thus critically reflect on the necessity and intensity of their involvement in order to prevent negative effects for the coachees. Bearing in mind that entrepreneurs' misleading expectations and lack of

openness towards coaching might impede successful coaching, incubator managers could use their influence and status to prepare entrepreneurs for coaching and provide realistic previews.

4.5 Conclusion

This dissertation broadens the perspective on contextual factors relevant in WPC and their potential interplay with process factors, in particular coach behavior. It raises awareness of the need for differentiated definitions of WPC according to particular characteristics, especially coach roles/functions. It is the first empirical work that illuminates and systematically depicts coach behavior in two different kinds of context, namely during the initial exploration and coaching for entrepreneurs. By developing a three-dimensional framework for coach behavior and contextual factors, this dissertation lays the groundwork for future research to test specific pathways and for coaching practitioners to critically reflect on the diversity of their potential roles and on when and how changing roles might be appropriate. We still have a long way to go, but the fist important steps have been taken.

5. References

Athanasopoulou, A., & Dopson, S. (2018). A systematic review of executive coaching outcomes: Is it the journey or the destination that matters the most? *The Leadership Quarterly*, *29*(1), 70–88. https://doi.org/10.1016/j.leaqua.2017.11.004

Audet, J., & Couteret, P. (2012). Coaching the entrepreneur: features and success factors. *Journal of Small Business and Enterprise Development*, *19*(3), 515–531. https://doi.org/10.1108/14626001211250207

Bachkirova, T. (2015). Self-deception in coaches: an issue in principle and a challenge for supervision. *Coaching: An International Journal of Theory, Research and Practice*, *8*(1), 4–19. https://doi.org/10.1080/17521882.2014.998692

REFERENCES

Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, *41*(1), 63–105. https://doi.org/10.1111/j.1744-6570.1988.tb00632.x

Barner, R. (2006). The targeted assessment coaching interview. *Career Development International*, *11*(2), 96–107. https://doi.org/10.1108/13620430610651868

Bazire, M., & Brézillon, P. (2005). Understanding context before using it. In D. Hutchison, T. Kanade, J. Kittler, J. M. Kleinberg, F. Mattern, J. C. Mitchell, M. Naor, O. Nierstrasz, C. Pandu Rangan, B. Steffen, M. Sudan, D. Terzopoulos, D. Tygar, M. Y. Vardi, G. Weikum, A. Dey, B. Kokinov, D. Leake, & R. Turner (Eds.), *Lecture Notes in Computer Science. Modeling and using context* (Vol. 3554, pp. 29–40). Springer Berlin Heidelberg. https://doi.org/10.1007/11508373_3

Behrendt, P., & Greif, S. (2018). Erfolgsfaktoren im Coachingprozess [Success factors in the coaching process]. In S. Greif, H. Möller, & W. Scholl (Eds.), *Springer Reference Psychologie. Handbuch Schlüsselkonzepte im Coaching [Handbook of key concepts in coaching]* (pp. 163–172). Springer.

Ben Salem, A., & Lakhal, L. (2018). Entrepreneurial coaching: how to be modeled and measured? *Journal of Management Development*, *37*(1), 88–100.

Berman, W. H. (2019). Coaching C-suite executives and business founders. *Consulting Psychology Journal: Practice and Research*, *71*(2), 72–85. https://doi.org/10.1037/cpb0000128

Berman, W. H., & Bradt, G. (2006). Executive coaching and consulting: "different strokes for different folks". *Professional Psychology: Research and Practice*, *37*(3), 244–253. https://doi.org/10.1037/0735-7028.37.3.244

Berninger-Schäfer, E. (2018). *Online-Coaching*. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-10128-2

REFERENCES

Blackman, A., Moscardo, G., & Gray, D. E. (2016). Challenges for the theory and practice of business coaching. *Human Resource Development Review*, *15*(4), 459–486. https://doi.org/10.1177/1534484316673177

Blau, P. M. (1964). Exchange and power in social life. Wiley.

Boland, A., Cherry, M. G., & Dickson, R. (Eds.). (2017). *Doing a systematic review: A student's guide* (2nd edition). SAGE.

Böning, U. (2015). *Business-Coaching: Feldstudie zum Einzel-Coaching mit Top-, Senior- und Mittelmanagern aus grossen Wirschaftsunternehmen [Business coaching: Field study on individual coaching of top, senior, and middle managers in major commercial enterprises]* [Dissertation]. Universität Osnabrueck, Osnabrueck.

Böning, U., & Kegel, C. (2015). *Ergebnisse der Coaching-Forschung [Results of coaching research]*. Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-662-43520-5

Bono, J. E., Purvanova, R. K., Towler, A. J., & Peterson, D. B. (2009). A survey of executive coaching practices. *Personnel Psychology*, *62*(2), 361–404. https://doi.org/10.1111/j.1744-6570.2009.01142.x

Bowles, S., Cunningham, C. J.L., La Rosa, G. M. de, & Picano, J. (2007). Coaching leaders in middle and executive management: goals, performance, buy-in. *Leadership & Organization Development Journal*, *28*(5), 388–408. https://doi.org/10.1108/01437730710761715

Bozer, G., & Delegach, M. (2019). Bringing context to workplace coaching: A theoretical framework based on uncertainty avoidance and regulatory focus. *Human Resource Development Review*, *18*(3), 376–402. https://doi.org/10.1177/1534484319853098

Bozer, G., & Jones, R. J. (2018). Understanding the factors that determine workplace coaching effectiveness: a systematic literature review. *European Journal of Work and*

Organizational Psychology, *27*(3), 342–361. https://doi.org/10.1080/1359432X.2018.1446946

Briner, R. B., & Denyer, D. (2012). Systematic review and evidence synthesis as a practice and scholarship tool. In D. M. Rousseau (Ed.), The Oxford handbook of evidence-based management. Oxford University Press.

Brinkley, M.-L., & Le Roux, I. (2018). Coaching as a support function for potential entrepreneurs. *The Southern African Journal of Entrepreneurship and Small Business Management*, *10*(1), 30. https://doi.org/10.4102/sajesbm.v10i1.99

Burger, Z., & Van Coller-Peter, S. (2019). A guiding framework for multi-stakeholder contracting in executive coaching. *SA Journal of Human Resource Management*, *17*. https://doi.org/10.4102/sajhrm.v17i0.1114

Burt, D., & Talati, Z. (2017). The unsolved value of executive coaching: A meta-analysis of outcomes using randomised control trial studies. *International Journal of Evidence Based Coaching and Mentoring*, *15*(2), 17–24.

Carter, A., Blackman, A., Hicks, B., Williams, M., & Hay, R. (2017). Perspectives on effective coaching by those who have been coached. *International Journal of Training and Development*, *21*(2), 73–91. https://doi.org/10.1111/ijtd.12098

Cooper, S. E. (2019). Introduction to the special issue on coaching elite performers. *Consulting Psychology Journal: Practice and Research*, *71*(2), 63–71. https://doi.org/10.1037/cpb0000140

Coutu, D., & Kauffman, C. (2009). What can coaches do for you? *Harvard Business Review*, 1–8.

Cox, E., Bachkirova, T., & Clutterbuck, D. (2014). Theoretical traditions and coaching genres: Mapping the territory. *Advances in Developing Human Resources*, *16*(2), 139–160. https://doi.org/10.1177/1523422313520194

Crompton, B. M. (2012). *The effect of business coaching and mentoring on small-to-medium enterprise performance and growth* [Dissertation]. RMIT University, Melbourne.

Crompton, B. M., & Smyrnios, K. X. (2011). *What difference does business coaching make to entrepreneurs' firm performance and future growth?* Paper presented at the 56th ICSB World Conference, Stockholm, Sweden. https://doi.org/10.5840/questions2011119

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals*, *11*(1), 479–516. https://doi.org/10.5465/annals.2015.0099

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874–900. https://doi.org/10.1177/0149206305279602

De Haan, E. (2018). Are you the coach you think you are? Different perspectives on coaching behaviour. *Coaching Today*, 6–10.

De Haan, E. (2019). A systematic review of qualitative studies in workplace and executive coaching: The emergence of a body of research. *Consulting Psychology Journal: Practice and Research*, *71*(4), 227–248. https://doi.org/10.1037/cpb0000144

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*(1), 40–57. https://doi.org/10.1037/a0031635

REFERENCES

De Haan, E., Gray, D. E., & Bonneywell, S. (2019). Executive coaching outcome research in a field setting: A near-randomized controlled trial study in a global healthcare corporation. *Academy of Management Learning & Education*, *18*(4), 581–605. https://doi.org/10.5465/amle.2018.0158

De Haan, E., & Nilsson, V. O. (2017). Evaluating coaching behavior in managers, consultants, and coaches: A model, questionnaire, and initial findings. *Consulting Psychology Journal: Practice and Research*, *69*(4), 315–333. https://doi.org/10.1037/cpb0000099

De Meuse, K. P., Dai, G., & Lee, R. J. (2009). Evaluating the effectiveness of executive coaching: Beyond ROI? *Coaching: An International Journal of Theory, Research and Practice*, *2*(2), 117–134. https://doi.org/10.1080/17521880902882413

Del Giudice, M. J., Yanovsky, B., & Finn, S. E. (2014). Personality assessment and feedback practices among executive coaches: In search of a paradigm. *Consulting Psychology Journal: Practice and Research*, *66*(3), 155–172. https://doi.org/10.1037/cpb0000007

Deplazes, S. (2016). *KaSyCo – Kategoriensysteme zur Analyse von Coachingprozessen [KaSyCo - category systems for the analysis of coaching processes]*. *Forum Beratungswissenschaft: v.3*. kassel universiy press.

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review*, *32*(4), 1155–1179. https://doi.org/10.5465/amr.2007.26586086

Ely, K., Boyce, L. A., Nelson, J. K., Zaccaro, S. J., Hernez-Broome, G., & Whyman, W. (2010). Evaluating leadership coaching: A review and integrated framework. *The Leadership Quarterly*, *21*(4), 585–599. https://doi.org/10.1016/j.leaqua.2010.06.003

Erdös, T., Haan, E. de, & Heusinkveld, S. (2020). Coaching: client factors & contextual dynamics in the change process. *Coaching: An International Journal of Theory, Research and Practice*, 1–22. https://doi.org/10.1080/17521882.2020.1791195

Executive Coaching Forum. (2015). *The executive coaching handbook: Principles and guidelines for a successful coaching partnership*. http://www.theexecutivecoachingforum.com/docs/default-document-library/tecf-6th-ed.pdf

Fayolle, A., & Klandt, H. (2006). Issues and newness in the field of entrepreneurship education: New lenses for new practical and academic questions. In A. Fayolle & H. Klandt (Eds.), *International entrepreneurship education: Issues and newness* (pp. 1–17). Edward Elgar.

Feldman, D. C., & Lankau, M. J. (2005). Executive coaching: A review and agenda for future research. *Journal of Management*, *31*(6), 829–848. https://doi.org/10.1177/0149206305279599

Garvey, B. (2011). Researching coaching: An eclectic mix or common ground? A critical perspective. In R. Wegener, A. Fritze, & M. Loebbert (Eds.), *Coaching entwickeln [Developing coaching]* (pp. 65–76). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-93059-6_7

Gessnitzer, S., & Kauffeld, S. (2015). The working alliance in coaching: Why behavior is the key to success. *The Journal of Applied Behavioral Science*, *51*(2), 177–197. https://doi.org/10.1177/0021886315576407

Gettman, H. J., Edinger, S. K., & Wouters, K. (2019). Assessing contracting and the coaching relationship: Necessary infrastructure? *International Journal of Evidence Based Coaching and Mentoring*, *17*(1), 46–62. https://doi.org/10.24384/0NFX-0779

Grant, A. M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behavior and Personality: An International Journal*, *31*(3), 253–263. https://doi.org/10.2224/sbp.2003.31.3.253

Grant, A. M., & Cavanagh, M. J. (2004). Toward a profession of coaching: Sixty-five years of progress and challenges for the future. *International Journal of Evidence Based Coaching and Mentoring*, *2*(1), 1–16.

Grant, A. M., & Green, R. M. (2018). Developing clarity on the coaching-counselling conundrum: Implications for counsellors and psychotherapists. *Counselling and Psychotherapy Research*, *18*(4), 347–355. https://doi.org/10.1002/capr.12188

Graßmann, C., & Schermuly, C. C. (2016). Side effects of business coaching and their predictors from the coachees' perspective. *Journal of Personnel Psychology*, *15*, 152–163. https://doi.org/10.1027/1866-5888/a000161

Graßmann, C., & Schermuly, C. C. (2020). Understanding what drives the coaching working alliance: A systematic literature review and meta-analytic examination. *International Coaching Psychology Review*, *15*(2), 99–118.

Graßmann, C., Schölmerich, F., & Schermuly, C. C. (2019). The relationship between working alliance and client outcomes in coaching: A meta-analysis. *Human Relations*, *42*(2), 1-24. https://doi.org/10.1177/0018726718819725

Greif, S. (2005). *Mehrebenen-Coaching von Individuen, Gruppen und Organisationen - Eine umfassende und genaue Definition von Coaching als Förderung der Selbstreflexion.* Universität Osnabrueck.

Greif, S. (2013). Conducting organizational-based evaluations of coaching and mentoring programs. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *Wiley-Blackwell handbooks in organizational psychology. The Wiley-Blackwell handbook of the psychology of*

coaching and mentoring (pp. 445–470). Wiley-Blackwell, a John Wiley & Sons, Ltd., Publication.

Greif, S., Möller, H., & Scholl, W. (2018). Coachingdefinitionen und -konzepte [Coaching definitions and concepts]. In S. Greif, H. Möller, & W. Scholl (Eds.), *Springer Reference Psychologie. Handbuch Schlüsselkonzepte im Coaching [Handbook of key concepts in coaching]* (pp. 1–10). Springer.

Greif, S., Schmidt, F., & Thamm, A. (2010). *The rating of eight coaching success factors: Observation manual*, Osnabrueck.

Grover, S., & Furnham, A. (2016). Coaching as a developmental intervention in organisations: A systematic review of its effectiveness and the Mechanisms Underlying It. *PloS One*, *11*(7), e0159137. https://doi.org/10.1371/journal.pone.0159137

Hagedorn, A. (2018). *The impact of social capital for venture creation: Essays on its role in management support and crowdinvesting* [Dissertation]. HHL Leipzig Graduate School of Management, Leipzig, Germany.

Henriques, P. L., Curado, C., & Matos, P. V. (2017). The warmness seed: long-term fruits of coaching. *Coaching: An International Journal of Theory, Research and Practice*, *10*(1), 66–81. https://doi.org/10.1080/17521882.2016.1269236

Heron, J. (2001). *Helping the client: A creative practical guide* (5th ed.). SAGE. http://www.loc.gov/catdir/enhancements/fy0657/2001276112-d.html

Hersey, P., & Chevalier, R. (2012). Situational leadership and executive coaching. In M. Goldsmith, L. S. Lyons, & S. McArthur (Eds.), *Coaching for leadership: Writings on leadership from the world's greatest coaches* (3rd ed., pp. 24–34). John Wiley.

Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the working alliance inventory. *Journal of Counseling Psychology*, *36*(2), 223–233. https://doi.org/10.1037/0022-0167.36.2.223

Hunt, C. M., & Fielden, S. (2016). *Coaching for women entrepreneurs*. *New horizons in management*. Edward Elgar Publishing.

Ianiro, P. M., Lehmann-Willenbrock, N., & Kauffeld, S. (2015). Coaches and clients in action: A sequential analysis of interpersonal coach and client behavior. *Journal of Business and Psychology*, *30*(3), 435–456. https://doi.org/10.1007/s10869-014-9374-5

Ianiro, P. M., Schermuly, C. C., & Kauffeld, S. (2013). Why interpersonal dominance and affiliation matter: An interaction analysis of the coach-client relationship. *Coaching: An International Journal of Theory, Research and Practice*, *6*(1), 25–46. https://doi.org/10.1080/17521882.2012.740489

International Coaching Federation. (2020). *2020 ICF global coaching study: Executive summary*. https://coachingfederation.org/app/uploads/2020/09/FINAL_ICF_GCS2020_ExecutiveSummary.pdf

Jansen, A., Mäthner, E., & Bachmann, T. (2003). Evaluation von Coaching [Evaluation of coaching]: Eine Befragung von Coachs und Klienten zur Wirksamkeit von Coaching. *Organisationsberatung, Supervision, Coaching*, *3*, 245–254.

Jayaraman, N., Khorana, A., Nelling, E., & Covin, J. (2000). CEO founder status and firm financial performance. *Strategic Management Journal*, *21*(12), 1215–1224. https://doi.org/10.1002/1097-0266(200012)21:12<1215::AID-SMJ146>3.0.CO;2-0

Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, *31*(2), 386–408. https://doi.org/10.5465/amr.2006.20208687

Jones, R. J., & Bozer, G. (2018). Advances in the psychology of workplace coaching. *Applied Psychology: An International Review*, *67*(4), 768–772. https://doi.org/10.1111/apps.12164

Jones, R. J., Napiersky, U., & Lyubovnikova, J. (2019). Conceptualizing the distinctiveness of team coaching. *Journal of Managerial Psychology*, *34*(2), 62–78. https://doi.org/10.1108/JMP-07-2018-0326

Jones, R. J., Woods, S. A., & Guillaume, Y. R. F. (2016). The effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology*, *89*(2), 249–277. https://doi.org/10.1111/joop.12119

Joo, B.-K. (2005). Executive coaching: A conceptual framework from an integrative review of practice and research. *Human Resource Development Review*, *4*(4), 462–488. https://doi.org/10.1177/1534484305280866

Kampa-Kokesch, S., & Anderson, M. Z. (2001). Executive coaching: A comprehensive review of the literature. *Consulting Psychology Journal: Practice and Research*, *53*(4), 205–228. https://doi.org/10.1037/1061-4087.53.4.205

Kilburg, R. R. (1996). Toward a conceptual understanding and definition of executive coaching. *Consulting Psychology Journal: Practice and Research*, *48*(2), 134–144. https://doi.org/10.1037/1061-4087.48.2.134

Kirkpatrick, D. L. (1976). Evaluation of training. In R. L. Craig (Ed.), *Training and development handbook: A guide to human resource development* (2nd ed., pp. 1–27). McGraw-Hill Book Co.

Kirkpatrick, D. L. (1994). *Evaluating training programs: The four levels*. Berrett-Koehler.

Koopman, R. (2013). *Coaching and mentoring entrepreneurs - more definitions won't work.* Paper presented at 27nd RENT, Vilnius, Lithuania.

Kotte, S., Hinn, D., Oellerich, K., & Möller, H. (2016). Der Stand der Coachingforschung: Kernergebnisse der vorliegenden Metaanalysen. *Organisationsberatung, Supervision, Coaching*, *23*(1), 5–23. https://doi.org/10.1007/s11613-016-0444-6

Kotte, S., Müller, A., & Diermann, I. (2020). Intuition in der Eingangsdiagnostik im Coaching – Empirische Einblicke in die Rolle der Intuition aus der Sicht von Coaches [Intuition in the initial exploration in coaching - empirical insights into the role of intuition from coaches' perspective]. *Organisationsberatung, Supervision, Coaching*, *27*(4), 455–470. https://doi.org/10.1007/s11613-020-00680-6

Kotte, S. C. (2019). The state-of-play of coaching: A synthesis of the extant meta-analyses. *Academy of Management Proceedings.* Advance online publication. https://doi.org/10.5465/AMBPP.2019.13554abstract

Kraiger, K., Ford, J. K., & Salas, E. (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training Evaluation. *Journal of Applied Psychology*, *78*(2), 311–328.

Kutzhanova, N., Lyons, T. S., & Lichtenstein, G. A. (2009). Skill-based development of entrepreneurs and the role of personal and peer group coaching in enterprise development. *Economic Development Quarterly*, *23*(3), 193–210. https://doi.org/10.1177/0891242409336547

Ladegard, G., & Gjerde, S. (2014). Leadership coaching, leader role-efficacy, and trust in subordinates. A mixed methods study assessing leadership coaching as a leadership development tool. *The Leadership Quarterly*, *25*(4), 631–646. https://doi.org/10.1016/j.leaqua.2014.02.002

Lancer, N., Clutterbuck, D., & Megginson, D. (2016). *Techniques for coaching and mentoring* (2nd ed.). Routledge.

Lee, R. J. (2016). The role of contracting in coaching: Balancing individual client and organizational issues. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *The Wiley-Blackwell Handbook of the Psychology of Coaching and Mentoring* (pp. 40–57). John Wiley & Sons.

Lippmann, E. (2013). *Coaching*. Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-35921-7

Louis, D., & Fatien Diochon, P. (2014). Educating coaches to power dynamics: Managing multiple agendas within the triangular relationship. *Journal of Psychological Issues in Organizational Culture*, *5*(2), 31–47. https://doi.org/10.1002/jpoc.21140

Louis, D., & Fatien Diochon, P. (2018). The coaching space: A production of power relationships in organizational settings. *Organization*, *25*(6), 710–731. https://doi.org/10.1177/1350508418779653

Mansoori, Y., Karlsson, T., & Lundqvist, M. (2019). The influence of the lean startup methodology on entrepreneur-coach relationships in the context of a startup accelerator. *Technovation*, *84-85*, 37–47. https://doi.org/10.1016/j.technovation.2019.03.001

Matotola, S., & Bengesi, K. (2019). Motivation as a potential gear towards business establishment by young entrepreneurs incubated in higher learning institutions business incubators in Tanzania. *Journal of Business Studies and Economics* (1), 155–173.

Mavor, P., Sadler-Smith, E., & Gray, D. E. (2010). Teaching and learning intuition: Some implications for HRD and coaching practice. *Journal of European Industrial Training*, *34*(8/9), 822–838. https://doi.org/10.1108/03090591011080995

McDowall, A., & Smewing, C. (2009). What assessments do coaches use in their practice and why? *The Coaching Psychologist*, *5*(2), 98–103.

Möller, H., & Kotte, S. (2018). Diagnostik im Coaching. In S. Greif, H. Möller, & W. Scholl (Eds.), *Springer Reference Psychologie. Handbuch Schlüsselkonzepte im Coaching [Handbook of key concepts in coaching]* (pp. 105–113). Springer.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research.: Part 3: Sampling, data collection and analysis. *The European Journal of General Practice*, *24*(1), 9–18. https://doi.org/10.1080/13814788.2017.1375091

Müller, A., & Kotte, S. (2020). Of SMART, GROW, and goals gone wild - A systematic literature review on the relevance of goal activities in workplace coaching. *International Coaching Psychology Review*, *15*(2), 69–97.

Müller, A., Kotte, S., Diermann, I., & Möller, H. (in prep.). Constructing a full picture of the coaching client: Coaching practices during the initial exploration in workplace coaching and how they relate to coach characteristics.

Müller, K.-D., & Diensberg, C. (Eds.). (2011). *Beiträge zu Gründung, Unternehmertum und Mittelstandsentwicklung: Vol. 4. Methoden und Qualität in Gründungslehre, Gründungscoaching und Gründungsberatung: Interventionen und Innovation [Methods and quality in teaching entrepreneurship, entrepreneurial coaching and start-up consultancy: Interventions and innovations]* (1st ed.). Eul.

Newsom, G., & Dent, E. B. (2011). A work behaviour analysis of executive coaches. *International Journal of Evidence Based Coaching and Mentoring*, *9*(2), 1–22.

Pandolfi, C. (2020). Active ingredients in executive coaching: A systematic literature review. *International Coaching Psychology Review*, *15*(2), 6–30.

Pohl, M. (2010). Die Kunst des Coaching [The art of coaching]. In M. Pohl & H. Fallner (Eds.), *Coaching mit System: Die Kunst nachhaltiger Beratung* (4th ed., pp. 17–86). VS Verl. für Sozialwiss.

Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly*, *22*(5), 956–974. https://doi.org/10.1016/j.leaqua.2011.07.014

Saadaoui, S., & Affess, H. (2015). Evaluating the role of coaching on developing entrepreneurial self-efficacy. *European Journal of Business and Social Sciences, 3*(11), 54–61.

Schein, E. (2012). Coaching and consultation revisited: Are they the same? In M. Goldsmith, L. S. Lyons, & S. McArthur (Eds.), *Coaching for leadership: Writings on leadership from the world's greatest coaches* (3rd ed., pp. 35–43). John Wiley.

Schein, E. H. (1990). A general philosophy of helping: Process consultation. *Sloan Management Review*, *31*(3), 57–64.

Schermuly, C. C. (2018). Client dropout from business coaching. *Consulting Psychology Journal: Practice and Research, 70*(3), 250–267. https://doi.org/10.1037/cpb0000112

Schermuly, C. C., & Graßmann, C. (2019). A literature review on negative effects of coaching – what we know and what we need to know. *Coaching: An International Journal of Theory, Research and Practice*, *12*(1), 39–66. https://doi.org/10.1080/17521882.2018.1528621

Schreier, M. (2012). *Qualitative content analysis in practice*. SAGE.

Schreyögg, A. (2010). Ist Coaching reine Prozessberatung oder sind hier auch andere Beratungsmodelle relevant? [Is coaching pure process consultation or are other consultation models also relevant?]. *Organisationsberatung, Supervision, Coaching*, *17*(2), 119–132. https://doi.org/10.1007/s11613-010-0185-x

Schreyögg, A. (2017). The potential diversity of a coach's roles. In A. Schreyögg & C. Schmidt-Lellek (Eds.), *The Professionalization of Coaching* (pp. 179–191). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-16805-6_11

Schreyögg, A., & Schmidt-Lellek, C. (Eds.). (2017). *The Professionalization of Coaching*. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-16805-6

Schweer, M. K. W. (2008). Vertrauen und soziales Handeln - Eine differentialpsychologische Perspektive [Trust and social action - a differential psychology perspective]. In E. Jammal (Ed.), *Vertrauen im interkulturellen Kontext* (pp. 13–26). VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-91038-3_2

Segers, J., Vloeberghs, D., Henderickx, E., & Inceoglu, I. (2011). Structuring and understanding the coaching industry: The coaching cube. *Academy of Management Learning & Education*, *10*(2), 204–221.

Sheldon, C. (2018). Trust your gut, listen to reason: How experienced coaches work with intuition in their practice. *International Coaching Psychology Review*, *13*(1), 6–20.

Shoukry, H., & Cox, E. (2018). Coaching as a social process. *Management Learning*, *49*(4), 413–428. https://doi.org/10.1177/1350507618762600

Sime, C., & Jacob, Y. (2018). Crossing the line? A qualitative exploration of ICF master certified: Coaches' perception of roles, borders and boundaries. *International Coaching Psychology Review*, *13*(2), 46–61.

Smither, J. W. (2011). Can psychotherapy research serve as a guide for research about executive coaching? An agenda for the next decade. *Journal of Business and Psychology*, *26*(2), 135–145. https://doi.org/10.1007/s10869-011-9216-7

Söhnchen, F. (2009). Common method variance und single source bias. In S. Albers, D. Klapper, U. Konradt, A. Walter, & J. Wolf (Eds.), *Methodik der empirischen Forschung* (pp. 137–152). Gabler Verlag. https://doi.org/10.1007/978-3-322-96406-9_10

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*, *8*(2), 73–95. https://doi.org/10.1080/17521882.2015.1071418

Sonesh, S. C., Coultas, C. W., Marlow, S. L., Lacerenza, C. N., Reyes, D., & Salas, E. (2015). Coaching in the wild: Identifying factors that lead to success. *Consulting Psychology Journal: Practice and Research*, *67*(3), 189–217. https://doi.org/10.1037/cpb0000042

Stein, I. F. (2009). Which hat am I wearing now? an evidence-based tool for coaching self-reflection. *Coaching: An International Journal of Theory, Research and Practice*, *2*(2), 163–175. https://doi.org/10.1080/17521880903102233

Stephan, U. (2018). Entrepreneurs' mental health and well-being: A review and research agenda. *Academy of Management Executive*, *32*(3), 290–322. https://doi.org/10.5465/amp.2017.0001

Stern, L. R. (2004). Executive coaching: A working definition. *Consulting Psychology Journal: Practice and Research*, *56*(3), 154–162. https://doi.org/10.1037/1065-9293.56.3.154

Stewart, L. J., Palmer, S., Wilkin, H., & Kerrin, M. (2008). Towards a model of coaching transfer: Operationalising coaching success and the facilitators and barriers to transfer. *International Coaching Psychology Review*, *3*(2), 87–109.

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*(1), 1–18. https://doi.org/10.1080/17439760.2013.837499

Thompson, G., & Glasø, L. (2018). Situational leadership theory: a test from a leader-follower congruence approach. *Leadership & Organization Development Journal*, *39*(5), 574–591. https://doi.org/10.1108/LODJ-01-2018-0050

Thompson, G., & Vecchio, R. P. (2009). Situational leadership theory: A test of three versions. *The Leadership Quarterly*, *20*(5), 837–848. https://doi.org/10.1016/j.leaqua.2009.06.014

Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, *14*(3), 207–222. https://doi.org/10.1111/1467-8551.00375

Vandaveer, V. V., Lowman, R. L., Pearlman, K., & Brannick, J. P. (2016). A practice analysis of coaching psychology: Toward a foundational competency model. *Consulting Psychology Journal: Practice and Research*, *68*(2), 118–142. https://doi.org/10.1037/cpb0000057

Wanberg, C. R., Welsh, E. T., & Hezlett, S. A. (2003). Mentoring research: A review and dynamic process model. *Research in Personnel and Human Resources Management*, *22*, 39–124. https://doi.org/10.1016/S0742-7301(03)22002-8

Wegener, R., Loebbert, M., & Fritze, A. (2016). *Coaching-Praxisfelder [Coaching practice fields]*. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-10171-8

Witherspoon, R., & White, R. P. (1996). Executive coaching: A continuum of roles. *Consulting Psychology Journal: Practice and Research*, *48*(2), 124–133. https://doi.org/10.1037/1061-4087.48.2.124

6. Full-Length Manuscripts

6.1 Study 1: Initial exploration in workplace coaching: Coaches' thematic and methodological approach

Introduction

Workplace coaching (WPC) is generally acknowledged to be effective in initiating desired changes and this claim is supported by meta-analytical evidence (e.g. De Meuse et al., 2009; Jones et al., 2016; Kotte, 2019; Sonesh et al., 2015). Initial empirical evidence suggests that the beginning of a coaching engagement is particularly important for the success of the entire coaching, especially as a basis for establishing a sound working alliance between coach and coachee (Ianiro et al., 2013). Moreover, the coaching literature highlights the importance of (1) identifying whether coaching or an alternative format is the appropriate type of support for a client (e.g. Grant & Green, 2018), (2) narrowing the focus of the coaching engagement in order to avoid negative effects (e.g. Schermuly & Graßmann, 2019), and (3) clarifying the contract, possibly by also involving other organisational stakeholders (e.g. Burger & Van Coller-Peter, 2019). More recently, it has been emphasised that WPC needs to be considered as a contextualised rather than a dyadic intervention, shaped by and embedded in its social, in particular its organisational context (Athanasopoulou & Dopson, 2018). The efficacy of a coaching intervention is therefore posited to be dependent upon its fit with both the individual coachee and the respective organisational culture (Bozer & Delegach, 2019). Whether such a fit can be established is likely to be impacted upon by the way coaches conduct the initial exploration. In fact, Athanasopoulou and Dopson (2018) consider investigating how the focus of the coaching intervention is established as a relevant area for future research. In contrast to psychotherapy, where a clear clinical diagnosis is the starting point for planning the treatment (e.g. Cwik et al., 2016), how to conduct the initial exploration in WPC is less clear and far less

unanimous. Research has largely neglected to study coaches' behaviour and methodological approach so far (Gessnitzer & Kauffeld, 2015; Gettman et al., 2019). However, a better understanding of the approaches coaches employ is a necessary first step in order to then assess how effective they are with regard to coaching outcomes.

Given the outlined importance of a thorough initial exploration on the one hand and the scarcity of research on how coaches actually proceed on the other, we seek to develop a descriptive taxonomy of contents and methods of the initial exploration and thereby contribute both to the research and practice of WPC. We advance research by shedding light on and systematising a relevant, underresearched topic in WPC. We contribute to the practice of coaching as an HRD intervention by providing a framework for reflection and decision-making for coaching practitioners, coaching clients, and HR professionals.

Initial exploration within the coaching process

Even though different definitions of coaching coexist, researchers generally agree to describe WPC as a custom-tailored, relationship-based, reflection- and goal-oriented learning and development intervention that is provided by a professional coach to a client in a one-on-one setting with the aim of achieving professional goals for the client's (and the organisation's) benefit (Bozer & Jones, 2018; Jones et al., 2016).

Several attempts have been made to develop overall process models that differentiate stages across the coaching engagement, differing in the naming and number of stages (e.g. Feldman & Lankau, 2005; Gettman et al., 2019; The Executive Coaching Forum, 2015). Synthesising these process models, we position the initial exploration in an integrated coaching process model containing four different stages: (1) contracting, (2) assessment, (3) intervention, and (4) evaluation, that are preceded by a pre-coaching stage.

We posit that the initial exploration extends from the pre-coaching stage to the first two stages of the actual coaching engagement, that is, contracting and assessment. We therefore

define the *initial exploration* during WPC as the activities that coaches engage in to systematically gather and process relevant information about coachees, their situation and organisational context, with the purpose of generating a preliminary 'diagnosis' and deducing appropriate interventions (e.g. Möller & Kotte, 2013). We delimit the initial exploration from *ongoing exploration throughout the process* by considering different points in time at which the assessment is carried out, that is at the beginning (vs. throughout) of the coaching engagement (Schmidt-Atzert &Amelang, 2012).

Evidence on how coaches proceed during the initial exploration

Despite its indicated importance for coaching success, empirical evidence on how coaches approach the initial exploration is scarce (Gettman et al., 2019). However, there is research analysing sub-components of the initial exploration, namely contracting, goal setting, and psychometric assessments.

As to contracting, Gettman et al. (2019) found a positive relationship between contracting behaviour and the working alliance in a coaching engagement. They also identified differences in coaches' and coachees' perceptions regarding the relevance of coaches' contracting behaviour. Burger and Van Coller-Peter (2019) developed a framework for multi-stakeholder contracting in coaching. Their empirical findings point to the importance of contracting both at the beginning of a coaching process and throughout the coaching engagement and also highlight the relevance of involving all stakeholders concerned.

Research suggests goal setting and an agreement on goals between coaches and coachees to positively affect coaching success (e.g. Blackman et al., 2016; Carter et al., 2017). However, findings on the relationship between working with goals and coaching outcome are inconsistent (Müller & Kotte, 2020). From a conceptual perspective, goal setting has also been discussed more critically, particularly if goals are equated with specific, SMART goals, rather than also considering higher levels of abstraction.

A survey examining coaches' use of assessment methods in coaching engagements in general also provides insight into the possible methodological range for the *initial* assessment (McDowall & Smewing, 2009). Of the surveyed coaches, 88 % apply psychometrics, these most frequently being personality questionnaires, followed by 360°-feedback (McDowall & Smewing, 2009). A study on coaches' use of personality assessments indicates that coaches gather information on the coachees' personality and performance in the early stages of the coaching engagement using psychometric assessments, and are also concerned with building mutual trust, thereby establishing a working alliance between coach and coachee (Del Giudice et al., 2014).

Aim and research questions

In summary, the initial exploration seems to be of great importance in achieving positive coaching outcomes (e.g. Ianiro et al., 2013; Schermuly & Graßmann 2019) and reducing the probability of negative effects for coachees (Schermuly & Graßmann, 2019) and the organisation (Oellerich, 2016). However, research on this important phase is scarce. We therefore aim to provide a more differentiated and systematised picture of what happens during the initial exploration. With our study, we seek to answer the following overarching research question:

RQ. How do coaches approach the initial exploration during a coaching process?

Coaching practices vary greatly across coaches, among other reasons because there are multiple different approaches to coaching (e.g. Feldman & Lankau, 2005) and because coaches come from a wide range of professional backgrounds (Orenstein, 2002). Therefore, the focus on specific content and methods applied probably differ substantially. This also concerns factors that guide coaches in how they proceed during the initial exploration (e.g. setting interview guidelines). We therefore seek to explore more closely:

RQ a. How do coaches proceed in the initial exploration regarding content?

RQ b. How do coaches proceed in the initial exploration regarding methods?

RQ c. What are coaches guided by during the initial exploration?

Method

Research Design

As we aimed to develop a profound understanding of how coaches proceed at the beginning of a coaching engagement, that is, a social interaction about which we do not have sufficient knowledge (Athanasopoulou & Dopson, 2018) and on which the state of the literature can be considered nascent (Edmondson & McManus, 2007), a qualitative interview study seemed to be appropriate. In line with suggestions to integrate interpretivist and positivist approaches (e.g. Arino et al., 2016; Lin, 1998), while we consider coaches' accounts of how they approach the initial exploration to be subjective interpretations of reality, our data analysis was primarily underpinned by a positivist approach: We aimed to uncover the how and why of the initial exploration from the perspective of our interviewees and did not attempt to subjectively interpret their responses. Rather, we sought to identify patterns across the various cases (e.g. Lin, 1998). The study received the approval of our university's research ethics committee.

Sample Selection

The sampling strategy we applied was purposeful sampling as we focused on specific characteristics (Patton, 2015). We interviewed 20 professional coaches in Germany who met the criteria of offering WPC in a one-on-one setting at the time of the interview. We purposefully sampled coaches with a broad range of coaching backgrounds and level of experience in working as a coach. We recruited coaches regarding the named criteria via online databases of German coaching associations, online networks, and through recommendations.

After perusing the coaches' homepages, they were contacted via e-mail. We obtained written informed consent from our research participants before conducting and audio-taping the interviews.

As it is common practice and recommended in qualitative research (e.g. Moser & Korstjens, 2018) we used saturation as a criterion for reaching a sample size that is rich enough for answering our research questions. Saturation is reached when the data captured cannot yield new categories and the same categories are coded several times. We reached saturation after having analysed 20 interviews, a sample size that is also generally estimated to be adequate in Qualitative Content Analysis (Moser & Korstjens, 2018).

Our sample included 20 German coaches of whom nine were female and eleven were male. Coaches were between 33 and 65 years old (M = 50.5) and had on average 12.1 years of experience as a coach (with a range from two to 30 years). Coaches spent on average 38.5 % of their entire working time on coaching (with a range from 5 % to 100 %). Our sample of coaches corresponds to sample characteristics of the German coaching market at large in terms of age, sex, proportion of working time spent on coaching, and years of coaching experience (e.g. Middendorf, 2018). Most coaches stated that they use several coaching approaches, including a systemic (16), humanistic (10), cognitive-behavioural (5), and/or a psychodynamic (4) approach.

Data Collection

We conducted semi-structured interviews with coaches. Semi-structured interviews ensure that all important aspects are covered for each individual case, while at the same time allowing for the emergence of new, additional issues (Louis & Fatien Diochon, 2014). The interview guide encompassed open and explorative questions to capture coaches' approach to the initial exploration. Interviewees were asked to remember the beginning of a specific coaching

engagement, describe how they proceeded and to then more generally report on 1) how they usually explore the content and apply the methods/techniques in order to gain an understanding of their coachees' issues and context, and 2) what guides them during the initial exploration.

Interviews were conducted by graduate-level students who had been specifically trained to do so. The average length of interviews was 39 minutes, ranging from 22 to 59 minutes, and the interview material was transcribed to be further analysed using specific transcription guidelines (McLellan, MacQueen, & Neidig, 2003).

Data Analysis

We conducted a Qualitative Content Analysis (QCA). QCA can be defined as a qualitative text analysis that intends to depict the structure of the data by developing a coding frame of higher- and lower-level categories (e.g. Schreier, 2012). As our aim was to capture the subjective experiences of coaches but likewise to integrate their reported practices into overarching patterns in order to develop a taxonomy, we consider QCA to constitute an appropriate methodological fit. Following a mainly inductive approach, we iteratively developed a coding frame in a team of three researchers, namely two doctoral psychology students and one post-doctoral researcher, all with coaching training. In line with Morse et al. (2002) we believe that striving for reliability and validity also applies for qualitative research. Thus, we used several verification strategies: We carefully selected an appropriate method of data collection to fit our research question, purposefully sampled until data saturation, engaged in an iterative process of data collection and analysis and discussed and aligned the perspectives of the three researchers (Morse et al., 2002). Furthermore, *trustworthiness* plays a crucial role in qualitative research. One important aspect to establish trustworthiness is credibility, in the sense that data is interpreted correctly and findings resemble the research participants' original point of view (Korstjens & Moser, 2018; Morrow, 2005; Morse et al., 2002). To ensure the

credibility of our research, we used prolonged engagement (e.g. letting interviewers become familiar with the context, providing sufficient time to engage with interviewees and build trust), persistent observation (e.g. switching back and forth between reading the interview transcripts, analysing, and theorizing; coding and recoding categories), and peer researchers (e.g. analysing data in a team of three researchers in an iterative process of independent analysis and joint discussion) (e.g. Korstjens & Moser, 2018; Morrow, 2005). More specifically, within the team of researchers, we adopted a consensual agreement approach (Schreier, 2012), meaning that we double-coded all interviews and discussed codings until we reached full agreement. The average Cohen's kappa between each original coding and the respective consensus file was κ = .70. According to Landis and Koch (1977), this can be considered a substantial agreement.

Results

We first present findings on how coaches approach the initial exploration regarding content (RQ a) and second, describe how coaches proceed methodologically (RQ b). In a third step, we illustrate what coaches are guided by during their initial exploration (RQ c). Table 1 provides an overview on the categories and respective frequencies.

--- insert Table 1 about here ---

Content of the Initial Exploration

Assessing the suitability of WPC and preconditions for engaging in coaching

Approximately half of the interviewed coaches (n = 11) described assessing the suitability of WPC for their coachees as an initial step before engaging in coaching. Coaches underlined the necessity of thoroughly checking if their potential coachees describe psychotherapeutic needs (n = 10) to avoid exceeding their capabilities and authority. Furthermore, coaches demarcate coaching from other types of consultation (n = 5; e.g., expert consultation, medical

treatments), and explore if coaching is being used to externalise the manager's role and responsibilities (*n* = 2). One coach said,

> *'Of course, one has to clarify whether the client's issues can be processed using coaching. They shouldn't be too deeply personal, that's approaching therapy, and this also applies in the other direction: There's equal temptation to drift into giving managerial job instructions.' (CD06)*

Moreover, coaches reported assessing their coachees' readiness for coaching (*n* = 9), including their willingness to change and their expectations of and concerns about coaching. They also underlined that exploring their coachees' motivational preconditions is an important aspect of creating a common basis from which both parties can start.

Coaches also reported that assessing the fit between coach and coachee plays an important role at the beginning of the coaching process (*n* = 9). In assessing the fit, they highlighted to explore whether it seems possible to establish a sound working alliance (*n* = 5). Additionally, coaches check whether their own thematic expertise fits the coachees' issues (*n* = 2) and ask for the reasons why they were chosen as coaches (*n* = 2).

Identifying coachees' main issues

Almost all coaches stated that they explicitly clarify their coachees' main issues once they start the process (*n* = 19). Besides, more than half of the coaches referred to the coachees' 'hidden issue', that is, something they themselves may not (yet) be aware of (*n* = 13). One coach explained,

> *'It's always the case that behind one issue stands a second or many other issues. […] They themselves often don't know what's behind it. So, I would say yes, that in all cases there are several issues and it would be deeply regrettable to only show an interest in the issue that is directly presented to me.' (NN05)*

Thematic foci

Looking into more depth at the specific issues coaches address, three different dimensions of the content explored emerged from the interviews: 1) the degree to which coaches focus on their coachees' private and/or professional issues (and within the latter whether there was a focus on the individual coachee, social/team aspects, or their organisation), 2) the past, present, and/or future of their coachees, and 3) whether they adopt a solution- or problem-focused orientation during the initial exploration. A graphic overview of coaches' foci regarding their coachees' area of life and respective temporal focus (dimensions 1 and 2) can be accessed in the supplemental material.

Dimension 1: Coachees' private vs. professional issues. The majority of coaches (n = 15) focusses their exploration on professional issues, including coachees' individual (*n* = 8), social (*n* = 9), and organisational (*n* = 6) aspects. Addressing individually focused professional issues included coachees' career path, functions and positions they occupy and tasks for which they are responsible. Social/team-focused professional issues refer to relationships and team constellations at work. Organisation-focused professional issues include working with organigrams, considering the organisational culture, or exploring the hierarchical structure. One coach said,

> *'I'll have the company explained to me first. […] How else can I work if I don't understand the company. And it may be that certain documents will be brought to the table. [...] Or something like an organigram, something like that is also helpful to use as a tool.' (CDm06)*

More than half of the coaches (n = 12) take an integrated view which explicitly aims to gain insights into various (work and life) fields of the coachees' life. Of these, six coaches

specifically place more stress on exploring the interplay of professional and private domains, for example in terms of work-life-balance issues or working hours. One coach explained,

> *'A good place to start is to look at the overwhelming structural demands on the person, and then we MOSTLY look not just at their professional environment but also at the personal-private sphere because […] a fatigue syndrome can never just be simplified down to too much work or stress at work. In other words, there's always a personal component.' (JG17)*

Private issues that were explored (n = 10) focus on the individual, for example coachees' norms and values, or physical and mental health, and partly extend to their family situation.

Dimension 2: Coachees' past, present, and/or future. Regarding the temporal focus during the initial exploration, most coaches focus on the present (n = 17), covering a broad thematic range regarding their coachees' professional and private life. Only slightly more than one quarter of the interviewed coaches indicate that they consider the coachees' past issues (n = 6), particularly their prior family situation (private) and their former career path (professional). One coach shared,

> *'I try to understand where someone comes from, what background he has, what experience he brings with him, that is actually a bit of letting the résumé tell.' (TRf09)*

Additionally, more than three quarters of the coaches (n = 16) explore their coachees' future by asking for desired changes, using differing levels of abstraction in terms of exploring more general strivings or assisting coaches in setting specific goals.

Taken together and integrating the dimensions 1 and 2, almost three quarters of the coaches (n = 14) focus on gaining insights into their coachees' present professional situation (e.g. team constellations, organisational context) whereas fewer coaches put emphasis on the

present private situation (*n* = 9; e.g. norms and values, current well-being), the past professional (*n* = 4; e.g. career path) or the past private life (*n* = 3; e.g. family situation) of their coachees.

Focus regarding a solution- vs. problem-oriented perspective. Our analysis regarding coaches' foci on solutions and/or problems revealed three distinct types of coaches, based on their statements: solution-oriented, problem-refuser, and balanced.

Of the twelve coaches who commented on the degree to which they focused on solutions and/or problems, six coaches adopt a purely solution-oriented approach and explained how they focus on their coachees' potential and strengths. One coach said,

> *'My methods are usually very strength-oriented, they're focused on the things that the person is good at.' (AA09)*

Some coaches also explicitly expressed their disapproval of problem-oriented exploration in coaching (*n* = 4). One coach shared,

> *'There is a misunderstanding that I also need to know a lot about the problem.' (AB09)*

Another six coaches indicated that they embody a balanced approach, that is, they explore both solutions and problems or obstacles equally. One coach described this balanced approach as follows,

> *'[I let him think about] "What obstacles do I face? What resources do I have?" because it's always a matter of resources and blockages […]' (KE17)*

None of the interviewed coaches stated that they conduct the initial exploration in a predominantly problem-oriented way.

Methodological Approach

Regarding how coaches approach the initial exploration methodologically, we identified both a range of specific assessment techniques as well as descriptions of the overall methodological approach.

Coaches' range of assessment techniques

Whereas all coaches (n = 20) described employing interview techniques and almost all of them use experience activating and visualising techniques (n = 19) during the initial exploration, far fewer coaches incorporate hard facts, resorting to existent organisational data (n = 7) or psychometrics (n = 5). A table detailing coaches' use of the various techniques can be retrieved from the supplemental material.

Concerning interview techniques, almost half of the coaches (n = 9) described to actively involve coachees by verbally checking their working hypotheses and explicitly engaging in dialogue about them. One coach shared,

> *'I have to always check as well because I have a hypothesis, an assumption, […]. I always very consciously check this with the coachee and he says to me, "Yes, that's right" or else "No, that's not right at all."' (EE11)*

What is remarkable among coaches' use of experience-activating and visualising techniques, is that constellations, for example with toys and figures, are used twice to three times as often as other techniques (n = 11). One coach explained,

> *'When it comes to coaching there's also the systemic constellation work. I use this concept on a small scale with the help of wooden figures. This allows the coachee to arrange the figures and set up relationship lines. This often helps to gain a visual overview of everything.' (LW17)*

Noticeably, almost all coaches who described to consider the organisational embeddedness of WPC reported directly involving other stakeholders (n = 6; e.g. the coachees' supervisor or the HR department). They indicated that a triangular exploration, that is, identifying and

contrasting the coach's, coachees', and sponsoring organisation's perspectives, is an important part of the initial exploration. One coach said,

> *'As for what's important, maybe, one definitely has to speak in-depth with the coaching sponsor when it comes to a triangular contract. In order to make a diagnosis. To know what it's all about, to ensure that the contract is good, that it's not some sort of responsibility being delegated by a supervisor.' (EE11)*

Psychometrics are used only by five out of 20 coaches as assessment instruments for the initial exploration, predominantly personality questionnaires.

Coaches' degree of standardisation

Differences in the degree to which coaches proceed in a standardised way during the initial exploration became evident regarding the use of an *interview guideline.* Almost two thirds of the coaches explained having an *inner structure* for the initial exploration, for example in terms of key questions, that they *handle flexibly* (*n* = 13) instead of following a *set interview guideline* (*n* = 3) or proceeding *without any guideline* (*n* = 3). One coach expressed appreciation for this inner structure,

> *'I have my schedule, my structure that I work within, but there's a lot of openness and flexibility when it comes to simply reacting to what the coachee brings along.' (JG17)*

Guiding Principles

We explicitly asked coaches what guides them in focusing their initial exploration ('What are you guided by?').

Responding to coachee characteristics

In line with the flexibly handled inner structure reported above, many coaches (*n* = 12) reported selecting their overall approach on a *case-by-case basis.* That is, they claimed to

individually adapt how they proceed during the initial exploration. One coach shared how the coachees' personality determines the choice of methods,

'That depends on the personality. I don't actually have a formula, I just look at the client, at the person, and see what he needs and use that as the basis for the method I choose.' (BC08)

Incorporating theoretical knowledge

More than half of the coaches also resort to theoretical knowledge to guide their initial exploration, thus following, at least partly, a theory-driven approach (*n* = 12). One coach said,

'When it comes to the exploration and what leads me, it's the concept of the ego states. This is in order to keep up somewhat with the latest findings in neuroscience [...]' (AB09)

Resorting to experience and intuition

Half of the coaches also indicated being guided by *experience and intuition*. In fact, they frequently linked their intuition to the experience gathered as a coach and reported using this as a source of their assessment (*n* = 10). One coach explained,

'I make assumptions, even in the first session. Yes, it could be said that this is intuition, but that's nothing unusual for me. It's closely tied in with knowledge and experiences and just like that, in a flash, I can activate this without a problem.' (NN05)

Coaches mostly considered their intuition and 'gut feeling' to be *valuable and useful* for the initial exploration (*n* = 8), while others perceived it as both *valuable and useful and potentially misleading at the same time* (*n* = 6). Only one coach referred to intuition as *predominantly negative and misleading*.

Discussion

Summary of Findings

Summarising our findings and integrating them with the extant relevant literature, we developed an empirically grounded descriptive taxonomy that allows for the identification of similarities and differences in coaches' approaches to the initial exploration in WPC. This taxonomy details the underlying dimensions regarding content, methodological approach, and guiding principles during the initial exploration, as indicated in Figure 1.

--- Insert Figure 1 about here ---

Solution- vs. Problem-Orientation

According to recent research findings, solution-focused coaching has positive effects on a range of outcomes for coachees (e.g. Grant, 2017) whereas exclusively concentrating upon problems is perceived as hindering by coachees (Carter et al., 2017). Coaches' use of solution-focused questions impacts upon coachees' generating solutions which in turn influences their goal attainment (Jordan & Kauffeld, 2020). However, the picture regarding the overall coaching approach may not be as clear-cut as it first seems. A result-oriented problem reflection is one of the so-called success factors of coaching (Greif et al., 2010). Recent research highlights that both solution- and problem-focused coaching approaches may yield positive outcomes for coachees under certain conditions (Bozer & Delegach, 2019). The effectiveness of solution- vs. problem-focused approaches respectively is impacted upon both by coachee characteristics (e.g. coachees' regulatory focus, level of dysfunctional attitudes) and by contextual factors (e.g. organisational coaching culture). This constitutes a strong argument for a flexible handling of a solution- and problem-orientation during the initial exploration as well as the intervention stage. The potential contradiction in coaches' descriptions of a case-by-case approach on the one hand and a partly normative emphasis on a solution-oriented approach on the other might be a field for future research.

Considering the Organisational Embeddedness of WPC

A recent development in coaching research is to conceptualise coaching as a social rather than an individual (i.e. dyadic only) intervention embedded and shaped by its social context, and in particular by the coachees' organisational context (Athanasopoulou & Dopson, 2018). At least some of the coaches from our sample focus not only on the person of the coachee (individual) but also on social relationships (e.g. team constellations) as well as on peculiarities of the coachees' organisation.

Regarding methods, coaches mostly assess the organisational context indirectly (e.g. asking circular questions or using constellations) rather than establishing triangular contracts. In line with the literature (Burger & Van Coller-Peter, 2019; Louis & Fatien Diochon, 2014), the few coaches that did refer to triangular contracts highlighted that identifying and contrasting the coachees' and the sponsoring organisation's perspectives plays an important role in the initial exploration when it comes to detecting possible hidden agendas and anticipating conflicts among the parties involved. Indeed, both conceptual work (Bozer & Delegach, 2019) and empirical research suggests that the organisation's coaching culture (e.g. attitudes towards coaching, degree to which coaching is established in the organisation) impacts upon coaching effectiveness (Oellerich, 2016). By considering organisational stakeholders as additional sources during the initial exploration coaches can do justice to the coaching's social context and to stakeholder alignment in order to maximise coaching outcomes (Athanasopoulou & Dopson, 2018; Blackman et al., 2016; Carter et al., 2017).

The Tension Between Intuitive and more Standardised Approaches

Most coaches we interviewed described working rather flexibly and being guided by their intuition This approach is backed empirically by findings that coachees perceive their coaches'

non-standardised, individually tailored behaviour to be effective (Blackman et al., 2016), but coaches not acting flexibly is considered to hinder coaching effectiveness (Carter et al., 2017).

Intuition is closely linked to the implicit knowledge acquired through experience and is suggested as being a vital skill for coaches (Mavor et al., 2010), in particular if one considers coaches themselves the key 'instrument' in coaching (Bachkirova, 2016; Orenstein, 2002). However, relying on intuition is associated with potential drawbacks. The use of intuition alone without a certain degree of standardisation or the inclusion of additional 'external' data sources (e.g. psychometric assessments, organisational data, or triangular contracting) or without sound theoretical knowledge therefore risks falling foul of coaches' blind spots. Continuously and critically reflecting the coaches' own perceptions (Orenstein, 2002) and engaging in continuous professional development, for example through ongoing coaching supervision, can be regarded as conditions for effectively using intuition (Bachkirova, 2016; Sheldon, 2018).

Theoretical Contribution

In their systematic review on executive coaching outcomes, Athanasopoulou and Dopson (2018) name the intervention focus and coaches' behaviour among the factors affecting coaching outcomes that should be further investigated. With the present study, we provide differentiated insights into how coaches approach the initial exploration in WPC and thereby determine the focus of their coaching interventions. Our study can be considered an important step in advancing research on the beginning of coaching engagements. Concretely, we contribute to the coaching literature by providing an empirically grounded taxonomy that describes the variety of contents addressed, methods used, and underlying assumptions that coaches are guided by during the initial exploration in WPC (see Figure 1). Our taxonomy also contextualises specific components such as goal setting or psychometrics within a more holistic picture of what a thorough initial exploration in coaching may entail.

Implications for Practice

Our findings entail several practical implications. First, our findings can be taken by practitioners as suggestions for the variety of ways in which the organisational context can be considered during the initial exploration, regarding both contents addressed and methods employed. In particular, exploring the functions that coaching is allotted by different organisational stakeholders (e.g. 'externalisation of the manager'; Louis & Fatien Diochon, 2014) appears relevant in order to facilitate stakeholder alignment and clarity in roles and expectations (Athanasopoulou & Dopson, 2018). Second, our findings might stimulate coaches to reflect upon their approach regarding a focus on solutions and/or problems during the initial exploration. A strict focus on solutions might prevent a holistic picture which in turn can guide the process in line with individual coachees' needs. Indeed, empirical evidence on solution- vs. problem-oriented approaches in coaching is heterogeneous and points to the importance of tailoring it to coachee characteristics and contextual factors (Bozer & Delegach, 2019). Third, the important role of intuition during the initial exploration that emerged from our data is also emphasised in the coaching literature (e.g. Bachkirova, 2016; Sheldon, 2018). However, the frequent use of intuition combined with the rare use of additional 'external' data sources and limited theoretical grounding is likely to bring along blind spots. Therefore, incorporating psychometric assessments – or other objective data – could attenuate subjectivity (Batey et al., 2012). Additionally, in light of the predominant pattern of handling the initial exploration flexibly and intuitively, self-reflection, continued professional development, and the use of coaching supervision appear crucial as a means of quality assurance (Bachkirova, 2016; Mavor et al., 2010; Orenstein, 2002).

In summary, we contribute to the *practice of coaching as an HRD intervention* by providing a framework for reflection and decision-making for coaches, coaching clients, and HR

practitioners. Coaches can use this framework to critically reflect upon their own approach in terms of perceptual habits and blind spots. Coaching clients can use the framework in order to assess beyond mere 'gut feeling' whether they feel that the content focus and the methods employed by the coach could fit for them, given that the coach-coachee-fit is assumed to affect coaching outcome (Athanasopoulou & Dopson, 2018). For HR practitioners (and other coaching purchasers within organisations), assessing coaches' approach to the initial exploration systematically by means of our framework can be utilised as a criterion for selecting coaches into their company's coaching pool and/or for matching coaches and coachees when initiating a coaching engagement.

Limitations and Future Research

The results from our qualitative interview study thus far only indicate tendencies on how workplace coaches typically proceed during the initial exploration. In order to corroborate our findings our results should be elaborated on and expanded by a large-scale quantitative survey. This would allow researchers to (1) analyse patterns, for example the interplay between content focus and methods employed, (2) investigate the actual functionality of specific approaches to the initial exploration regarding coaching outcomes, and (3) identify factors that impact upon coaches' respective approaches (e.g. coach characteristics, situational context characteristics).

Furthermore, our study is limited to coaches' self-reports. While it addresses the perspective of coaches which is considered somewhat underresearched to date (Athanasopoulou & Dopson, 2018), extant coaching research clearly points to differences of perception (e.g. between coaches, coachees, and stakeholders from the coachees' organisation; e.g. De Meuse et al., 2009; Oellerich, 2016). Therefore, possible gaps between these perspectives need to be considered (Athanasopoulou & Dopson, 2018). It would be valuable to complement our findings by investigating the initial exploration from the perspective of coachees, and ideally,

by an analysis of audio- or video-based material of recorded coaching sessions, using the taxonomy we established as a groundwork for coding coaching sessions. The latter would allow for the comparison of coaches' self-reported behaviour to coaches' actual behaviour during coaching sessions.

Lastly, we conceptualise the initial exploration to be different from exploration throughout the coaching process. However, we are aware that in coaching practice, the boundary is not as clear-cut as is necessary to make it available for scientific scrutiny. Future research could therefore investigate how exploration at different points in time over the course of the coaching engagement impacts upon the coaching process and coaching outcome.

Conclusion

With our study, we shed light on how coaches approach the beginning of a coaching engagement by uncovering the issues that coaches address, the methods and techniques they use, and the assumptions they are guided by during this initial phase. Integrating our research findings with the extant (conceptual) literature on assessment in coaching and providing a taxonomy (Figure 1), we contribute to the literature by systematising coach behaviour during the initial exploration in coaching.

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No potential conflict of interest was reported by the authors.

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References

Arino, A., LeBaron, C., & Milliken, F.J. (2016). Publishing qualitative research in academy of management discoveries. *Academy of Management Discoveries, 2*(2), 109-113.

Athanasopoulou, A., & Dopson, S. (2018). A systematic review of executive coaching outcomes: Is it the journey or the destination that matters the most? *The Leadership Quarterly, 29*(1), 70–88.

Bachkirova, T. (2016). The self of the coach: Conceptualization, issues, and opportunities for practitioner development. *Consulting Psychology Journal: Practice and Research*, *68*(2), 143–156.

Batey, M., Walker, A., & Hughes, D. (2012). Psychometric tools in development - do they work and how? In J. Passmore (Ed.), *Psychometrics in coaching: Using psychological and psychometric tools for development* (2nd ed., pp. 49–58). Kogan Page.

Blackman, A., Moscardo, G., & Gray, D. E. (2016). Challenges for the theory and practice of business coaching. *Human Resource Development Review, 15*(4), 459–486.

Bozer, G., & Delegach, M. (2019). Bringing context to workplace coaching: A theoretical framework based on uncertainty avoidance and regulatory focus. *Human Resource Development Review, 92*(1), 1-27.

Bozer, G., & Jones, R. J. (2018). Understanding the factors that determine workplace coaching effectiveness: A systematic literature review. *European Journal of Work and Organizational Psychology*, *27*(3), 342–361.

Burger, Z., & Van Coller-Peter, S. (2019). A guiding framework for multi-stakeholder contracting in executive coaching. *SA Journal of Human Resource Management, 17.*

Carter, A., Blackman, A., Hicks, B., Williams, M., & Hay, R. (2017). Perspectives on effective coaching by those who have been coached. *International Journal of Training and Development, 21*(2), 73–91.

Cwik, J. C., Papen, F., Lemke, J.-E., & Margraf, J. (2016). An investigation of diagnostic accuracy and confidence associated with diagnostic checklists as well as gender biases in relation to mental disorders. *Frontiers in Psychology, 7(1813),* 1-10.

De Meuse, K. P., Dai, G., & Lee, R. J. (2009). Evaluating the effectiveness of executive coaching: Beyond ROI? *Coaching: An International Journal of Theory, Research and Practice*, *2*(2), 117–134.

Del Giudice, M. J., Yanovsky, B., & Finn, S. E. (2014). Personality assessment and feedback practices among executive coaches: In search of a paradigm. *Consulting Psychology Journal: Practice and Research, 66*(3), 155–172.

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review, 32*(4), 1155–1179.

Feldman, D. C., & Lankau, M. J. (2005). Executive coaching: A review and agenda for future research. *Journal of Management*, *31*(6), 829–848.

Gessnitzer, S., & Kauffeld, S. (2015). The working alliance in coaching: Why behavior is the key to success. *The Journal of Applied Behavioral Science*, *51*(2), 177–197.

Gettman, H. J., Edinger, S. K., & Wouters, K. (2019). Assessing contracting and the coaching relationship: Necessary infrastructure? *International Journal of Evidence Based Coaching and Mentoring*, *17*(1), 46–62.

Graneheim, U. H., Lindgren, B.-M., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today, 56,* 29-34.

Grant, A. M. (2017). Solution-focused cognitive-behavioral coaching for sustainable high performance and circumventing stress, fatigue, and burnout. *Consulting Psychology Journal: Practice and Research*, *69*(2), 98–111.

Grant, A. M., & Green, R. M. (2018). Developing clarity on the coaching-counselling conundrum: Implications for counsellors and psychotherapists. *Counselling and Psychotherapy Research*, *18*(4), 347–355.

Greif, S., Schmidt, F., & Thamm, A. (2010). *The Rating of Eight Coaching Success Factors: Observation Manual.* http://www.home.uni-osnabrueck.de/sgreif/downloads/Rating_of_Coaching_Success_Factors_Version4-May_2010.pdf

Ianiro, P. M., Schermuly, C. C., & Kauffeld, S. (2013). Why interpersonal dominance and affiliation matter: An interaction analysis of the coach-client relationship. *Coaching: An International Journal of Theory, Research and Practice*, *6*(1), 25–46.

Jones, R. J., Woods, S. A., & Guillaume, Y. R. F. (2016). The effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology*, *89*(2), 249–277.

Jordan, S., & Kauffeld, S. (2020). A mixed methods study of effects and antecedents of solution-focused questions in coaching. *International Journal of Evidence Based Coaching and Mentoring*, *18*(1), 57-72.

Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *The European Journal of General Practice, 24*(1), 120–124.

Kotte, S. (2019). The state-of-play of coaching research: A synthesis of the extant meta-analyses. *Academy of Management Proceedings,* 1.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, *33*(1), 159–174. https://pdfs.semanticscholar.org/7e73/43a5608fff1c68c5259db0c77b9193f1546d.pdf

Lee, R. J. (2016). The role of contracting in coaching: Balancing individual client and organizational issues. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *The Wiley-Blackwell Handbook of the Psychology of Coaching and Mentoring* (pp. 40–57). John Wiley & Sons.

Lin, A. C. (1998). Bridging positivist and interpretivist approaches to qualitative methods. *Policy Studies Journal*, *26*(1), 162-180.

Louis, D., & Fatien Diochon, P. (2014). Educating coaches to power dynamics: Managing multiple agendas within the triangular relationship. *Journal of Psychological Issues in Organizational Culture*, *5*(2), 31–47.

Mavor, P., Sadler-Smith, E., & Gray, D. E. (2010). Teaching and learning intuition: Some implications for HRD and coaching practice. *Journal of European Industrial Training*, *34*(8/9), 822–838.

McDowall, A., & Smewing, C. (2009). What assessments do coaches use in their practice and why? *The Coaching Psychologist*, *5*(2), 98–103. https://epubs.surrey.ac.uk/802700/

McLellan, E., MacQueen, K. M., & Neidig, J. L. (2003). Beyond the qualitative interview: Data preparation and transcription. *Field Methods, 15*(1), 63–84.

Middendorf, J. (2018). *16. Coaching-Umfrage Deutschland 2017/2018 [Coaching survey Germany 2017/2018]*. Büro für Coaching und Organisationsberatung, Köln, Germany.

Möller, H., & Kotte, S. (Eds.). (2013). *Diagnostik im Coaching: Grundlagen, Analyseebenen, Praxisbeispiele [Diagnostics in coaching: Essentials, levels of analysis, practical examples]*. Springer.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology, 52*(2), 250–260.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods, 1*(2), 13–22.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research: Part 3: Sampling, data collection and analysis. *The European Journal of General Practice*, *24*(1), 9–18.

Müller, A. A., & Kotte, S. (2020). Of SMART, GROW and goals gone wild: A systematic literature review on the relevance of goal activities in workplace coaching. *International Coaching Psychology Review, 15*(2), 69-97.

Oellerich, K. (2016). *Negative Effekte von Coaching und ihre Ursachen aus der Perspektive der Organisation* (Dissertation) *[Negative effects of coaching and their causes from the perspective of the organisation]*. Kassel University Press.

Orenstein, Ruth, L. (2002). Executive coaching: It's not just about the executive. *The Journal of Applied Behavioral Science, 38*(3), 355-374.

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE.

Schermuly, C. C., & Graßmann, C. (2019). A literature review on negative effects of coaching – what we know and what we need to know. *Coaching: An International Journal of Theory, Research and Practice*, *12*(1), 39–66.

Schmidt-Atzert, L., & Amelang, M. (2012). *Psychologische Diagnostik [Psychological assessment]* (5th ed.). Springer.

Schreier, M. (2012). *Qualitative content analysis in practice*. SAGE.

Sheldon, C. (2018). Trust your gut, listen to reason: How experienced coaches work with intuition in their practice. *International Coaching Psychology Review*, *13*(1), 6–20.

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*, *8*(2), 73–95.

The Executive Coaching Forum (2015). *The Executive Coaching Handbook: Principles and Guidelines for a Successful Coaching Partnership*. https://www.theexecutivecoachingforum.com/docs/default-document-library/tecf-6th-ed.pdf

Table 1

Category System for the Initial Exploration in Workplace Coaching: Content, Methodological Approach, and Guiding Principles

	Higher level categories	*n* of coaches	Examples of lower level categories
Content	***Pre-contracting: Suitability and preconditions***		
	• Demarcating workplace coaching from other interventions	11	• Psychotherapy, HR/ expert consultation
	• Coachees' motivational preconditions	9	• Motivation to change, expectations
	• Fit between coach and coachee	9	• Working alliance, thematic expertise
	Specific topics		
	• Coachees' main issues	19	• Explicitly stated issue(s), hidden issue(s)
	• Private life	10	• Family situation, well-being, norms, values and personality
	• Professional life	15	• Career path, position/functions, team, organisation
	• Work-life Interplay (professional & private)	12	• Work-life balance issues, holistic view
	Content focus/dimensions		
	• Professional vs. private issues		• Individual vs. social/team vs. organisation
	• Past vs. present vs. future		• Desired changes
	• Problem- vs. solution-orientation		• Balanced vs. solution-oriented vs. problem-refuser
Methodological Approach	***Specific methods and techniques***		
	• Interview techniques	20	• Questioning techniques, reflecting back
	• Experience-activating & visualizing techniques	19	• Constellations, imaginative techniques
	• Use of existent organisational data	7	• Triangular contracting, 360°-feedback
	• Psychometrics	5	• Personality questionnaires
	Degree of standardization		
	Set interview guidelines vs. inner structure handled flexibly vs. no guideline		
Guiding Principles	• Characteristics of the individual coachee: proceeding on a case-by-case basis	12	
	• Incorporating theoretical knowledge	12	
	• Resorting to experience, intuition, and "gut feeling"	10	

Note. Numbers indicated represent numbers of interviewees regarding higher level categories.

Figure 1

Taxonomy of Dimensions of the Initial Exploration in Workplace Coaching

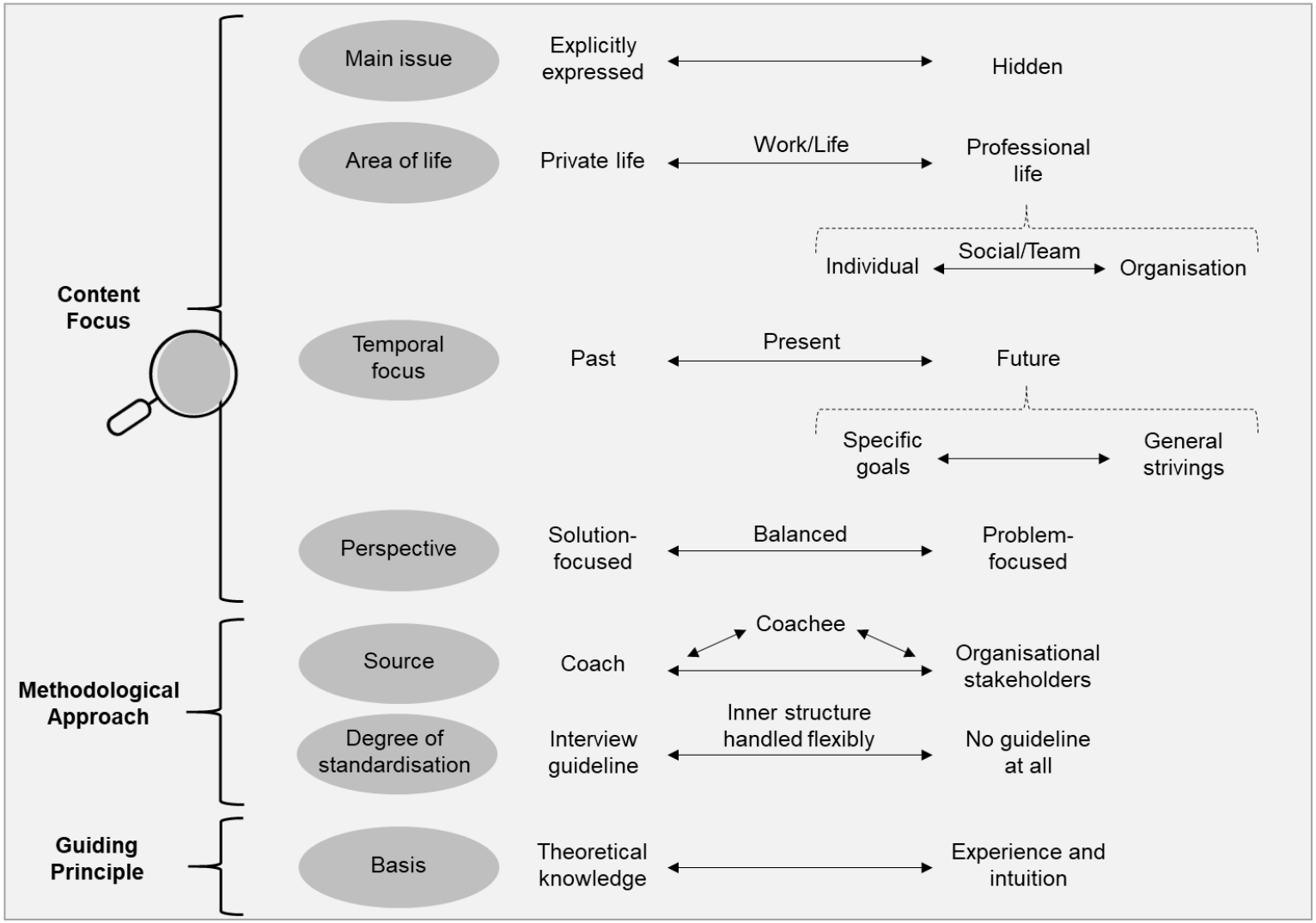


Figure 2. Content Explored Regarding Areas of Life and Temporal Focus

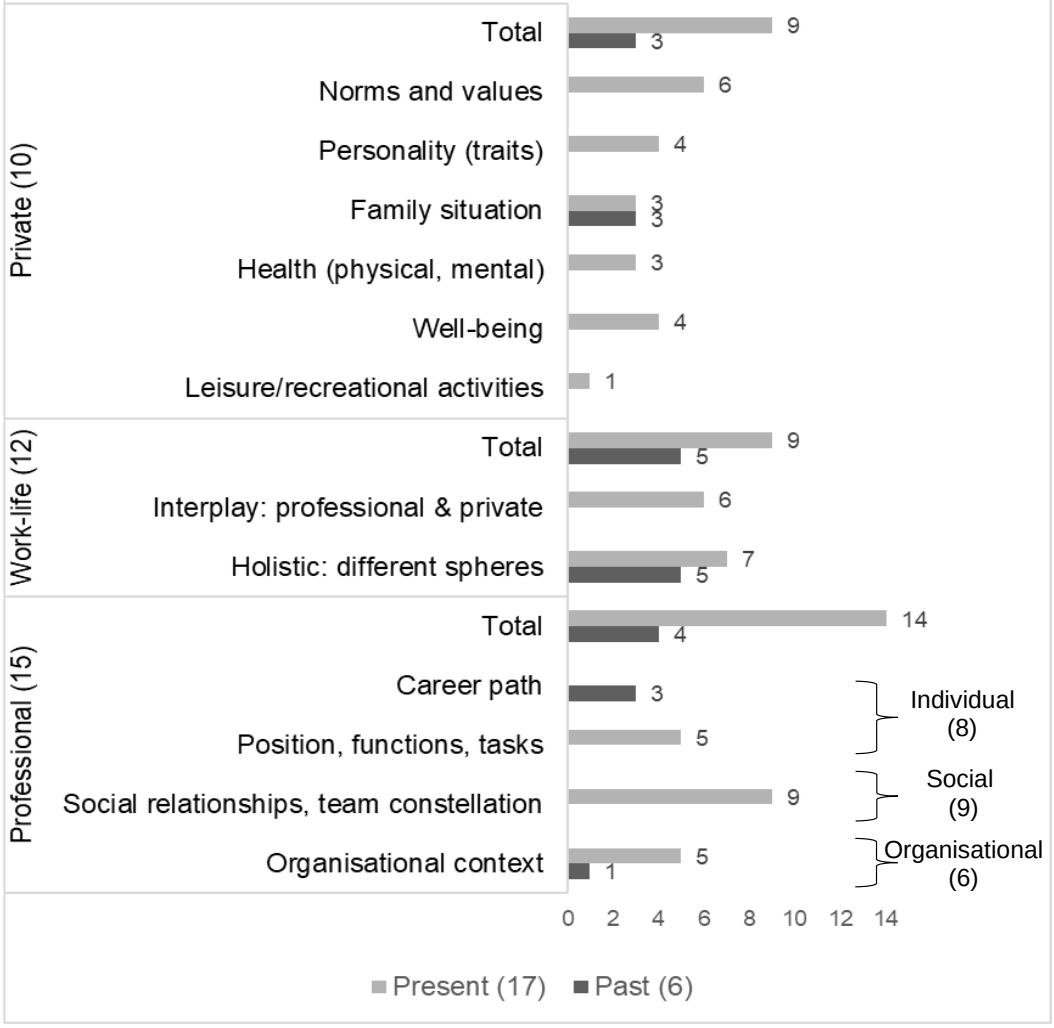


Table 2

Coaches' Methodological Approach: Use of specific assessment techniques

Level of categories		*n* of coaches
Higher level categories	**Lower level categories**	
Interview techniques		**20**
	Questioning techniques (e.g. systemic questions)	19
	Listening, summarizing, reflecting back	11
	Checking assumptions, interpretations or working hypotheses	9
Experience-activating and visualising techniques		**19**
	Constellations	11
	Imaginative techniques	6
	Role playing	4
	Models of inner plurality	3
Use of existent organisational data		**7**
	Triangular contracting	6
	360°-feedback	2
	Potential analyses	1
Psychometric assessments		**5**
	Personality questionnaires	4
	Other tests	1

Note. Numbers indicated represent numbers of interviewees.

6.2 Study 2: Entrepreneurial Coaching: A Two-Dimensional Framework in Context

Introduction

Entrepreneurship is increasingly important in today's working world. As entrepreneurs generate innovations, create jobs, and increase productivity, their importance for national labor markets and the economy is significant (Van Praag & Versloot, 2007). Entrepreneurship is not restricted to enterprise creation but also encompasses the processes of opportunity detection and exploitation (Shane & Venkataraman, 2000) as well as the personal development of an entrepreneur and the whole process of "becoming entrepreneurial" (Lackéus, 2015, p. 9).

The process of being and developing as an entrepreneur is highly demanding. For example, compared to employed professionals, entrepreneurs must tolerate longer working hours, intense time pressure, and high levels of complexity and uncertainty (U. Stephan, 2018). They experience higher levels of stress (Cardon & Patel, 2015) while receiving less social support at work (Tetrick, Slack, Da Silva, & Sinclair, 2000). Furthermore, entrepreneurs often assume multiple roles simultaneously, frequently acting both within the company (e.g. as the managing director) and as a shareholder, thereby increasing their stake in their venture (St-Jean, 2011). While some of their job demands, for example high levels of responsibility, resemble those of executives (Berman, 2019), entrepreneurs are more closely tied to their venture, not only financially as owners but also emotionally as creators of their business idea (Jayaraman, Khorana, Nelling, & Covin, 2000).

Given the high job demands of entrepreneurs, there is growing awareness that they may benefit significantly from external support while setting up and running a business (Kutzhanova, Lyons, & Lichtenstein, 2009). Accordingly, the European Commission's action plan for 2020 proposes to promote and facilitate entrepreneurial behavior and to provide entrepreneurial education to entrepreneurs (European Commission, 2018). Entrepreneurial education encompasses a wide range of activities (formal and informal, theory- as well as practice-oriented) in order to foster an entrepreneurial mindset and the competencies required throughout the entrepreneurial value-creating process (Lackéus, 2015; Volkmann et al., 2009). Classroom teaching and start-up consultancy are among the most established approaches. These

latter activities have, however, been criticized for being insufficiently adapted to entrepreneurs' specific needs. Due to the focus on knowledge transfer, such instructively oriented approaches fail to stimulate entrepreneurs' active learning processes or self-reflection (e.g. Audet & Couteret, 2012; Brinkley & Le Roux, 2018; Kutzhanova et al., 2009).

In contrast, stimulating self-reflection is posited to be a core element of coaching (Behrendt & Greif, 2018), an intervention that has been introduced into entrepreneurial education practice more recently. Coaching is, by definition, a custom-tailored development intervention "that uses a collaborative, reflective, goal-focused relationship to achieve professional outcomes that are valued by the coachee" (Bozer & Jones, 2018, p. 342). As per its definition and in light of its demonstrated effectiveness (Jones, Woods, & Guillaume, 2016; Kotte, 2019), coaching appears to be a particularly suitable and promising way of assisting entrepreneurs. However, the concept of coaching in the entrepreneurial context, which we term *entrepreneurial coaching* (EC), lacks a clear definition (Kutzhanova et al., 2009; Müller & Diensberg, 2011). Although EC has recently started to be explored from both a theoretical and empirical perspective (Kutzhanova et al., 2009; Saadaoui & Affess, 2015), findings are scattered, and to date an integrated framework is lacking. Moreover, a wide range of different interventions have been labeled "coaching" within entrepreneurial education, including start-up consultancy and mentoring (e.g. Brinkley & Le Roux, 2018; Müller & Diensberg, 2011).

The central aim of this article is to introduce a conceptual framework for EC that provides a theoretically and empirically grounded basis for future research. Within this conceptual framework, we seek to clarify key characteristics of EC and to position EC relative to related developmental interventions by identifying similarities and differences. In doing so, we integrate distinct literature streams with the emerging literature on EC and contribute to expanding theory on EC. Moreover, we respond to recent calls in the coaching literature to differentiate coaching for specific populations (Cooper, 2019; Jones & Bozer, 2018) by focusing on EC directed at entrepreneurs in early stages of the entrepreneurial process.

Theoretical Background

Entrepreneurial Coaching and Related Developmental Interventions

The existing literature lacks a generally accepted definition of EC. A few empirical studies refer to the definition of Audet and Couteret (2012) and define EC as individualized support provided by a coach to entrepreneurs in early start-up stages which is aimed at acquiring and developing the skills and knowledge necessary to establish themselves as independent entrepreneurs (e.g. Ben Salem & Lakhal, 2018; Mansoori, Karlsson, & Lundqvist, 2019; Saadaoui & Affess, 2015). Other definitions focus more strongly on working towards the improvement of the venture's performance as an aim of EC (e.g. Crompton & Smyrnios, 2011) or take a wider approach and include the support of entrepreneurs at later stages (e.g. Schermuly, Wach, Kirschbaum, & Wegge, 2020).

In the following, we will define related interventions for supporting entrepreneurs and explain how they can be characterized by two underlying dimensions: expert- vs. process-consultation (Schein, 1990) and individual-work-venture focus (Dowejko & Chan, 2019; St-Jean, 2011). The first dimension describes the basic methodological approach of the respective developmental intervention. Expert-consultation is characterized by a consultant possessing a high level of content expertise and providing expert information, advice, and solutions to clients. Process-consultation, conversely, considers clients as experts in their own realities and environments and it enables them, by means of the consultant's process expertise in facilitating conversations, to find their own solutions (Schein, 1990; Stokes, Fatien Diochon, & Otter, 2020). The second dimension (individual-work-venture focus) concerns the focus of the developmental intervention, that is, whether there is a focus on the individual (e.g. motivations, emotions, personality), their work (e.g. tasks, roles and responsibilities) and/or the venture (e.g. organizational performance). The developmental interventions differ regarding which of these three foci they emphasize and whether they encompass one or several of these foci. Figure 1 provides an overview of the developmental interventions related to EC within the two-dimensional framework.

--- Insert Figure 1 about here ----

Developmental interventions in entrepreneurial education. Among the different interventions in entrepreneurial education, entrepreneurial mentoring (EM) and start-up consultancy seem to be most relevant when considering EC as they share with EC the provision of customized consultation to entrepreneurs (in contrast to classroom teaching, that is, standardized knowledge transfer; Lackéus, 2015).

Start-up consultancy aims to provide solutions for urgent and practical matters, such as assisting entrepreneurs in writing a business plan. It focuses on giving advice and imparting knowledge. To provide effective support, a start-up consultant needs business and management knowledge and to be an expert in the entrepreneurial ecosystem and the process of venture creation (Müller & Diensberg, 2011). As such, start-up consultancy can be defined as expert-consultation (Müller & Diensberg, 2011; Schein, 1990) focused on the successful establishment and development of the business, that is with a primary focus on the venture rather than the individual entrepreneur (Müller & Diensberg, 2011).

Mentoring in the entrepreneurial context can be defined as a relationship oriented towards learning and development in which an experienced entrepreneur supports a novice entrepreneur (e.g. El Hallam & St-Jean, 2016; St-Jean & Audet, 2012). Such a relationship requires the mentor to have practical experience in the entrepreneur's field (Audet & Couteret, 2012; Brinkley & Le Roux, 2018). Mentors are viewed as fulfilling three basic functions: a psychosocial, career-related, and role-modeling function (e.g. Dickson et al., 2014). For the entrepreneurial context, a fourth, venture-related function has been introduced (Dowejko & Chan, 2019). The terms "mentoring" and "coaching" often lack a clear conceptual delimitation (Lancer, Clutterbuck, & Megginson, 2016), and there is substantial discussion regarding similarities and differences between the two (e.g. Stokes et al., 2020). In the entrepreneurial context, they are frequently used interchangeably both in practice and research (e.g. Brinkley & Le Roux, 2018; Matotola & Bengesi, 2019). Like coaching, mentoring relies on a trustful relationship (El Hallam & St-Jean, 2016; Graßmann, Schölmerich, & Schermuly, 2019) and is characterized by the fostering of entrepreneurs' active learning as well as by personal and professional development (e.g. Audet & Couteret, 2012; Lancer et al., 2016). The most salient difference compared to coaching is that, in mentoring, transferring the mentor's knowledge and own entrepreneurial experience lies at the heart of the relationship, as expressed in the role-modeling function and career-related subfunctions such as acting as a guide (e.g. St-Jean, 2011). EM therefore combines both elements of expert- and process-consultation. In contrast to start-up consultancy, EM spans a broader range of content as is evident in the range of entrepreneurial mentor functions with the psychosocial support focusing on the individual, career-related support representing a work focus, and venture support focusing on the venture (e.g. Dowejko & Chan, 2019; El Hallam & St-Jean, 2016; St-Jean, 2011).

Workplace coaching. Although numerous definitions exist, the core of WPC is that it is an individualized, reflective, and relationship-based development intervention aimed at achieving professional outcomes for the coachee (Bozer & Jones, 2018). In order to establish a rapport on equal terms, it is crucial for the coach not to act as an expert but as a sparring partner, to refrain from being directive and to possess methodical and process-related competence to help coachees to develop their own solutions (e.g. Jones et al., 2016; Schreyögg, 2010). Therefore, WPC is generally considered to be a primarily process-oriented type of consultation (Jones, Napiersky, & Lyubovnikova, 2019; Schreyögg, 2010). The specification "workplace" delimits WPC from other types of coaching that are not focused on professional issues (e.g. life or health coaching), whereas WPC focuses on the intersection between the individual and their work.

EC can therefore be understood as a specific type of WPC that is directed towards a particular client population, namely entrepreneurs, whose job demands and whose close, often intensely personal, interconnection with their organization differ from "traditionally" employed professionals (U. Stephan, 2018; St-Jean, 2011). The WPC literature has so far barely focused on differential approaches to the coaching of different target groups. Instead, WPC is mostly used as a generic term that comprises the coaching of a wide range of professionals, across job roles and functions, hierarchical levels, and industries (e.g. Bozer & Jones, 2018; Graßmann et al., 2019). Differential approaches have only recently been addressed (e.g. coaching different types of elite performers; Cooper, 2019) or called for (e.g. expanding coaching research to new work contexts and populations like entrepreneurs; Jones & Bozer, 2018).

One target group of coaching that has been more extensively studied are executives. Top-level executives most closely resemble entrepreneurs in their characteristics and job features. For example, these two groups share the position of being alone at (or near) the top of a company (Berman, 2019; Tetrick et al., 2000) and both carry high responsibility for a whole venture (Berman, 2019; Stephan, 2018), requiring them to make complex decisions under high levels of uncertainty (Busenitz & Barney, 1997). Nevertheless, they differ most notably in that entrepreneurs are more existentially attached to their venture since they assume multiple roles, including being the venture's founder and owner (Jayaraman et al., 2000). Moreover, in contrast to entrepreneurs in early stages, top-level executives focus on general management and rarely involve themselves in operational work (Berman, 2019).

Executive coaching can be understood as a specific variation of WPC that focuses primarily on improving the leadership and management capabilities of executives in organizations (Berman, 2019; Stern, 2004). There are suggestions that it contains more elements of expert-consultation than classical WPC (Berman, 2019), given that executives expect coaches to help them think through business options and strategic decision-making. In contrast to classical WPC, executive coaching is more concerned with the intersection between the executive's work (i.e. leadership/management tasks and responsibilities) and the organization and its performance at large, especially the higher the executive is in the hierarchy (Berman, 2019; Stern, 2004).

Synthesis: Developmental Interventions within the Two-Dimensional Framework. In summary, at the extremes of our two-dimensional framework are start-up consultancy and classical WPC. Start-up consultancy can be described as an expert-consultation approach that is focused on the venture, while classical WPC is primarily conceived as a process-consultation approach focused at the intersection between the individual coachee and their work. Mentoring, particularly EM, and executive coaching can be positioned between the extremes. Mentoring differs from WPC with regards to the degree of expert-consultation, given that passing on the mentor's knowledge and experience is an essential element. The question is whether this distinction also holds true for EC and EM or whether EC, like executive coaching, might contain functions that move it closer to the expert-consultation side. Regarding the content focus, EM covers the broadest range. The venture-support function differentiates EM from classical mentoring. Given entrepreneurs' close interconnection with their venture, this raises the question as to whether such an enlarged focus on the venture also differentiates EC from classical WPC, similar to the stronger consideration of organizational-level issues in executive coaching.

State of the Art of EC

Building on the general differentiation from related developmental interventions, we will now focus on the specific characteristics of EC. Strikingly, although EC is increasingly demanded as a reflection- and action-based learning method in entrepreneurial education (Küttim, Kallaste, Venesaar, & Kiis, 2014), empirical research is still at an emerging stage (Saadaoui & Affess, 2015). Even if the body of research on EC is increasing, extant studies focus on particular aspects of EC (e.g. specific outcomes, Brinkley & Le Roux, 2018; Saadaoui & Affess, 2015), are rather isolated and lack integration. This means that the research

cannot yet provide a comprehensive picture of EC and its outcomes, input, process, and contextual factors (i.e. components contained in established coaching and mentoring frameworks; e.g. Ely et al., 2010; Greif, 2013; Wanberg, Welsh, & Hezlett, 2003). In the following, we will describe the existing research and derive our research questions for the current study.

A growing number of researchers resort to the established taxonomy of training evaluation (Kirkpatrick, 1994; Kraiger, Ford, & Salas, 1993) when categorizing coaching outcomes (e.g. Ely et al., 2010; Jones et al., 2016; Kotte, 2019). We summarize EC findings accordingly. There is evidence that EC achieves positive effects at all three outcome levels, from the learning to the results level. Regarding cognitive learning, EC studies report mostly self- and role-related learning outcomes (self-awareness, self-reflection, role identity; Brinkley & Le Roux, 2018; Kutzhanova et al., 2009). Regarding affective learning, the most frequently reported outcomes are increased entrepreneurial self-efficacy and self-confidence (e.g. Brinkley & Le Roux, 2018; Crompton, 2012; Saadaoui & Affess, 2015). At the behavioral level, EC prompts entrepreneurs to set up and start the venture (e.g. Bosma, Hessels, Schutjens, van Praag, & Verheul, 2012). In addition, EC fosters actual skill development, such as improved communication and interpersonal skills (Brinkley & Le Roux, 2018; Saadaoui & Affess, 2015). At the results level, the EC literature, to our knowledge, does not specify individual-level effects to date. As for organizational-level results, EC contributes to organizational growth and performance (e.g. Crompton & Smyrnios, 2011). All in all, although there are some empirical studies on EC outcomes, these studies are disjointed and focused on selected aspects. Consequently, a comprehensive overview of the range of possible outcomes of EC is missing. We therefore aim to systematically explore EC outcomes and identify the outcomes' focus within our two-dimensional framework (Figure 1). We seek to assess:

RQ 1. What is the range of outcomes of EC?

When it comes to input factors on the part of the coaches, their business knowledge, in particular their entrepreneurial experience, is posited as important for EC (e.g. Crompton, 2012; Crompton & Smyrnios, 2011). However, empirical findings on how coaches' entrepreneurial (or other) experience relates to the success of EC are lacking (e.g. Audet & Couteret, 2012). On the part of the entrepreneurs, EC studies have identified entrepreneurs' self-reflection, openness to change, and willingness to accept help as predictors of coaching success (Audet & Couteret, 2012; Kutzhanova et al., 2009). To our knowledge, extant research

has not explicitly considered how the entrepreneurs' level of entrepreneurial experience impacts upon EC. However, it seems likely that entrepreneurs with differing levels of experience might require different types of support. In total, only few characteristics of coaches and entrepreneurs have been studied as input factors of EC. As the experience and background of different types of consultants and their respective clients are considered important in interventions related to EC, additional coach or entrepreneur characteristics may be relevant. Therefore, we aim to explore:

RQ 2. Which coach and entrepreneur characteristics are relevant input factors?

In the case of process factors, relationship quality impacts upon outcomes of EC (Crompton & Smyrnios, 2011; El Hallam & St-Jean, 2016), in line with being a firmly established success factor in WPC (Graßmann et al., 2019) and relevant in EM (El Hallam & St-Jean, 2016). Initial EC studies have also attempted to identify and categorize coach behaviors (Ben Salem & Lakhal, 2018; Crompton, 2012; Kutzhanova et al., 2009). These can partly be related to established mentor functions of EM and to emerging attempts to categorize coach roles and common factors of WPC and executive coaching (e.g. Behrendt & Greif, 2018; Berman, 2019; Jones et al., 2019; Segers, Vloeberghs, Henderickx, & Inceoglu, 2011). Still, in EC, coach behaviors and their impact upon outcomes remain largely unexplored. Unlike in EM, a consensual and established taxonomy is missing, which points to the usefulness of exploring coach roles or functions in EC systematically. We therefore seek to explore relevant process factors, particularly coach functions, and identify to what extent these functions correspond to an expert- vs. process-consultation approach as well as a focus on the individual, their work, or the venture. This leads us to ask:

RQ 3. What are relevant process factors of EC?

RQ 3a. What are coach functions in EC and how can they be positioned within the two-dimensional framework?

As in research on WPC and executive coaching (Athanasopoulou & Dopson, 2018; Jones et al., 2016; Kotte, 2019), contextual influences have barely been explicitly studied in EC. Context is mostly only described in terms of "the entrepreneurial environment". Extant EC studies at least point to the importance of (1) job characteristics of entrepreneurs, namely time pressure (e.g. Audet & Couteret, 2012), and (2) potential influences from the organizational context in which EC is (partially) embedded (e.g. boundary

conditions of support programs like incubators, accelerators or venture creation programs; role of third parties; e.g. Audet & Couteret, 2012; Ben Salem & Lakhal, 2018; Mansoori et al., 2019). The stage of the venture within the entrepreneurial process (i.e. pre-launch, launch, post-launch) as a contextual factor is notably absent from studies on EC although the entrepreneurship literature shows that entrepreneurs have different needs at different stages of venture growth (Crompton & Smyrnios, 2011). Depending on the boundary conditions or the entrepreneurial stage, a different approach or content focus in EC might be appropriate. Given the limited knowledge on which contextual influences impact upon EC, we aim to explore:

RQ 4. What are relevant contextual factors of EC?

In summary, on the basis of current empirical findings, it is not yet clear where to position EC in relation to other developmental interventions. Consequently, we propose a two-dimensional framework and by exploring the above-named research questions, we aim to develop an empirically supported conceptual framework specific to EC that can guide both future theory development and empirical research on this emerging, practical and relevant topic.

Method

Research Design

To answer our research questions, we conducted a qualitative interview study with coaches and entrepreneurs who had engaged in EC. An explorative, qualitative approach is particularly well-suited to the development of a more integrated framework (till now lacking in the EC literature) since it identifies a wide range of outcomes, input, process, and contextual factors including those that go beyond the specific aspects that have been examined in the extant research (Lee, 1999). Moreover, qualitative research designs are especially suited to capturing the context of a coaching intervention (Grover & Furnham, 2016), which is highly relevant given that EC can be considered a particular type of WPC that is shaped by its specific context, namely the entrepreneurial ecosystem. Qualitative interview studies in particular allow for the exploration of subjective experiences and the perceptions of coaches and entrepreneurs, both in depth and, if based on a substantial number of interviews, in breadth (Athanasopoulou & Dopson, 2018) in order to come to a practice-based rather than merely theoretically-driven conceptualization of the distinctiveness of

EC. Taking into account the transitionary state of the EC literature between nascent and intermediate theory (Edmondson & McManus, 2007), qualitative content analysis (QCA), which has been defined as "category-driven qualitatively oriented text analysis" (Mayring, 2015, p. 30, our translation) is particularly well-suited for the purposes of our study. First, rather than being purely explorative, QCA allows us to incorporate the extant, emerging theory on EC and from related fields while at the same time staying receptive to new insights and phenomena. Instead of mere theory testing which is better suited to more developed fields of research, QCA enables us to contribute to theory development on EC because it inherently allows researchers to move back and forth between theoretical assumptions and data (Morse, Barrett, Mayan, Olson, & Spiers, 2002). Second, in QCA, the frequency of categories is interpreted as an indicator of their relevance. On the basis of a substantial sample of interviews, QCA thereby allows us to assess the relevance of particular factors within the overall picture of EC.

Data Collection

We conducted in-depth, semi-structured interviews with both professional coaches experienced in providing coaching to entrepreneurs as well as with entrepreneurs who had taken part in at least one coaching intervention. We sought to capture EC from the perspectives of both parties involved in order to create a more multifaceted sense of the phenomenon.

Sampling. As the term "coaching" has gained popularity in the entrepreneurial context but is applied to a wide range of interventions, we introduced the following inclusion criteria for our study: The coaching had to (1) be conducted in a one-on-one setting, (2) be provided by a professional coach being paid for the sessions, and (3) include at least some elements of reflective learning (i.e. not be purely instructional). On the part of coaches, our second inclusion criterion excludes investors "coaching" entrepreneurs. Although not uncommon in practice, we draw on the current debate in WPC, wherein WPC by a professional coach is differentiated from managerial or supervisory coaching with its associated power dynamics (e.g. Bozer & Jones, 2018; Jones et al., 2016). To foster conceptual clarity, we apply this distinction to the entrepreneurial field. We argue that coaching by "neutral" professional coaches is fundamentally different from the guidance provided by investors (or other stakeholders) involved in the venture due to the latter group's personal interests and entrepreneurs' dependencies. Regarding entrepreneurs, we focus on EC directed at founders in the early stages of the entrepreneurial process, from

the pre-launch to post-launch stages, for two reasons. First, in practice, entrepreneurship education in general and EC more specifically are mostly directed at early-stage entrepreneurs (e.g. Müller & Diensberg, 2011). Second, prior studies on EC have predominantly focused on nascent and novice entrepreneurs (e.g. Audet & Couteret, 2012; Saadaoui & Affess, 2015). Thus, to relate our framework to both predominant practice and prior research, such a focus seems warranted. Beyond these inclusion criteria, in line with recommendations by Bluhm, Harman, Lee, and Mitchell (2011), we aimed to obtain a maximally heterogeneous sample in order to depict EC in its assumed variety. We began our study with different variables in mind that might influence perceptions of EC, such as gender, age, prior experience, industry, and organizational context of EC engagements. We recruited interviewees through incubators, start-up centers, and chambers of industry and commerce, as well as through the social professional networks Xing and LinkedIn and independent coaching agencies.

Sample sizes in qualitative research are generally smaller than in quantitative research as the primary aim is to achieve in-depth insights into a phenomenon rather than representativeness (Morse et al., 2002). An established criterion in qualitative research for determining a large-enough sample is saturation (Morse et al., 2002; Moser & Korstjens, 2018), that is, the point at which no further new categories and concepts emerge from the data. Following general estimations for adequate sample sizes in QCA, we aimed for an initial sample of 15 to 20 coaches and entrepreneurs each (Moser & Korstjens, 2018). We then sampled additional coaches and entrepreneurs until we could no longer generate new aspects (Morse et al., 2002; Moser & Korstjens, 2018). Saturation was reached after analyzing 67 interviews.

Sample. Our final sample included 44 coaches and 23 entrepreneurs from around Germany. Coaches were between 29 and 72 years old (M = 47.70, SD = 9.78) and 50.00% were male. They had on average 10.19 years (SD = 6.71) of practical experience as coaches, which includes an average of 9.76 years (SD = 6.72) coaching entrepreneurs. They spent M = 37.17% (SD = 24.41) of their annual working hours on coaching. Our sample of coaches is thus comparable to the German coaching market in relation to age, gender, experience as a coach, and proportion of coaching to total working time (M. Stephan & Rötz, 2017). On average, 29.08% of their EC engagements were embedded in an institutional program while 70.92% were stand-alone. More than half of the coaches (54.54%) offer coaching not only to entrepreneurs but also to other client populations. 80.65% of coaches had their own experience as entrepreneurs.

Entrepreneurs were between 22 and 53 years old (M = 37.26, SD = 9.85) and 60.87% were male. They had on average taken part in 7.47 sessions of EC (SD = 5.25). The majority (69.57%) of them reported having used coaching as part of a formal program (e.g. incubator). Our sample includes both first- and second-time founders (n = 3) in a broad range of fields (e.g. technology, health, marketing, and human resources). At the time of the interview, two entrepreneurs reported being in the pre-launch stage, four were in the launch stage and 17 in the post-launch stage (with a maximum of five years since founding their company).

Semi-structured interviews. We conducted in-depth, semi-structured telephone interviews. Interview questions, in line with our research questions, were partly predefined and guided by the overall structure of established coaching and mentoring frameworks (Ely et al., 2010; Greif, 2013; Wanberg et al., 2003). At the same time, new topics were allowed to emerge. We included elements of the storytelling approach (Lewis, 2011) by asking interviewees to remember a specific coaching engagement they had experienced and report on these experiences. The majority of questions were asked to coaches and entrepreneurs alike. We explored outcomes of EC by asking why entrepreneurs sought coaching and what outcomes coaches and entrepreneurs perceived. We went into more depth with entrepreneurs about perceived outcomes as their reports are more direct (Bozer & Jones, 2018). We explored input, process, and contextual factors by asking both coaches and entrepreneurs how the coaching started, how the coaching intervention proceeded over time (e.g. what a typical session looked like, how the coach intervened) and what impacted upon the coaching process. Interviews lasted an average of 40.8 minutes, with a range from 26 to 87 minutes, and were transcribed for further analysis.

Data Analysis

QCA (Mayring, 2015; Schreier, 2012) was used to analyze the interviews in a team of four researchers, comprising the first two authors of this study and two graduate students in business psychology. We developed our coding frame such that we created concept-driven higher-level categories as a first step, availing ourselves of existing conceptual frameworks in WPC and mentoring (Ely et al., 2010; Greif, 2013; Wanberg et al., 2003) and differentiated outcomes, input, process, and contextual factors. As a second step, we specified these categories by data-driven lower-level categories for unexplored or unclear research areas

(e.g. coach behaviors) and by concept-driven lower-level categories for research areas that are already further developed (i.e. outcomes of EC, in line with established taxonomies of training outcome).

In contrast to quantitative methods, in qualitative research data collection and analysis should be closely interrelated to engage with a phenomenon as deeply as possible, thereby ensuring reliability and validity (Morse et al., 2002; Moser & Korstjens, 2018). We thus coded the first few interviews and created a first draft of our category system. Continuing our coding, we remained receptive to the emergence of new topics. We discussed and refined data-driven categories iteratively among the team of researchers until they were as unidimensional, mutually exclusive, and exhaustive as possible (Schreier, 2012). In line with our approach to sample until saturation, we used the replication of categories and the non-occurrence of new categories as criteria to finalize our category system (Moser & Korstjens, 2018). For the final coding, we calculated inter-coder reliability using Cohen's kappa and achieved an average $\kappa = .72$, indicating a substantial agreement between coders (Landis & Koch, 1977).

Results

In line with our research questions, we first present findings on the outcomes of EC (RQ1). We then elaborate on input factors (RQ2), process factors (RQ3), in particular coach behavior and functions (RQ3a), and on contextual factors that impact upon EC (RQ4).

Outcomes of Entrepreneurial Coaching

Based on the coaches' and entrepreneurs' statements we identified coaching outcomes on all four deductively set levels: reactions, learning (cognitive and affective), behavior, and results. Some lower-level categories specific to the entrepreneurial context emerged inductively from the interviews. Table 1 provides an overview of EC outcomes across the different levels together with the number of coaches and entrepreneurs referring to these outcomes. While Table 1 depicts all outcomes comprehensively, we elaborate only on outcomes that differ from established results on WPC (including executive coaching) or mentoring in order to draw a characterizing picture of EC.

--- Insert Table 1 about here ---

Concerning *cognitive learning* ($n = 26$), increases in *declarative* as well as *procedural business-related knowledge* appear to be relevant. One entrepreneur said:

> *"The fact that I now know exactly how to proceed with the acquisition, both in terms of addressing customers and which tools can be used. How to set up a social media campaign. So, how shall I put this, I really had no plan before."*

As to *affective learning* (*n* = 13), interviewees specifically described *entrepreneurial* rather than general *self-efficacy*. One entrepreneur shared:

> *"That simply made me or us feel safe and secure on our path and that we've developed confidence in ourselves, that we're on the right path [with our business idea]."*

On the *behavior level* (*n* = 20), changes in *externally directed behavior* (i.e. towards investors and customers) figure as prominently as changed *task- and relations-oriented behavior* (e.g. structuring work, communicating with employees). One entrepreneur explained how he interacted differently with customers:

> *"I put more effort into considering the answers that have to be prepared beforehand, or the questions that arise in other people's minds earlier on, and to incorporate them into my lines of reasoning, for example in relation to marketing measures."*

On the *results level* (*n* = 18), what stands out is that interviewees mentioned substantially more outcomes on the *team/company level* (e.g., improved climate and communication, changed structures and processes, global company performance) than on the *individual-results level*. One entrepreneur shared how coaching had improved the team/company climate:

> *"That we've learned to address the small problems immediately, so that they never get big. We now have a very good culture of dialogue [...]. Usually in such a way that nobody feels offended. I believe that this is also a part of what came out of coaching."*

Input Factors

We identified both characteristics of coaches and of entrepreneurs as relevant input factors for EC.

Coach characteristics. The central coach characteristics that both coaches and entrepreneurs mentioned were related to the *(lack of) experience and expertise* of the coach (*n* = 28). More specifically, the coaches' *expert knowledge*, in particular business-relevant knowledge as well as industry-specific knowledge, was seen as valuable and a lack thereof as hindering (*n* = 22). One coach said:

> *"From my own experience, entrepreneurial coaching comes up against limiting factors for me personally when it has to do with numbers. That's something I can't deal with. Or even highly strategic processes. In these matters I'm not the right sparring partner."*

Some interviewees also perceived the *coaches' own entrepreneurial experience* as an important factor for coaching success (*n* = 7). One entrepreneur said:

> *"Since our coach himself has many years of experience in entrepreneurship, he was able to convey this everyday experience to us really well so we could really learn a lot. And above all, we were able to avoid many mistakes during the founding stage and so on, because he had already made them for us, so to speak, and could communicate them to us beforehand. That's one of the most important things."*

Similarly, extensive *experience as a coach* (*n* = 4) was considered helpful.

Entrepreneur characteristics. First, *attitudes of entrepreneurs towards coaching* (*n* = 12) were named most prominently by both coaches and entrepreneurs. By describing *entrepreneurs' unrealistic expectations*, interviewees referred to a lack of knowledge about what coaching is, meaning that entrepreneurs expected more directive advice and help. One entrepreneur shared:

> *"There was a small misunderstanding. I'd expected that the coaching agency would also help me to develop a website. That it would offer concrete marketing services."*

On the other hand, they indicated that *entrepreneurs' openness and motivation* towards the coaching positively influenced the coaching process.

Second, entrepreneurs' *learning ability and openness to change in general* (*n* = 5) were portrayed as success factors for coaching and for their entrepreneurial success at large.

Third, coaches indicated that the *level of entrepreneurs' entrepreneurial experience* (*n* = 6), relating to being a first-time, serial or seasoned entrepreneur, impacted upon the coaching process in the sense that it required them to adapt the coaching accordingly. One coach said:

> *"If someone comes to us and has already started a business, has perhaps already managed a company, that has an influence on [the process]."*

Process Factors

We identified process factors of EC regarding (i) the coaches' behavior, (ii) the entrepreneurs' behavior and (iii) the working alliance between coaches and entrepreneurs.

Coach behavior. Categorizing specific coach behaviors described by our interviewees led us to define seven coach functions in EC, namely *supportive*, *reflection-focused developmental*, *skill-focused developmental*, *optimization-focused developmental*, *educating*, *implementing*, and *connective behavior*.

Table 2 provides an overview of the seven coach functions and their respective behavioral lower-level categories.

--- Insert Table 2 about here ---

Supportive coach behavior. Coach behaviors classified as *supportive* (*n* = 50) have coaches taking on the role of *companions*. One entrepreneur stated:

> *"It's like someone is there by your side. So, he's always there beside us with his experience, that's a huge help."*

Among supportive coach behaviors, the most frequently named behaviors were *empathic understanding* and *encouraging and motivating* entrepreneurs. One coach explained:

> *"It's like pretty much everything in life, there are ups and downs. […] And there it's important to have a good coach who's also empathic and personally accompanies them and connects to them where they're at."*

Further supportive coach behaviors include *exploring entrepreneurs' personal needs* and *unspecified supportive behavior*, referring to the coach acting as a companion in general.

Reflection-focused developmental coach behavior. Interviewees described that coaches act as *personal sparring partners* who stimulate reflection (*n* = 53). *Stimulating self-reflection* was most prominent. It mostly focused on entrepreneurs' *personal strengths and weaknesses* but also related to their basic *attitudes, beliefs, and motivations* and to *work-life balance issues*. Further, *stimulating reflection on entrepreneurs' motivation to found and their individual relationship to the venture* was frequently addressed (e.g. their current or desired role within the company, their visions of the venture's future). One entrepreneur shared how the coach worked with him:

> *"He reflected very deeply with me on what I wanted to get out of the company for me. What kind of fears, worries and perhaps also positive aspects would I like to take away with me from the months and years afterwards?"*

Reflection and perspective-taking regarding interpersonal and team issues were also reported.

Skill-focused developmental coach behavior. Acting as *skill trainers* (*n* = 46), coaches' behavior encompasses *using skill assessment techniques* (e.g. potential analyses or job shadowing) as well as *practicing and giving feedback on skills and competencies* critical to the entrepreneurial process. Interviewees predominantly described how coaches *practice communication* and *presentation skills* with

entrepreneurs, but also *mindfulness-, stress- and time-management techniques*. One coach explained how customer contact was practiced:

> *"Regarding sales, for example, we've really simulated complete conversation situations and scenarios. This included assigned roles, they were recorded on camera and so on."*

In addition, skills were also *fostered in unspecified ways*, particularly *interpersonal and collaboration skills*.

Optimization-focused developmental coach behavior. Coaches also take on the role of *business development assistants* by displaying a range of behaviors focused on optimizing entrepreneurs' business ($n = 51$). Optimizing behaviors predominantly include *stimulating strategic reflection*, either by challenging the *business idea* or stimulating thinking in *alternative and future scenarios*, as well as *evaluating and refining business plans* with entrepreneurs. They also encompass *identifying and working with business-relevant social, financial and other resources*, notably *critical performance factors*. One entrepreneur shared:

> *"After having identified the crucial points or the critical success factors, we […] looked at how to develop solutions or countermeasures."*

Educating coach behavior. Among *educating coach behaviors* ($n = 48$), *providing expert knowledge, advice or assessment*, especially on *financial issues*, but also on *other topics* (e.g. legal or marketing issues), was most frequently mentioned, thus illustrating coaches' role as *advisors*. One entrepreneur stated:

> *"Yes, on the one hand it was on how my bookkeeping had to look, how I had to prepare myself for it, that I had to stay with it, and that he also offered to look over it twice a year. That was really great, because that's what I wanted."*

To a lesser degree, interviewees also reported that coaches provide entrepreneurs with *general information on entrepreneurship* and *share their own experiences*.

Implementing coach behavior. In displaying *implementing coach behaviors*, coaches take on the role of *implementation guides* ($n = 42$). *Working on specific next steps and defining action plans* with entrepreneurs was named most frequently. One coach shared:

> *"And then we set up a schedule. Every day he has to do something about the whole set-up that he's not so familiar with. I'm not a fan of these kinds of to-do lists with 30 or 60 points, but there's always one thing that has to be done every day."*

Furthermore, coaches *provide specific tools and templates* (e.g. apps, software, checklists) and assist in *general implementation issues and overall structuring*.

Connective coach behavior. *Connective coach behavior* (*n* = 18) includes providing entrepreneurs with *access to coaches' relevant networks* and *informing them about events and workshops* relevant for establishing contacts. These connective behaviors are directed both to (potential) business partners for entrepreneurs and to a broader network of consultants who might provide more specialized support. One coach described the role as *network broker*:

> *"Yes, in every phase there are different needs. And different questions. And I mostly see myself as an intermediary, because I don't have to know everything. But I have a very good network and know where to find the answers. And I'm good at getting people in touch with each other, which is usually very productive."*

Taken together, the reflection-focused developmental function, the optimization-focused developmental function and the supportive function were named by the highest number of interviewees (75% or more; see Table 2). The remaining functions were reported by approximately two-thirds of our interviewees, except for the connective function which was named least. Both coaches and entrepreneurs mentioned the reflection-focused and optimization-focused developmental functions among the top four and the connective function as the least prominent. However, while coaches most frequently emphasized the supportive and developmental functions (i.e. focusing on support and fostering the development of entrepreneurs' reflexivity, skills and business), entrepreneurs most prominently valued the hands-on educating and implementing functions of coaching.

Lack of/wish for directive advice. Apart from function-related coach behaviors, an additional category emerged from the responses of some of the entrepreneurs. They criticized coaches for *not delivering enough directive interventions in general* (*n* = 5). One entrepreneur said:

> *"There is one thing that should be done more often in coaching sessions: Concrete interventions! That would actually be more exciting. Sometimes it might help to simply make a suggestion, like saying: 'Usually, it's useful if you do this and that. Try it out.'"*

Correspondingly, some of the coaches described entrepreneurs' wish or need for practical knowledge and expert advice (*n* = 7).

Entrepreneur behavior. Regarding entrepreneurs' behavior, the central factor interviewees related to is how entrepreneurs reacted to feedback and advice. A substantial number of coaches (*n* = 17) and even

some of the entrepreneurs (*n* = 3) described their *resistance to feedback and advice* as negatively impacting upon the coaching process. One entrepreneur shared:

> *"And I also have to say that self-employed people, myself included, naturally also show a certain resistance to consulting. Not always in a negative sense. On the contrary, if you weren't like that, you probably wouldn't be able to do what you're doing. Because everyone is shaking their heads anyway. […] And that makes it all the more difficult of course to give advice to such people, myself included."*

Accordingly, some coaches indicated that this resistance to advice or inability to take criticism led to the need to address this resistance and, in extreme cases, to end the coaching.

Working alliance. Regarding the relationship between coach and entrepreneur, interviewees mentioned all three of the established components of the working alliance (Horvath & Greenberg, 1989), namely bond-related aspects, task-related aspects and goal-related activities.

Regarding *bond-related aspects* (*n* = 19), coaches as well as entrepreneurs mainly indicated that *establishing mutual trust* is essential for the success of a coaching engagement.

Task-related aspects (*n* = 11) were mentioned by coaches and entrepreneurs in reference to *coaches explaining their working method*. One coach shared:

> *"And I explain my working method, describe my working method and my approach in order to see if we can work together at all."*

A majority of coaches and entrepreneurs referred to *goal-oriented activities* (*n* = 43) as an important part of the working alliance. They emphasized the need to explore entrepreneurs' expectations, motivation and goals *at the beginning of the coaching process*. One coach said:

> *"Well, in the beginning I always have to find out about their motivation. Extrinsic or intrinsic? And accordingly, to filter out for the coachees what we have to work on. 'Where do you want to go? Why do you want to go in that direction?'"*

Moreover, both coaches and entrepreneurs stated that it was beneficial that they *tracked goals* throughout the coaching process.

Contextual Factors

Interviewees highlighted how the specific characteristics of the entrepreneurial ecosystem, namely *entrepreneurs' job demands*, the *entrepreneurial stage*, and *boundary conditions of embedded coaching engagements*, impact upon EC.

As to *entrepreneurs' job demands* (*n* = 20) coaches explained that, in contrast to coaching other target groups, entrepreneurs were engaged in a wide *variety of topics* in their daily work, often juggling multiple tasks and role requirements at the same time (*n* = 8). One coach said:

> *"The diversity. That there are just so many topics. Someone who applies for a new job has usually done an apprenticeship, has some professional experience, and applies mostly in the same sector or field. That's the case for a job. But for someone who sets up a business, now suddenly it's the whole business. From being managing director, to financial controlling, the purchasing department, sales, marketing, HR, everything."*

They also emphasized that entrepreneurs had to deal with *high levels of uncertainty* (*n* = 6).

Furthermore, the *entrepreneurial stage* that entrepreneurs are in (i.e. pre-launch, launch, post-launch) when engaging in coaching was referred to by a majority of coaches (*n* = 32) as a factor influencing the coaching process. While most coaches (*n* = 23) described *more generally* that different stages require them to deal with different topics and to use different types of interventions (e.g. more directive versus more reflective approaches), some explained in more detail *how the focus shifts* (*n* = 9). One coach explained:

> *"In the pre-launch stage, we concentrate more on the motives, why someone wants to set up a business. The question of why and, of course, about the [entrepreneur's] resources [...]. In the course of the entrepreneurial process it's more about the topic of team building, team leadership. How to motivate employees, customers. And usually during the growth stage we must look at the entrepreneur again. Why doesn't he succeed in something that he's striving for? Is it the team? Is it the product?"*

For those EC engagements that were part of a start-up program or grant (i.e. embedded coaching engagements), interviewees mentioned that the *boundary conditions* (*n* = 23) were often set by the program or grant sponsors rather than contracted between coach and entrepreneur. For example, *program-related restrictions* that shape EC engagements (*n* = 12) implied a *predetermined structure* of the coaching engagement (i.e. standardized procedures and guidelines; *n* = 6), and a *set time frame* in terms of time contingents and/or frequency of meetings (*n* = 4). Program-related restrictions also include the *scope of*

coaching themes, in the sense that coaches were not allowed to advise on specific issues (*n* = 3). One entrepreneur shared:

> *"What was missing, as I said, were these financial things, tax for example, that would have really helped me. I actually think it's a great pity that these coaching programs are prevented from doing so. I can't understand that, this really needs to change."*

Externally defined boundary conditions also implied that *entrepreneurs' freedom of choice* was often limited in embedded coaching engagements, both with regards to whether to engage in coaching at all or with a particular coach (*n* = 9). When asked for the reason why they engaged in coaching, more than half of the entrepreneurs (*n* = 12) explained that it was part of a program or grant.

Discussion

Our study provides a multifaceted view on the outcomes, input, process, and contextual factors of EC. By basing our analysis on the perspectives of both coaches and entrepreneurs, we thoroughly investigated a research topic that is based upon the relationship between (at least) two stakeholders who sometimes differ substantially in their perspectives (e.g. Theeboom, Beersma, & van Vianen, 2014). These results thus provide a systematic and holistic picture of EC, with a focus on early-stage entrepreneurs.

Our findings make a particular contribution to advancing EC research in two areas: First, they bring clarity to the current lack of understanding regarding relevant coach behavior in EC by identifying seven overarching coach functions that characterize EC. Second, we provide insights into the currently underresearched contextual factors that impact upon EC by identifying entrepreneurs' job demands, the entrepreneurial stage, and institutional boundary conditions (especially for embedded coaching engagements) as relevant contextual influences.

A Two-dimensional Framework for Characterizing and Positioning EC

In addition to identifying relevant outcomes, input, process, and contextual factors of EC, a major contribution made by our study lies in the introduction of a novel framework consisting of the two dimensions of expert- vs. process-consultation and individual-work-venture-focus. We propose that this framework advances research on EC in at least two ways. First, it serves to systematize coach functions within EC. Second, it allows EC to be positioned in relation to related developmental interventions.

Positioning the seven overarching coach functions within the two-dimensional framework highlights the spectrum and pattern of coach functions characteristic of EC (see Figure 2). While the supportive companion is positioned at one extreme, namely providing individually-focused process-consultation, developmental functions differ primarily in their focus, with the sparring partner focusing on the individual entrepreneur, the skill trainer on the entrepreneur's work, and the business-development assistant on the venture. The clearly expert-oriented functions (advisor, implementation guide, network broker) all focus on the intersection between the entrepreneurs' tasks and the venture. Such a systematization of coach functions increases the theoretical understanding of how coaches support entrepreneurs in the challenges they face and paves the way for more differentiated research on EC.

--- Insert Figure 2 about here –-

The framework also allows us to characterize and position EC as a developmental intervention for entrepreneurs relative to related interventions (see Figure 3). While classical WPC and start-up consultancy constitute opposite ends of the expert- vs. process-consultation and individual-work-venture-focus dimensions, EC along with executive coaching and EM can be positioned between the two extremes. We will describe similarities and differences between EC and related interventions in more detail, using these two dimensions.

--- Insert Figure 3 about here ---

Expert- vs. process-consultation. In line with WPC's focus on process-consultation (e.g. Schreyögg, 2010), stimulating self-reflection has been posited as its key characteristic (Behrendt & Greif, 2018). In contrast, regarding the cognitive learning level, interviewees in our study reported more outcomes for business-related knowledge ("about" and "how to") than typically found in WPC (Kotte, 2019). Moreover, only two of the seven coach functions of EC correspond to a pure process-consultation approach, while the remaining five are in line with an expert-consultation approach or contain elements of both expert- and process-consultation (see Figure 2). When explicitly comparing EC to classical WPC, coaches named the higher proportion of expert-consultation as a key distinguishing characteristic. Moreover, entrepreneurs mentioned the hands-on educating and implementing functions of EC most prominently and criticized the lack of more directive interventions. Our findings therefore corroborate initial research indicating that EC might also include expert-consultation functions (Crompton, 2012; Kutzhanova et al., 2009), similar to

executive coaching (Berman, 2019). In our study, the coaches' business-relevant specialist knowledge and, to a lesser degree, their own experience as entrepreneurs were seen as important factors. This emphasis on specialist knowledge is in sharp contrast to WPC (Jones et al., 2016) where clients and sponsoring organizations attribute higher relevance to experience as a coach than, for example, to industry experience or personal experience as an executive (M. Stephan & Rötz, 2017). Emphasizing the experience as a coach also applies to executive coaching (M. Stephan & Rötz, 2017), even though executive coaching has been suggested, similarly to EC, to contain more expert-consultation elements (e.g. Berman, 2019).

Due to its stronger focus on expert-consultation, EC is in fact closer to mentoring and to executive coaching than to classical WPC. EM shares some process-consultation elements with EC (e.g. the psychosocial support function of EM in line with the supportive function we found for EC; e.g. Allen, Eby, Poteet, Lentz, & Lima, 2004). However, with its emphasis on mentors passing on their experience and role-modeling as one of the core functions (e.g. Dickson et al., 2014), EM is more strongly characterized by an expert-consultation approach than EC. As in executive coaching, coaches passing on their own experience plays a lesser role in EC, named as a lower-level category by only one of the coaches and by less than a third of the entrepreneurs in our study. In contrast, a majority of both coaches and entrepreneurs mentioned the reflection-focused developmental function, resonating with initial findings indicating that learning outcomes in EC are more reflection-related than in EM (e.g. Brinkley & Le Roux, 2018). This emphasis on reflection also clearly differentiates EC from start-up consultancy, while it draws EC and executive coaching together. Compared to mentors (St-Jean & Audet, 2012), coaches' professional identity is less closely tied to their own experience as entrepreneurs (or executives). A substantial proportion of coaches in our sample did not have experience as entrepreneurs themselves (19.35%) and most coaches (93.20%) worked with a range of other client groups besides entrepreneurs.

Focus on the individual, the work, or the venture. Given the close interconnection of entrepreneurs with their venture (e.g. Jayaraman et al., 2000; St-Jean, 2011), we explored whether the broadened entrepreneurship-specific focus towards the venture introduced for EM (Dowejko & Chan, 2019) and the stronger focus on the organization at large in (top-level) executive coaching (Berman, 2019) also applied to EC. We indeed found a similarly enlarged scope. In contrast to WPC (Jones et al., 2019; Kotte, 2019), interviewees reported more outcomes of EC on the venture-related than the individually-

focused results level and substantial business-related learning outcomes in addition to self-related learning. Four of the seven coach functions of EC target the venture, either exclusively (as in *coach as business development assistant*) or in combination with addressing entrepreneurs' tasks and responsibilities (e.g. in *coach as implementation guide*) (see Figure 2). Moreover, stimulating reflection on the entrepreneurs' relationship to their venture emerged as one of the reflection-focused developmental subfunctions, making the individual-work-venture link an explicit part of the content of the coaching engagement. EC therefore shares with EM the breadth of topics and associated range of foci from the individual to the venture level and thus its scope is broader than in both classical WPC and (top-level) executive coaching. In contrast to classical WPC, EC also includes a venture-focus. In contrast to executive coaching, it also includes a focus on the individual while sharing with executive coaching the consideration of the work-venture intersection (e.g. own role within the company, company strategy; Berman, 2019). Because of its broadened focus on the venture, EC also overlaps more than WPC with organizational development and consulting, and its entrepreneurship-specific form, namely start-up consultancy.

Taken together, EC can therefore be positioned between EM and executive coaching. EC shares with EM the broad focus but adopts a slightly more process-oriented approach. EC shares with executive coaching the slightly stronger orientation towards process-consultation but adopts a broader focus on the individual-work-venture dimension.

Taking a Closer Look at Contextual Factors of EC

In line with recent calls to reframe WPC as a contextually embedded social process rather than as an individual intervention (Athanasopoulou & Dopson, 2018; Grover & Furnham, 2016; Louis & Fatien Diochon, 2014), our study explicitly considered contextual factors impacting upon EC and therefore adds substantially to the extant EC literature.

Complexity of entrepreneurial job demands: the challenge of focusing the coaching engagement. Our study shows that entrepreneurs' job demands, notably the complexity of simultaneous issues and roles (e.g. Cardon & Patel, 2015; U. Stephan, 2018), and their close connection to their venture (e.g. Jayaraman et al., 2000; St-Jean, 2011) lead to a complexity of topics in the coaching engagement that has also been raised in the EM literature (St-Jean, 2011). In fact, coaches named the variety of topics that are addressed during EC as one of the key features, distinguishing it from classical WPC which is generally

more focused on specific and distinct topics. In this sense, EC also differs from executive coaching where the scope is generally more narrowly defined as well. Focusing the coaching engagement is therefore more challenging in EC. Tensions may arise, for example, between focusing on and "siding with" individual entrepreneurs with their personal concerns and developmental needs on the one hand, and the venture with its business requirements on the other, thereby requiring coaches to wear "conflicting hats" (Fatien Diochon, Martin, & Kotte, 2019).

The breadth of topics "flooding" the coaching intervention presents a challenge to coaching. Research on WPC shows that negative effects of coaching for the coachee arise in particular when too many different topics are dealt with during the coaching engagement (Schermuly & Graßmann, 2018) and that including additional topics (such as multisource feedback) may distract from rather than support goal achievement (Jones et al., 2016). Against this background, it is likely that goal-oriented activities were emphasized so strongly by our interviewees since they are a useful strategy for increasing the focus of coaching engagements, thereby facilitating coaching success (e.g. Behrendt & Greif, 2018).

Institutional boundary conditions and additional stakeholders. The contextual perspective of our study also highlights the need to differentiate between embedded and stand-alone EC engagements. Embedded EC engagements are part of a more comprehensive entrepreneurial program or start-up grant, similar to common practice in EM (e.g. Brinkley & Le Roux, 2018; El Hallam & St-Jean, 2016; Mansoori et al., 2019). Key boundary conditions (e.g. time, structure, content) are at least partially defined externally, that is outside of the coach-entrepreneur dyad. Moreover, both coach and entrepreneur are partly dependent upon the sponsoring organization (e.g. coaches being employed or contracted by a business incubator; coaching as a precondition for entrepreneurs to receive funding). The extrinsic rather than intrinsic motivation for engaging in coaching that may result from mandatory coaching is problematic as coaching motivation has been identified as an important predictor of coaching outcomes (e.g. Bozer & Jones, 2018). Similarly, the reported resistance of entrepreneurs to advice and feedback might at least partly be linked to such mandatory coaching engagements. In EM, there is evidence of predetermined relationships being less effective than self-selected ones (McGregor & Tweed, 2002). In summary, the strong institutional influences in embedded coaching engagements curtail the freedom and scope of action of both coaches and entrepreneurs and complicate the contracting between both parties which is key to establishing a solid

working alliance (e.g. Burger & Van Coller-Peter, 2019). In this regard, embedded EC shows more similarities to the organizational dependencies, power dynamics, and the need for stakeholder alignment that are typical of WPC (e.g. Athanasopoulou & Dopson, 2018; Burger & Van Coller-Peter, 2019; Louis & Fatien Diochon, 2014) than one might initially expect in light of entrepreneurs being self-employed.

It is important to note, however, that embedded EC engagements are only one form of EC along with stand-alone EC engagements. In fact, in our sample, half of the coaches conduct more than 95% of their EC engagements as stand-alone. Whether and how third parties, for example investors, impact upon or are incorporated into contracting in these stand-alone coaching engagements is as yet unclear.

Synthesis: A Definition of Entrepreneurial Coaching

Based on the review of the literature, our empirical findings, and the discussion thereof, we propose a definition of entrepreneurial coaching as follows:

> *Entrepreneurial coaching is a custom-tailored, reflective, and results-oriented development intervention that is directed towards entrepreneurs with differing levels of experience and across different stages of the entrepreneurial process. It is based on a collaborative relationship between a professional coach (who may or may not have personal entrepreneurial experience) and an entrepreneur. EC can be embedded (e.g. in entrepreneurial programs or start-up grants) or be conducted as a stand-alone intervention. It entails both expert- and process-consultation elements and, beyond focusing on the individual entrepreneur and their work, involves a consideration of the venture level.*

Limitations and Implications for Future Research

The assumed relevance of input, process, and contextual factors is at present based on the subjective assessment of coaches and entrepreneurs having engaged in EC, rather than on their actual predictive value. Therefore, in a next step, testable pathways need to be specified and assessed empirically. We inductively explored coach behaviors and allotted them to seven different coach functions of EC. This structure needs to be tested factor-analytically similar to the methodical approach adopted for corroborating the mentor functions of EM (St-Jean, 2011). A sound quantitative measure of EC coach functions could in turn enable the testing of specific hypotheses. Similar to the differential impact of specific mentoring functions on specific outcomes in mentoring (Allen et al., 2004), we suggest that coach functions may impact

differentially upon specific EC outcomes (e.g. the skill-focused developmental function might particularly foster behavior change; the implementing function might impact upon the results level).

Another pathway that we suggest is between the coaches' background, the degree to which they display specific functions, and EC outcomes. We assume that coaches with a higher degree of technical expertise and personal entrepreneurial experience display more expert-consultation functions, while coaches with more extensive experience as a coach display more process-consultation functions. The assumed link between coach functions and outcomes may be moderated by the level of experience of the entrepreneur. Research on situational leadership theory suggests that inexperienced followers benefit from more directive leadership (Thompson & Vecchio, 2009) which has some overlap with expert-consultation. Moreover, researchers have assumed that inexperienced entrepreneurs make less use of heuristics and may thus be overwhelmed by information (Ucbasaran, Wright, Westhead, & Busenitz, 2003). Building on this research, we suggest that coach functions in line with expert-consultation are more effective for inexperienced entrepreneurs, while coach functions in line with process-consultation are more effective for experienced entrepreneurs.

In our study, we focused on early-stage entrepreneurs in order to relate our framework to both the predominant practice of EC and existing research. It is reasonable to expect, however, that the approach and focus of EC not only change across the initial pre-launch, launch, and post-launch stages but also at later growth stages of the venture. Purposefully sampling entrepreneurs across a wide range of stages could shed light on how the focus of and approach to coaching is (or is not) adapted to the respective stage and, therefore, extend our initial findings on the impact of the entrepreneurial stage upon the coaching engagement. Moreover, we suggest that future research might further explore contextual factors, taking our two-dimensional framework as a useful starting point. Recent research indicates that the choice of coaching and mentoring behaviors is context-sensitive (Stokes et al., 2020). Accordingly, the contextual peculiarities of specific subgroups of entrepreneurs (e.g. independent start-ups vs. spinoffs, for-profit vs. social entrepreneurs) might impact upon the choice and efficacy of different coach functions in EC.

A limitation of our study is the use of subjective reports on coaches' and entrepreneurs' behavior. Self-reported and actual behavior in coaching may differ substantially (Ianiro, Lehmann-Willenbrock, &

Kauffeld, 2015). Therefore, observational studies comparing how coaches intervene over the course of EC sessions would be desirable to corroborate our findings.

While our study identifies boundary conditions imposed by the entrepreneurial ecosystem as important contextual factors of EC, particularly for embedded EC engagements, our findings are limited to the perspectives of coaches and entrepreneurs. We suggest the inclusion of a third-party perspective on EC by following up with an interview study on how these third parties view EC, both for embedded as well as for stand-alone EC engagements. While it has already been suggested that incubator managers be included in future EC studies (Audet & Couteret, 2012), we recommend to also include the investor perspective on coaching, particularly since recent entrepreneurship research has indicated that entrepreneurs' "coachability" (Ciuchta, Letwin, Stevenson, McMahon, & Huvaj, 2018) is a part of investors' criteria for investment decisions. Relatedly, the question of how different stakeholders' interests and perspectives are incorporated and aligned in EC remains unexplored. Multi-stakeholder contracting (Burger & Van Coller-Peter, 2019) might play an important role in EC and thus is a relevant area for future research.

Practical Implications

Our study bears practical implications for coaches, entrepreneurs, and organizational stakeholders involved in EC. For coaches, our study raises awareness of the importance of maintaining a conscious balance between expert- and process-consultation as well as between focusing on the individual, work, and venture. The entrepreneurs' clearly voiced wish for more instructive interventions and the sharing of specialist knowledge and experience is likely to create a strong pull towards expert-consultation. Maintaining a collaborative working relationship that requires and allows entrepreneurs to identify their own needs and solutions in line with a process-consultation approach is therefore particularly challenging in EC. Although coachees in executive coaching settings also express a preference for concrete advice and recommendations (Hall, Otazo, & Hollenbeck, 1999), considering the specialized field of EC, the variety of topics and the insecurities which entrepreneurs bring to coaching may make it particularly difficult to "win them over" to a, at least partially, process-oriented coaching engagement. Explicitly and continuously addressing, explaining, and contracting the way in which coach and entrepreneur collaborate (i.e. strengthening the task-related component of the working alliance; Horvath & Greenberg, 1989) seems

therefore particularly important in EC. Relatedly, the breadth of topics that results from entrepreneurs' job demands requires coaches to equilibrate their focus on the individual-work-venture continuum. Coaches need to reflect their "habitual pull" towards a particular focus (with the associated blind spots and seducibilities) and should clarify goals with entrepreneurs on an ongoing basis in order to jointly decide upon the respective focus (i.e. strengthening the goal-related component of the working alliance; Horvath & Greenberg, 1989).

For entrepreneurs, our study helps to better understand what outcomes and what type of intervention to expect from EC and how it differs from other developmental interventions. Channeling expectations is relevant, since entrepreneurs' unrealistic expectations were named as a hindering factor in our study, and the alignment of coachee expectations (or lack thereof) impacts upon the success of WPC (e.g. Athanasopoulou & Dopson, 2018).

For organizational stakeholders, our study raises awareness of the tensions associated with making coaching a compulsory component of entrepreneurial programs or funding. We suggest that the limited choice that some entrepreneurs reported (both with regards to coaching and the specific coach) may contribute to the frequently reported resistance to feedback and advice. Thus, while it is reasonable, from an organizational perspective, to attach conditions to funding, organizational stakeholders should also consider how they could increase degrees of freedom in order to foster entrepreneurs' intrinsic motivation and ultimately the effectiveness of coaching (e.g. by allowing the choice of coach based on a selection of coach profiles as is common practice in organizationally embedded WPC).

Conclusion

Our study contributes to the highly relevant topic of supporting entrepreneurs during the entrepreneurial process (e.g. European Commission, 2018). We provide a clearer picture of what EC is and how it differs from (and resembles) related interventions from the fields of entrepreneurial education and professional coaching by characterizing and positioning EC within a two-dimensional conceptual framework and by suggesting a definition of EC. This framework can pave the way for future empirical investigations into EC. For practitioners – coaches, entrepreneurs, and organizational stakeholders – it can serve as a roadmap to guide them to a better understanding of how EC can be optimally used.

References

Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, *89*(1), 127–136.

Athanasopoulou, A., & Dopson, S. (2018). A systematic review of executive coaching outcomes: Is it the journey or the destination that matters the most? *The Leadership Quarterly*, *29*(1), 70–88.

Audet, J., & Couteret, P. (2012). Coaching the entrepreneur: Features and success factors. *Journal of Small Business and Enterprise Development*, *19*(3), 515–531.

Behrendt, P., & Greif, S. (2018). Erfolgsfaktoren im Coachingprozess [Success factors in the coaching process]. In S. Greif, H. Möller, & W. Scholl (Eds.), *Handbuch Schlüsselkon-zepte im Coaching [Handbook key concepts in coaching]* (pp. 163–172). Berlin: Springer.

Ben Salem, A., & Lakhal, L. (2018). Entrepreneurial coaching: How to be modeled and measured? *Journal of Management Development*, *37*(1), 88–100.

Berman, W. H. (2019). Coaching C-suite executives and business founders. *Consulting Psychology Journal: Practice and Research, 71*(2), 72–85.

Bluhm, D. J., Harman, W., Lee, T. W., & Mitchell, T. R. (2011). Qualitative research in management: A decade of progress. *Journal of Management Studies*, *48*(8), 1866–1891.

Bosma, N., Hessels, J., Schutjens, V., van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, *33*(2), 410–424.

Bozer, G., & Jones, R. J. (2018). Understanding the factors that determine workplace coaching effectiveness: A systematic literature review. *European Journal of Work and Organizational Psychology*, *27*(3), 342–361.

Brinkley, M.-L., & Le Roux, I. (2018). Coaching as a support function for potential entrepreneurs. *The Southern African Journal of Entrepreneurship and Small Business Management*, *10*(1), 1-12.

Burger, Z., & Van Coller-Peter, S. (2019). A guiding framework for multi-stakeholder contracting in executive coaching. *SA Journal of Human Resource Management*, *17*.

Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing, 12*(1), 9–30.

Cardon, M. S., & Patel, P. C. (2015). Is stress worth it? Stress-related health and wealth trade-offs for entrepreneurs. *Applied Psychology: An International Review, 64*(2), 379–420.

Ciuchta, M. P., Letwin, C., Stevenson, R., McMahon, S., & Huvaj, M. N. (2018). Betting on the coachable entrepreneur: Signaling and social exchange in entrepreneurial pitches. *Entrepreneurship Theory and Practice, 42*(6), 860–885.

Cooper, S. E. (2019). Introduction to the special issue on coaching elite performers. *Consulting Psychology Journal: Practice and Research, 71*(2), 63–71.

Crompton, B. M. (2012). *The effect of business coaching and mentoring on small-to-medium enterprise performance and growth* (Dissertation). RMIT University, Melbourne, Australia.

Crompton, B. M., & Smyrnios, K. X. (2011, June). *What difference does business coaching make to entrepreneurs' firm performance and future growth?* Paper presented at the 56th ICSB World Conference, Stockholm, Sweden.

Dickson, J., Kirkpatrick-Husk, K., Kendall, D., Longabaugh, J., Patel, A., & Scielzo, S. (2014). Untangling protégé self-reports of mentoring functions. *Journal of Career Development, 41*(4), 263–281.

Dowejko, M. K., & Chan, E. (2019, June). *Mentoring functions in entrepreneurial formal mentorship.* Paper presented at the European Academy of Management, 19th Conference, Lisbon, Portugal.

Edmondson, A. C., & McManus, S. E. (2007). Methodological fit in management field research. *Academy of Management Review, 32*(4), 1155–1179.

El Hallam, H., & St-Jean, E. (2016). Nurturing entrepreneurial learning through mentoring. *Journal of Developmental Entrepreneurship, 21*(2), 1650012.

Ely, K., Boyce, L. A., Nelson, J. K., Zaccaro, S. J., Hernez-Broome, G., & Whyman, W. (2010). Evaluating leadership coaching: A review and integrated framework. *The Leadership Quarterly, 21*(4), 585–599.

European Commission (2018). *Proposal for a council recommendation on key competences for lifelong learning.* Commission staff working document. Brussels, SWD 14 final.

Fatien Diochon, P., Martin, F., & Kotte, S. (2019). *Entrepreneurial coaching: Handling conflicting hats.* Presentation at the 11th ESMT Coaching Colloquium, Berlin, Germany.

Graßmann, C., Schölmerich, F., & Schermuly, C. C. (2019). The relationship between working alliance and client outcomes in coaching. *Human Relations*, *42*(2), 1–24.

Greif, S. (2013). Conducting organizational-based evaluations of coaching and mentoring programs. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *The Wiley-Blackwell handbook of the psychology of coaching and mentoring* (pp. 445–470). Chichester, UK: Wiley-Blackwell.

Grover, S., & Furnham, A. (2016). Coaching as a developmental intervention in organisations: A systematic review of its effectiveness and the mechanisms underlying it. *PloS One, 11*(7), e0159137.

Hall, D. T., Otazo, K. L., & Hollenbeck, G. P. (1999). Behind closed doors: What really happens in executive coaching. *Organizational Dynamics, 27*(3), 39–53.

Horvath, A. O., & Greenberg, L. S. (1989). Development and validation of the Working Alliance Inventory. *Journal of Counseling Psychology, 36*(2), 223–233.

Ianiro, P. M., Lehmann-Willenbrock, N., & Kauffeld, S. (2015). Coaches and clients in action: A sequential analysis of interpersonal coach and client behavior. *Journal of Business and Psychology, 30*(3), 435–456.

Jayaraman, N., Khorana, A., Nelling, E., & Covin, J. (2000). CEO founder status and firm financial performance. *Strategic Management Journal, 21*(12), 1215–1224.

Jones, R. J., & Bozer, G. (2018). Advances in the psychology of workplace coaching. *Applied Psychology: An International Review, 67*(4), 768–772.

Jones, R. J., Napiersky, U., & Lyubovnikova, J. (2019). Conceptualizing the distinctiveness of team coaching. *Journal of Managerial Psychology*, *34*(2), 62–78.

Jones, R. J., Woods, S. A., & Guillaume, Y. R. F. (2016). The effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology*, *89*(2), 249–277.

Kirkpatrick, D. L. (1994). *Evaluating training programs: The four levels*. San Francisco, CA: Berrett-Koehler.

Kotte, S. C. (2019). The state-of-play of coaching: A synthesis of the extant meta-analyses. *Academy of Management Proceedings*, 13554.

Kraiger, K., Ford, J. K., & Salas, E. (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training Evaluation. *Journal of Applied Psychology*, *78*(2), 311–328.

Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship education at university level and students' entrepreneurial intentions. *Procedia - Social and Behavioral Sciences*, *110*, 658–668.

Kutzhanova, N., Lyons, T. S., & Lichtenstein, G. A. (2009). Skill-based development of entrepreneurs and the role of personal and peer group coaching in enterprise development. *Economic Development Quarterly*, *23*(3), 193–210.

Lackéus, M. (2015). *Entrepreneurship in education: What, why, when, how*. Retrieved from https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf.

Lancer, N., Clutterbuck, D., & Megginson, D. (2016). *Techniques for coaching and mentoring* (2nd ed.). London, UK: Routledge.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, *33*(1), 159–174.

Lee, T. W. (1999). *Using qualitative methods in organizational research*. Thousand Oaks, CA: SAGE.

Lewis, P. J. (2011). Storytelling as research/research as storytelling. *Qualitative Inquiry*, *17*(6), 505–510.

Louis, D., & Fatien Diochon, P. (2014). Educating coaches to power dynamics: Managing multiple agendas within the triangular relationship. *Journal of Psychological Issues in Organizational Culture*, *5*(2), 31–47.

Mansoori, Y., Karlsson, T., & Lundqvist, M. (2019). The influence of the lean startup methodology on entrepreneur-coach relationships in the context of a startup accelerator. *Technovation*, *84-85*, 37–47.

Matotola, S., & Bengesi, K. (2019). Motivation as a potential gear towards business establishment by young entrepreneurs incubated in higher learning institutions business incubators in Tanzania. *Journal of Business Studies and Economics*, *1*(1), 155–173.

Mayring, P. (2015). *Qualitative Inhaltsanalyse - Grundlagen und Techniken [Qualitative content analysis - fundamentals and techniques]* (12th ed.). Weinheim, Germany: Beltz.

McGregor, J., & Tweed, D. (2002). Profiling a new generation of female small business owners in New Zealand: Networking, mentoring and growth. *Gender, Work and Organizations*, *9*(4), 420–438.

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 13–22.

Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling, data collection and analysis. *The European Journal of General Practice*, *24*(1), 9–18.

Müller, K.-D., & Diensberg, C. (Eds.). (2011). *Methoden und Qualität in Gründungslehre, Gründungscoaching und Gründungsberatung: Interventionen und Innovation [Methods and quality in teaching entrepreneurship, entrepreneurial coaching and start-up consultancy: Interventions and innovations]* (1st ed.). Lohmar, Germany: Eul.

Saadaoui, S., & Affess, H. (2015). Evaluating the role of coaching on developing entrepreneurial self-efficacy. *European Journal of Business and Social Sciences*, *3*(11), 54–61.

Schein, E. H. (1990). A general philosophy of helping: Process consultation. *Sloan Management Review*, *31*(3), 57–64.

Schermuly, C. C., & Graßmann, C. (2018). A literature review on negative effects of coaching – what we know and what we need to know. *Coaching: An International Journal of Theory, Research and Practice*, *80*(3), 1–28.

Schermuly, C. C., Wach, D., Kirschbaum, C., & Wegge, J. (2020). Coaching of insolvent entrepreneurs and the change in coping resources, health, and cognitive performance. *Applied Psychology: An International Review*. Advance online publication.

Schreier, M. (2012). *Qualitative content analysis in practice*. Los Angeles, CA: SAGE.

Schreyögg, A. (2010). Ist Coaching reine Prozessberatung oder sind hier auch andere Beratungsmodelle relevant? [Is coaching pure process consultation or are other consultation models also relevant?]. *Organisationsberatung, Supervision, Coaching*, *17*(2), 119–132.

Segers, J., Vloeberghs, D., & Henderickx, E., & Inceoglu, I. (2011). Structuring and understanding the coaching industry: The coaching cube. *Academy of Management Learning & Education*, *10*(2), 204–221.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, *25*(1), 217–226.

Stephan, M., & Rötz, S. (2017). *Coaching-Marktanalyse 2016/17: Kurzfassung [Coaching market survey 2016/17: short version]*. Marburg, Germany: Philipps Universität Marburg.

Stephan, U. (2018). Entrepreneurs' mental health and well-being: A review and research agenda. *Academy of Management Executive*, *32*(3), 290–322.

Stern, L. R. (2004). Executive coaching: A working definition. *Consulting Psychology Journal: Practice and Research*, *56*(3), 154–162.

St-Jean, E. (2011). Mentor functions for novice entrepreneurs. *Academy of Entrepreneurship Journal*, *17*(1), 65–84.

St-Jean, E., & Audet, J. (2012). The role of mentoring in the learning development of the novice entrepreneur. *International Entrepreneurship and Management Journal*, *8*(1), 119–140.

Stokes, P., Fatien Diochon, P., & Otter, K. (2020). "Two sides of the same coin?" Coaching and mentoring and the agentic role of context. *Annals of the New York Academy of Sciences*. Advance online publication.

Tetrick, L. E., Slack, K. J., Da Silva, N., & Sinclair, R. R. (2000). A comparison of the stress-strain process for business owners and nonowners: Differences in job demands, emotional exhaustion, satisfaction, and social support. *Journal of Occupational Health Psychology*, *5*(4), 464–476.

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*(1), 1–18.

Thompson, G., & Vecchio, R. P. (2009). Situational leadership theory: A test of three versions. *The Leadership Quarterly*, *20*(5), 837–848.

Ucbasaran, D., Wright, M., Westhead, P., & Busenitz, L. W. (2003). The impact of entrepreneurial experience on opportunity identification and exploitation: Habitual and novice entrepreneurs. In J. A. Katz & D. A. Shepherd (Eds.), *Advances in entrepreneurship, firm emergence and growth: Cognitive approaches to entrepreneurship research* (Vol. 6, pp. 231–263). Bingley, UK: Emerald Group.

Van Praag, C. M., & Versloot, P. H. (2007). What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, *29*(4), 351–382.

Volkmann, C., Wilson, K. E., Mariotti, S., Rabuzzi, D., Vyakarnam, S., & Sepulveda, A. (Eds.). (2009). *Educating the next wave of entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st century*. Geneva, Switzerland: World Economic Forum.

Wanberg, C. R., Welsh, E. T., & Hezlett, S. A. (2003). Mentoring research: A review and dynamic process model. *Research in Personnel and Human Resources Management*, *22*, 39–124.

Figure 1. Formats Related to EC within the Two-Dimensional Framework

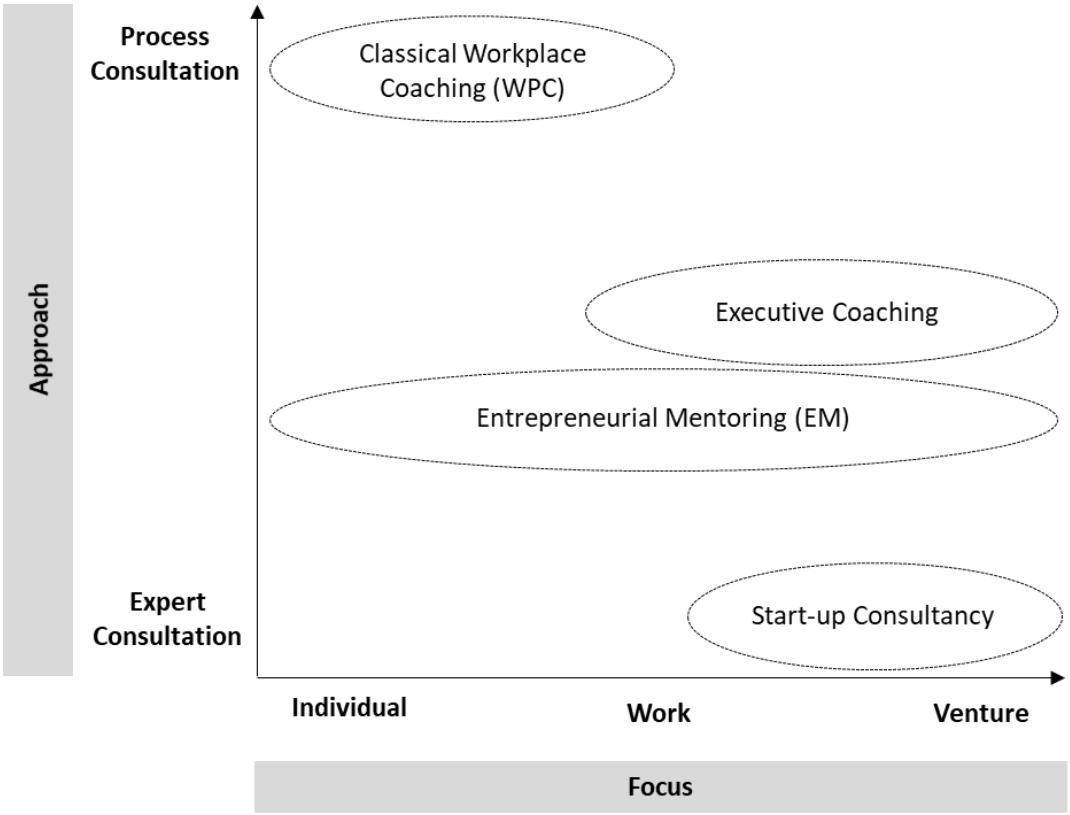


Table 1

Outcomes of Entrepreneurial Coaching

Outcome categories	C (*n* = 44)	E (*n* = 23)	Total (*N* = 67)
Reaction	**13**	**22**	**35**
Satisfaction with coaching	*2*	*12*	*14*
Subjectively perceived benefit	*13*	*22*	*35*
Learning	**9**	**20**	**29**
Cognitive Learning	7	19	26
Declarative knowledge	5	13	18
Business-related knowledge about	*0*	*4*	*4*
Self-awareness	*5*	*11*	*16*
Procedural knowledge/Cognitive strategies	4	14	18
Business-related knowledge how to (e.g. writing a business plan)	*2*	*8*	*10*
Self-reflectivity	*0*	*6*	*6*
Perspective-taking	*1*	*4*	*5*
Other cognitive learning	*1*	*2*	*3*
Affective Learning	2	11	13
Entrepreneurial self-efficacy	*2*	*5*	*7*
Job engagement/motivation	*0*	*3*	*3*
Self-confidence/self-criticism	*0*	*4*	*4*
Serenity	*0*	*4*	*4*
Other affective learning	*0*	*1*	*1*
Behavior/Transfer	**4**	**16**	**20**
Task-oriented behavior (e.g. work in a more structured way)	*1*	*7*	*8*
Change-oriented behavior (e.g. take a strategic decision)	*0*	*3*	*3*
Relations-oriented behavior (e.g. give feedback to team members)	*0*	*10*	*10*
Externally directed behavior (e.g. interact differently with investors)	*3*	*8*	*11*
Other specific or unspecified transfer	*0*	*4*	*4*
Results	**3**	**15**	**18**
Individual level	0	5	5
Individual work performance	*0*	*4*	*4*
Acquired social capital/expanded network	*0*	*2*	*2*
Team/company level	3	12	15
Climate/communication	*0*	*8*	*8*
Generally improved teamwork	*0*	*4*	*4*
Changed structures/processes/business model	*0*	*5*	*5*
Global company performance	*3*	*1*	*4*

Note. Numbers indicated represent numbers of interviewees. C = coaches; E = entrepreneurs.

Table 2

Coach Behavior Related to the Seven Coach Functions

Coach behavior (coach function)	C (n = 44)	E (n = 23)	Total (N = 67)
Supportive behavior (companion)	**38**	**12**	**50**
Empathic understanding	17	7	24
Encourage and motivate entrepreneur	16	5	21
Explore entrepreneur's needs	12	3	15
Unspecified supportive behavior (companion)	11	5	16
Reflection-focused developmental behavior (personal sparring partner)	**40**	**13**	**53**
Stimulate self-reflection	35	12	47
… on entrepreneurs' (personal) strengths and weaknesses	*22*	*4*	*26*
… on entrepreneurs' attitudes/beliefs/motivations and challenge them	*17*	*2*	*19*
… on work-life-balance issues and level of strain	*7*	*2*	*9*
… (unspecified)	*13*	*8*	*21*
Stimulate reflection on motivation to found/individual relationship to venture	19	3	22
Stimulate reflection and perspective-taking regarding interpersonal and team issues	9	5	14
Skill-focused developmental behavior (skill trainer)	**35**	**11**	**46**
Use skill assessment techniques (e.g. potential analyses, job-shadowing)	19	4	23
Practice (and give feedback on) critical skills and entrepreneurial competencies	25	5	30
… communication skills	*17*	*2*	*19*
… presentation skills/pitch training	*9*	*3*	*12*
… mindfulness-, stress- and time-management techniques	*5*	*1*	*6*
Foster skills in unspecified ways	15	6	21
… interpersonal/collaboration skills (communication, team, leadership)	*6*	*5*	*11*
… other/unspecified skills	*12*	*2*	*14*
Optimization-focused developmental behavior (business development assistant)	**38**	**13**	**51**
Stimulate strategic reflection	21	8	29
… on business idea and challenge it	*16*	*6*	*22*
… on alternative scenarios and anticipate change	*10*	*3*	*13*
Evaluate and refine business plan	25	6	31
Identify and work with business-relevant resources (e.g. social, financial)	21	6	27
… critical performance factors (e.g. chances and risks)	*14*	*5*	*19*
… (unspecified)	*7*	*1*	*8*
Educating behavior (advisor)	**29**	**19**	**48**
Provide expert knowledge/advice/assessment	29	13	42
… on financial issues (e.g. business models, funding)	*18*	*5*	*23*
… on other specific topics (e.g. legal, marketing)	*6*	*6*	*12*
… (unspecified)	*16*	*8*	*24*
Provide general information on entrepreneurship	2	8	10
Share own experiences	1	7	8
Implementing behavior (implementation guide)	**26**	**16**	**42**
Work on specific next steps/define action plans	18	9	27
Provide specific tools and templates (e.g. apps, checklists)	11	6	17
Provide overall implementation and structuring assistance	6	7	13
Connective behavior (network broker)	**15**	**3**	**18**
Provide network/contacts	11	2	13
Inform about events/workshops	9	1	10

Note. Numbers indicated represent numbers of interviewees. C = coaches; E = entrepreneurs.

Figure 2. Coach Functions within the Two-Dimensional Framework

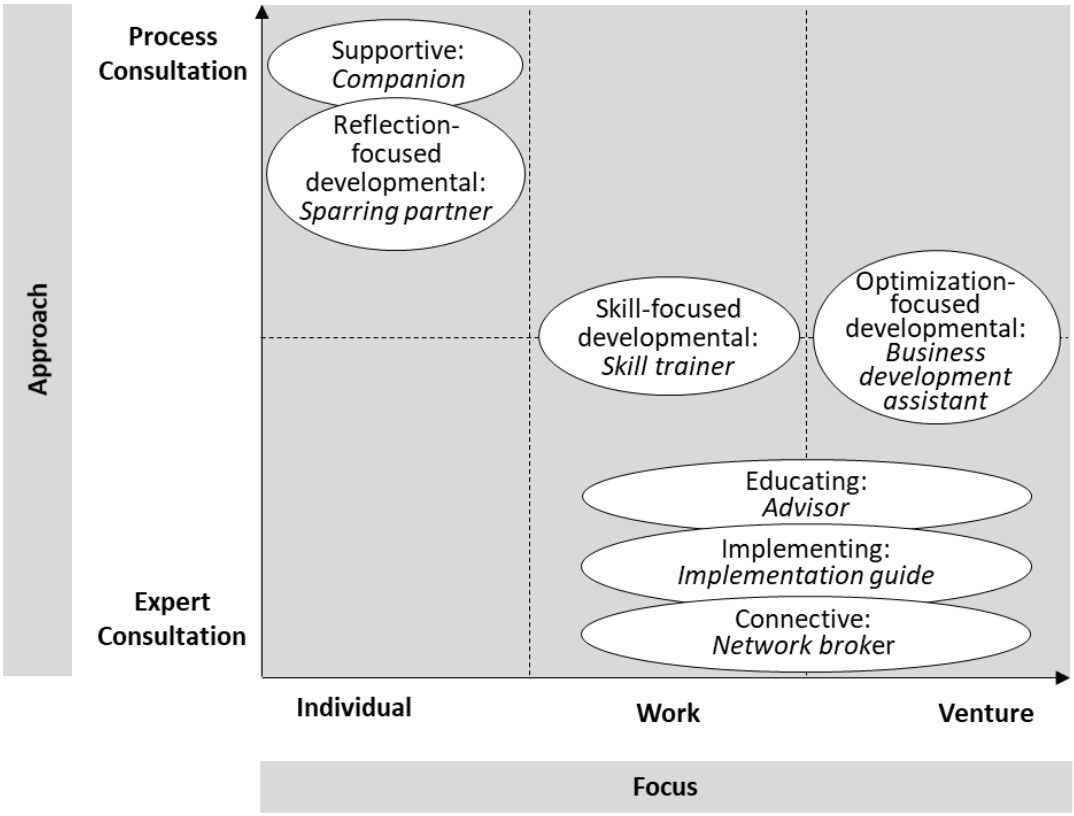
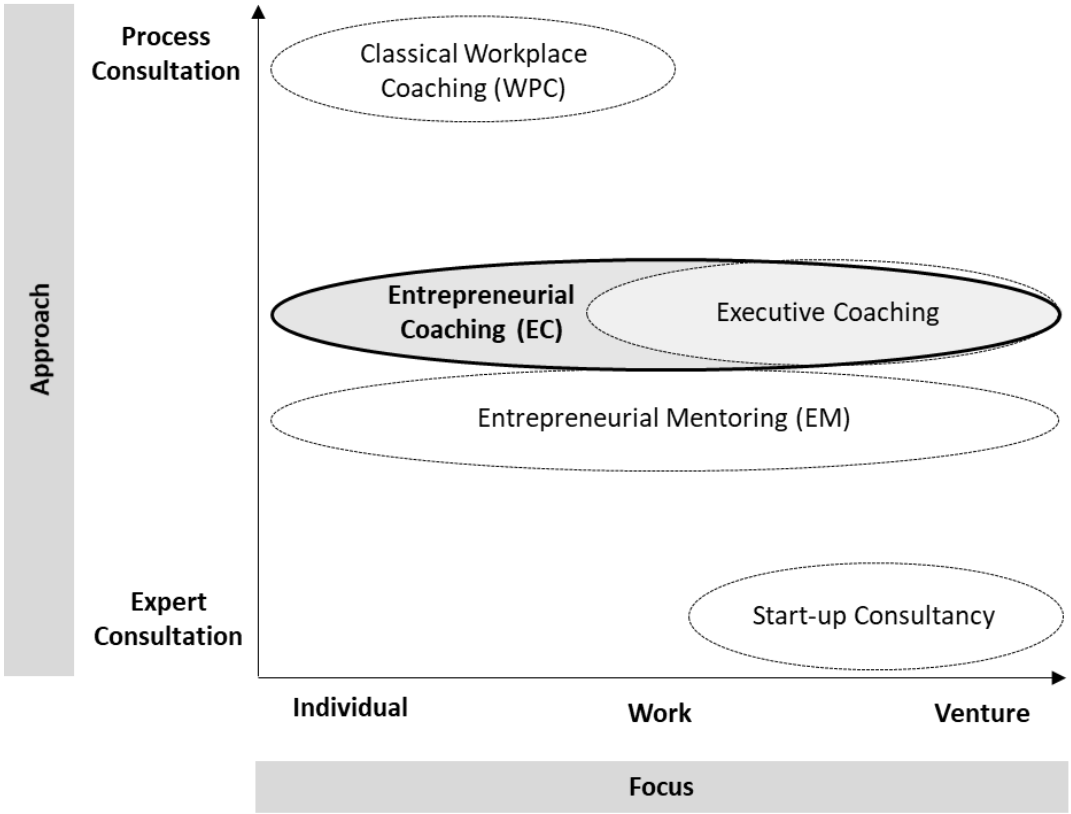


Figure 3. EC Relative to Related Formats within the Two-Dimensional Framework



6.3 Study 3: Entrepreneurial Coaching: A Systematic Literature Review

1. Introduction

Entrepreneurship, which fosters growth and innovation, is increasingly important for national economies (e.g., Van Praag & Versloot, 2007) and is thus now an established part of curricula in schools and universities (Lackéus, 2015; Volkmann et al., 2009). Entrepreneurs play an important role in the economic and social development of the economy, and at the same time have to deal with particularly challenging job demands (e.g., Stephan, 2018) during the establishment and management of their business (e.g., Audet & Couteret, 2012; Brinkley & Le Roux, 2018; Kutzhanova et al., 2009). Consequently, it seems reasonable to provide opportunities for learning and development as well as support for entrepreneurs as they work through the uncertainties and decisions that the entrepreneurial process entails (e.g., Kutzhanova et al., 2009). Against this background, offers of support and development for entrepreneurs are omnipresent in the form of incubators, accelerators, entrepreneurship programs and different types of consulting agencies, all of which target entrepreneurs with different levels of experience and at different stages of the entrepreneurial process (e.g., Lackéus, 2015). 'Entrepreneurial education' is the term most frequently used to describe and encompass the broad range of initiatives aimed at building entrepreneurial competencies and developing an entrepreneurial mindset (Lackéus, 2015; Volkmann et al., 2009) and at supporting entrepreneurs throughout the entrepreneurial process.

Entrepreneurial education can take several forms and encompass a broad range of activities for supporting entrepreneurs in their personal and professional development throughout the entrepreneurial process, from the pre-launch phase to dealing with business failure. Some of the more-established, instructively oriented formats within entrepreneurial education (e.g., teacher-centered instruction, directive start-up consultancy) have been subject to criticism as they do not adequately reflect the active learning process required of entrepreneurs (e.g., Audet & Couteret, 2012; Kutzhanova et al., 2009). Research suggests that entrepreneurial learning occurs through active doing, trial and error, and learning from practical experience (e.g., Kutzhanova et al., 2009; Lackéus, 2015). Instead of mere knowledge

sharing, more active formats are needed to support entrepreneurs during their learning processes (Morris et al., 2013).

One format that has been proposed as particularly suited to entrepreneurs' needs, especially in regard to support and development, is coaching (e.g., Kotte et al., 2020; Kutzhanova et al., 2009). According to its defining characteristics, coaching is a developmental intervention that is custom-tailored, focused on promoting self-reflection and insight in order to facilitate the coachees' learning and development, and is used to develop skills and competencies aimed at improving performance and achieving relevant goals (Grant & Cavanagh, 2004; Jones et al., 2016). Because it is individually adapted to the respective coachees and considers their active learning processes as a key developmental issue, coaching is thought to compensate for the disadvantages of other more standardized formats, especially since it goes beyond imparting knowledge and directive consultation (e.g., Audet & Couteret, 2012; Kotte et al., 2020; Kutzhanova et al., 2009). Moreover, recent conceptualizations of workplace coaching emphasize a dual concern for generating benefits both for coachees and for their organizations (Bozer & Jones, 2018; Louis & Fatien Diochon, 2014). This dual concern seems particularly fitting for formats that seek to support entrepreneurs given the close interrelatedness of entrepreneurs with their company.

By now there is solid evidence that workplace coaching is generally effective (e.g., Bozer & Jones, 2018; Jones et al., 2016). However, research on the specifics of coaching particular target populations is only in the early stages of development (e.g. Cooper, 2019). Coaching entrepreneurs is one such nascent field of research. The evaluation of its effects and the factors that impact upon its effectiveness is only now emerging and as yet is far from conclusive. Despite its proclaimed suitability for supporting entrepreneurs and its increasing popularity (Audet & Couteret, 2012), a coherent overview is lacking of where research on entrepreneurial coaching (EC) currently stands. Two characteristics of the research landscape of EC make it particularly difficult to gain a clear picture of the extant empirical evidence. First, the extant empirical studies on EC appear disconnected from rather than integrated with each other as they often focus on very particular aspects of EC. Second, lines between related support formats for entrepreneurs such as coaching, mentoring, advising, and start-up consultancy are blurred in practice (e.g., Brinkley & Le Roux, 2018). In the research literature, the different support formats for entrepreneurs

often are not clearly defined nor distinguished. Most noticeably, the terms ‘coaching’ and ‘mentoring’ are frequently used interchangeably in the entrepreneurial context (e.g., Brinkley & Le Roux, 2018; Koopmann, 2013).

With our systematic literature review, we therefore aim to determine what is already known about EC and what we still need to know in order to fully comprehend its effects as well as the factors impacting upon its effectiveness. By conducting such a review, our paper seeks to present a holistic overview of this emerging field of research on EC. By comprehensively and systematically analyzing the empirical research on EC, we go beyond the insights gained from individual studies. In this way we add to and integrate two distinct streams within the literature: First, we contribute to the coaching literature by taking a differentiated view of the particularities of coaching in different contexts and for different target groups (Jones & Bozer, 2018). Second, we contribute to the literature on entrepreneurship (education) by advancing research on coaching as a support format within entrepreneurial education that is rapidly gaining in popularity (Audet & Couteret, 2012).

2. Theoretical Background

2.1 What Is Entrepreneurial Coaching?

To fully understand the concept of EC, the format can be approached from two perspectives and two distinct streams of research, namely entrepreneurship/entrepreneurial education and workplace coaching.

From the perspective of entrepreneurship, and more specifically entrepreneurial education, coaching can be framed as one of a range of formats providing support and development for entrepreneurs throughout the entrepreneurial process (e.g., Lackéus, 2015; Volkmann et al., 2009). Entrepreneurial education comprises various formal and informal activities that educate or develop entrepreneurs either *about* entrepreneurship (i.e., imparting what entrepreneurship is), *for* entrepreneurship (i.e., providing knowledge and skills necessary for becoming an entrepreneur), or *through* entrepreneurship (i.e., adopting a learning-by-doing approach) (Kyrö, 2006). EC can be classified as an approach that educates *through*

entrepreneurship, based on experiential learning and thus more practice-oriented than other established approaches (e.g., teacher-centered instruction) (Lackéus, 2015). Within the range of formats in entrepreneurial education, the formats that can be considered most similar to EC are entrepreneurial mentoring and start-up consultancy as they too provide customized consultation (Kotte et al., 2020). Although both formats share some characteristics with EC, they differ regarding process characteristics (e.g., the degree of process- vs. expert-consultation; Schein, 1990) and structural characteristics (e.g., the length of the intervention; Brinkley & Le Roux, 2018) (see Kotte et al., 2020, for a more detailed discussion).

From the perspective of workplace coaching, EC can be understood as a particular type of workplace coaching that targets a specific occupational group, namely entrepreneurs. Workplace coaching is characterized as a custom-tailored, relationship-based, reflective, and goal-oriented developmental intervention (Bozer & Jones, 2018). Research on the specifics of coaching particular target groups is still in its early days (e.g., Cooper, 2019), with the exception of the coaching of executives (e.g., Berman, 2019). While entrepreneurs share some of the job demands of top-level executives (e.g., high responsibility for the whole venture; Berman, 2019), differences between entrepreneurs and non-owner top-level executives become apparent regarding their relationship to their company and the entrepreneurial ecosystem of their respective organizations (Jayaraman et al., 2000). EC thus needs to be explored as a distinct type of workplace coaching in its own right.

In the extant literature on EC, several studies relate to the definition by Audet and Couteret (2012) that characterizes EC as the provision of custom-tailored support to entrepreneurs by a coach in the beginning stages of the entrepreneurial process with the aim of fostering their development by means of promoting relevant knowledge and skills (e.g., Ben Salem & Lakhal, 2018; Mansoori et al., 2019; Saadaoui & Affess, 2015). Other definitions specify entrepreneurs at different stages of the entrepreneurial process as the target group of EC (e.g., Schermuly et al., 2020) or highlight the venture's performance improvement as a central goal (e.g., Crompton & Smyrnios, 2011) in contrast to focusing on the entrepreneur. Kotte et al. (2020) adopt a relatively broad definition of EC that spans the above-named, more-specific definitions. They characterize EC as a "custom-tailored, reflective, and results-oriented

development intervention that is directed towards entrepreneurs with differing levels of experience and across different stages of the entrepreneurial process" (Kotte et al., 2020, p. 31) that is based upon a working relationship on equal terms formed by a professional coach and an entrepreneur. Specifying the characteristics of EC, they highlight that EC can (but does not have to) occur in an institutionally embedded context, combines process and expert consultation and can imply a range of possible thematic foci including the person of the entrepreneur, their work tasks and roles, and/or the venture (Kotte et al., 2020). In order that our review be as inclusive as possible, we therefore build on the broad definition proposed by Kotte et al. (2020) that encompasses coaching for entrepreneurs with any level of entrepreneurial experience and at any stage of the entrepreneurial life cycle.

2.2 Why This Review on Entrepreneurial Coaching?

Research on EC has only appeared during the last fifteen years. Even though an increasing number of studies has been published in recent years, these studies mostly focus on specific aspects of EC, for example concentrating on isolated outcomes (e.g., Saadaoui & Affess, 2015), exploring coaching for entrepreneurs at specific stages, especially nascent entrepreneurs (e.g., Popescul, 2017), in specific settings, for example group or online coaching (e.g., Hunt, 2010; Ostrowski, 2018), or in specific environments, for example in the context of incubators (e.g., Mansoori et al., 2019). Only a few studies attempt to grasp the field more comprehensively (e.g., Audet & Couteret, 2012; Kotte et al., 2020). This means that a holistic and systematic overview on EC is currently lacking. Conducting a systematic literature review that synthesizes research on the effects of EC as well as factors that impact upon its effectiveness is thus timely in taking stock of this emerging field of research and identifying directions for its further advancement.

Frameworks for evaluating coaching are well-established in the literature on workplace coaching distinguishing outcomes as well as the factors that impact upon outcomes, namely input (e.g., coach and coachee characteristics), process (e.g., coaching relationship), and contextual factors (e.g., organizational context) (Ely et al., 2010; Greif, 2013). For EC, a more-specific conceptual framework that resembles the general evaluation structure established in workplace coaching has been developed by Audet and Couteret

(2012) and comprises coach and coachee characteristics (input factors), the coaching relationship and structural characteristics (process factors), and coaching effectiveness (outcomes).

As we aim to systematically integrate existing empirical findings on EC and link our synthesis to the extant body of research on workplace coaching and entrepreneurial education, we structured the research questions that guided our systematic literature review based on established coaching evaluation frameworks. Accordingly, we focus our research questions on coaching as a learning and development intervention for entrepreneurs in the *context* of the entrepreneurial ecosystem and we seek to identify relevant *input* and *process* factors impacting upon the *effectiveness* of EC. Therefore, the following research questions thus guide our systematic literature review:

RQ1. What are the outcomes of EC?

RQ2. What input factors are relevant regarding the effectiveness of EC?

RQ3. What process factors are relevant regarding the effectiveness of EC?

RQ4. What contextual factors are relevant regarding the effectiveness of EC?

3. Method

In contrast to other narrative literature reviews, conducting a systematic literature review (SLR) implies that a clearly described research protocol will be followed to ensure that the research process is as transparent, replicable and inclusive as possible, and that sound and well-reasoned answers are provided to the underlying research questions (Briner & Denyer, 2012). Following the recommendations for conducting SLRs (Boland et al., 2017; Briner & Denyer, 2012; Tranfield et al., 2003) that were also adopted for previous SLRs in related fields (e.g., Bozer & Jones, 2018; Nolan & Garavan, 2016), once we had formulated our research questions, we developed criteria for the inclusion and exclusion of studies, a search strategy, criteria for quality assessment and a strategy for the synthesis of results. In the following, we describe how we applied the different steps of our research protocol.

3.1 Search Strategy

In order to cover all relevant and available studies, our search strategy contained several steps: First, we searched relevant electronic databases, including Business Source Premier, EconLit, PsychArticles, PsycINFO, Psyndex and OpenDissertations. We applied the following search terms: Coaching AND (startup* OR start-up* OR entrepreneur* OR founder* OR foundation* OR founding* OR founded*). Second, we ran a search on Google Scholar with the search terms 'coaching entrepreneur', reviewing the first hundred records to assure that we did not miss relevant studies not registered in the databases. Third, we sent out a request for unpublished studies or work in progress via the mailing lists of various academic networks, namely the European University Network on Entrepreneurship (ESU), the strategic interest group of entrepreneurship of the European Academy of Management (EURAM), and the Academy of Management (AOM). Fourth, we identified researchers who frequently contributed to the research field and reviewed their ResearchGate profile and homepage. Fifth, we used citation chaining, that is reviewing the reference lists of recently published articles identified as especially relevant (e.g., Boland et al., 2017). We conducted the literature search between May and July 2020.

3.2 Inclusion and Exclusion Criteria

To be eligible for inclusion in our review, studies had to meet several criteria set *a priori* in our research protocol. Studies therefore had to (a) be empirical using a qualitative, quantitative, or mixed-method study design, thus excluding purely conceptual articles, and (b) deal with EC in line with our coaching definition and as an isolable intervention, thereby excluding studies that did not differentiate between different interventions and their respective effects (e.g., using coaching and mentoring interchangeably or evaluating a combination of coaching and training conjointly). They also had to (c) target entrepreneurs with any level of entrepreneurial experience (i.e., first-time founders as well as serial founders) and at any stage of the entrepreneurial process (i.e., nascent entrepreneurs, pre-launch, launch, post-launch) but excluding students or pupils without the actual intention of founding a real venture, non-owner executives, and employed 'intrapreneurs', and (d) investigate, in line with our research questions, outcome, input, process, and/or contextual factors of EC, thus excluding studies that analyzed other coaching-related aspects (e.g., factors impacting upon entrepreneurs' willingness to participate in coaching).

Besides the above-named inclusion and exclusion criteria, we followed recommendations for maximal inclusion of SLRs (Briner et al., 2009; Briner & Denyer, 2012), particularly for emerging fields of research, in order to minimize the risk of missing relevant studies in this young field of research and to mitigate problems associated with publication bias (Hopewell et al., 2005). We therefore included articles published in scientific peer-reviewed journals, as well dissertations, final theses, conference papers, working papers, and other types of grey literature. We also included relevant studies in any language and of any publication year.

3.3 Data Set

Applying the search terms described above yielded 1644 results using the electronic databases. An additional 11 records were identified through other sources. After an initial screening of abstracts, 128 articles remained for further analysis. We assessed those 128 full texts by carefully applying our inclusion criteria with the result that 31 studies were retained for our review. The assessment of studies for eligibility was carried out by both authors and a graduate student independently. Divergent appraisals were discussed until agreement between all assessors was reached. We adapted the PRISMA diagram by Moher et al. (2009) to transparently map our search process (see Figure 1). All studies included in the SLR are marked with an asterisk (*) in the references.

--- Insert Figure 1 about here ---

3.4 Coding of Included Studies

Both authors and a graduate student independently coded the included studies following the previously developed research protocol. Studies were coded according to the research questions addressed (i.e., outcomes, input, process, and contextual factors) and to relevant study characteristics regarding publication type and study design, as well as intervention and sample characteristics. As with the eligibility of studies, divergent assessments regarding the study characteristics were discussed until all assessors agreed on the coded variables.

3.5 Quality Assessment

Critically assessing the quality of studies included is a vital part of conducting an SLR. Without such a quality assessment, the review's informative value remains unclear as does the quality of answering the research questions (Briner & Denyer, 2012; Tranfield et al., 2003). With the intention of capturing EC as an emerging field of research in its entirety, we included empirical studies independent of the respective study designs, resulting in a range of quantitative as well as qualitative within and between subject designs (i.e., ranging from control-group designs to descriptive case studies). Consequently, a critical appraisal of our final sample of studies seemed crucial in regard to our review's conclusiveness. Most of the tools and checklists for assessing the quality of studies in an SLR originate from the medical context and are specified for randomized control trials or at least quantitative study designs (e.g. Guyatt et al., 2008; Wells et al., 2000). In order to adequately assess the quality of studies, it is however crucial that assessment instruments fit the respective study designs and the review's research questions (Boland et al., 2017; Briner & Denyer, 2012). To do justice to the broad range of different study designs included in our review, we carefully selected and integrated assessment questions from three different checklists (Downs & Black, 1998; Social Care Institute for Excellence, 2010; Zaza et al., 2000) suggested by Boland et al. (2017).

Our final checklist consisted of 20 items for all study designs with an additional four items for quantitative designs and a further three items for control group studies. The checklist covered the categories of overall study design and description, sampling, data collection and analysis, data interpretation, and potential confounds in control group designs. Each criterion was rated by both authors independently with values of 0 "no", 0.5 "partly", or 1 "yes". Means were calculated based on both authors' assessments and subsequently aggregated for each category. The quality assessment checklist and ratings can be found in the supplement to this manuscript.

4. Results

We present the results of our SLR in two steps. First, we describe the characteristics of the included studies. Second, we answer each of our four research questions, namely regarding outcomes, input,

process, and contextual factors of EC. This also allows us to report on the respective quality assessments in order to contextualize and evaluate the presented evidence.

--- Insert Table 1 about here ---

4.1 Study Characteristics

Table 1 provides an overview of study characteristics for all the included studies. These 31 studies were published between 2006 and 2020. About 65% of these studies were published within the last five years only, indicating that EC is a young yet growing field of research. The majority of studies was published in peer-reviewed journals (n = 18), 10 studies stem from dissertations (belonging to eight different dissertations), two are conference papers and one was published as a master's thesis. As a corollary of EC being a young field of research, the majority of studies (n = 18) used a qualitative study design, including two studies with a control-group design and three longitudinal studies. By contrast, only eight studies used a purely quantitative design, and five used a mixed-methods approach. About two thirds of the studies were cross-sectional (n = 21). Taken together, nine studies included a control-group (out of which four were purely quantitative, three mixed-method, and two qualitative). Sample sizes ranged from five participants in qualitative designs to a maximum of 34,733 data sets in quantitative designs. The vast majority of included studies (n = 27, i.e., 87%) was based on entrepreneurs' self-reports, exclusively (n = 18) or in combination with other sources (n = 9). Among these other sources, coaches' reports were most common. Approximately one third of the studies (n = 10) included coaches' reports, mostly in addition to entrepreneurs' reports (with the exception of one study relying on coaches' reports only). Regarding additional data sources, another four studies included the reports of institutional representatives, one included observer ratings and one included objective measurements. The studies' samples covered a broad range of nationalities including Australian, Belgian, Brazilian, Canadian, British, French, German, Ghanaian, Indonesian, Irish, Romanian, South African, Swedish, Tunisian, and USA. Most were published in English, with one in French and one in Portuguese. Regarding the coaching intervention under evaluation, many studies did not provide a detailed description, and likewise did not indicate the type of coaching setting (i.e., whether coaching was conducted as a one-on-one, group, or team coaching; n = 17). Of the studies that did describe the coaching setting, the majority was based (predominantly) on

one-on-one coaching interventions (*n* = 13), while one study explicitly evaluated group coaching. In about one third of the included studies, coaching was institutionally embedded, for example in incubator or accelerator settings (*n* = 11; including one study where the majority of coaching engagements was embedded). The entrepreneurial stage the entrepreneurs were in at the time of study sampling was indicated in 19 studies. In more than half of those studies (*n* = 13), entrepreneurs were sampled at early development stages from pre-launch to post-launch, three studies included entrepreneurs at different stages focusing on later development stages, two studies exclusively involved entrepreneurs after business failure and one study concentrated upon future entrepreneurs.

4.2 Study Findings

Based on the 31 studies included in our SLR, we identified a range of outcomes, input, process, and contextual factors relevant to EC. In summary, all 31 studies reported outcomes. Among the factors that impact upon EC effectiveness, process factors have so far been the most extensively investigated (*n* = 19 studies), while input and contextual factors (*n* = 10, and *n* = 7 studies, respectively) appear less prominently. Most of the studies (22 out of 31) analyzed a combination of at least one kind of influencing factor (i.e., input, process, or context) and an outcome category. Highly heterogeneous quality ratings (with regard to the overall study design, sampling, data collection and analysis, and data interpretation) corroborate the picture of EC as a vibrant yet early-stage field of research. We summarize the quality assessment as it relates to each research question separately.

4.2.1 RQ1: What are the outcomes of EC?

Regarding our research questions, all 31 studies reported on EC outcomes, resulting in a vast array of outcomes. In line with established taxonomies of training evaluation (Kirkpatrick, 1976; Kraiger et al., 1993) that have been applied to coaching (e.g., Ely et al., 2010; Jones et al., 2016), we coded reported EC outcomes deductively into reactions, learning (cognitive and affective), behavior, and results. EC outcomes were reported on every level with cognitive and affective learning as well as behavioral outcomes being the most detailed and differentiated. What is striking is the high number of entrepreneurship-specific (vs. general) outcomes (e.g., entrepreneurial self-efficacy, strategic skills,

company-level results etc.) and the fact that outcomes are relatively evenly distributed across the learning (n = 25 studies), behavior (n = 19 studies), and results levels (n = 18 studies). Table 2 details the EC outcomes on the different outcome levels. The quality assessment revealed high heterogeneity among the studies that investigated outcomes of EC (M = 0.72, Min = 0.23, Max = 0.97 for total study quality). Overall, data collection and analysis are of relatively high quality (M = 0.84), while confounding factors frequently are not considered sufficiently (M = 0.57), hence limiting the extent to which the identified outcomes can be attributed to EC (alone).

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4.2.2 RQ2: What input factors are relevant regarding the effectiveness of EC?

We identified ten studies analyzing relevant input factors of EC. Out of these, seven reported on coach characteristics and five reported on entrepreneur characteristics. Input factor categories and sub-categories are illustrated in Table 3. Among input factors, coach entrepreneurial experience and business expertise stand out as particularly relevant (along with general experience), while on the entrepreneurs' side, motivational preconditions, namely an openness to engage, learn, and change is considered most important. Interestingly, coach characteristics are explored exclusively with qualitative study designs and almost exclusively from the entrepreneurs' subjective perspective. Entrepreneur characteristics are also predominantly explored on the basis of entrepreneurs' self-reports with one study confirming entrepreneurs' openness and motivation as relevant from the perspective of coaches. The only quantitative study addressing entrepreneur characteristics identified entrepreneurs' education level and gender as influences on coaching outcomes.

The overall quality of studies reporting on input factors (n = 10) was slightly higher (M = 0.80) than for the entire sample of studies, while the heterogeneity was slightly lower (Min = 0.58, Max = 0.97). More specifically, study design, data collection and analysis as well as data interpretation overall were of good quality (M = 0.84 to M = 0.93), while the consideration of confounding factors (M = 0.57) was of mediocre quality.

--- Insert Table 3 about here ---

4.2.3 RQ3: What process factors are relevant regarding the effectiveness of EC?

Of the 31 studies included in our review, 19 studies analyzed process factors. Of these, 16 reported on coach behavior, nine on the working alliance, five on the structure of the coaching intervention, four on entrepreneur behavior, and two studies reported on the content focus of the coaching. Table 4 details categories and sub-categories of the identified process factors. What stands out among process factors is the frequency with which studies investigated coaches' behavior. Strikingly, the vast majority of these studies either explicitly identified particular roles that coaches adopt towards the entrepreneurs or explored behavior that we could allot to different coach roles. Coaches taking on the roles of a sparring partner/sounding board, companion/counsellor, and advisor/educator were described most prominently. Studies exploring coach roles are mainly qualitative (14 out of 15 studies) and based on entrepreneurs' subjective perspectives. However, three studies include coaches' perspectives (Cloet & Vernazobres, 2012; Hagedorn, 2018; Kotte et al., 2020) and one study quantitatively confirms the coaches' roles as sparring partner/sounding board, companion/counsellor, advisor/educator, and network facilitator (Crompton, 2012).

Regarding the relationship between coach and entrepreneur, the majority of studies (n = 8 out of 9 studies) are based on qualitative designs. They primarily explore bond-related aspects while only one study differentiates bond-, task-, and goal-related aspects of the working alliance, integrating both entrepreneurs' and coaches' perspectives (Kotte et al., 2020).

Further process factors (namely entrepreneur behavior, structural characteristics and content focus of the coaching intervention) are mostly only addressed by single studies. Entrepreneur behavior is rarely researched, with all four studies reporting on unrelated aspects. Findings on the structure of the coaching intervention and on its content focus are similarly scattered.

The overall quality and heterogeneity of studies reporting on process factors (n = 19) were comparable to the entire sample of studies (M = 0.69; Min = 0.23, Max = 0.97). However, we found lower quality and higher heterogeneity compared to studies that report on input or contextual factors. While data collection and analysis (M = 0.84) were of good quality, study design, sampling, and data interpretation were less

convincing (M = 0.70 to M = 0.74), with the lack of considering confounding factors as most critical (M = 0.43).

--- Insert Table 4 about here ---

4.2.4 RQ4: What contextual factors are relevant regarding the effectiveness of EC?

Contextual factors are scarcely researched, such that we identified only seven (out of 31) studies that reported on contextual factors. Categories and sub-categories of contextual factors are depicted in Table 5. The studies explore very diverse aspects of the entrepreneurial ecosystem, meaning that a clear focus has not yet emerged. The only aspect highlighted as important by several studies (n = 5) is the impact of the institutional embeddedness (e.g., within incubators, programs or grants) upon EC. These studies point to the important influence, both positive and negative, of institutional boundary conditions. By contrast, the entrepreneurs' situation and particular conditions (e.g., entrepreneurial stage or job demands) as well as general economic conditions are addressed by single studies only. With the exception of one study analyzing general economic conditions by evaluating one specific coaching program (Loersch, 2015), all studies use qualitative designs and are predominantly based on entrepreneurs' perspectives (with the further exception of one study that also integrates coaches' perspectives (Kotte et al., 2020).

The overall quality of studies reporting on contextual factors (n = 7) was highest, and heterogeneity was lowest compared to studies investigating input factors, process factors, and outcome (M = 0.86; Min = 0.74; Max = 0.96). With the exception of considering confounding factors (M = 0.67), all categories were rated as very good (M = 0.87 to M = 0.98). Therefore, although the number of studies that report on contextual factors is still very limited, their quality is relatively high, thus supporting the relevance of contextual factors in EC.

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5. Discussion

Our systematic literature review set out to provide an integrated overview of the current state of empirical research on EC, identifying 31 empirical studies that investigate (1) outcomes that EC

produces, as well as factors that impact upon the effectiveness of EC, namely (2) input factors, (3) process factors, and (4) contextual factors. Taken together, they depict EC as an early-stage yet vibrant field of research. This SLR contributes both to the literature on workplace coaching and entrepreneurship education by advancing the understanding of EC as a specific sub-format and revealing distinctive characterizing features. In the following, we therefore discuss the particularities of EC that emerge from our synthesis of the existent empirical work.

5.1 The particular pattern of EC outcomes: Entrepreneurship-specific and venture-related results

First, what is particular to the pattern of EC outcomes compared to outcomes of workplace coaching in general is that many of the outcomes reported are *entrepreneurship-specific* (e.g., identity and self-efficacy as an entrepreneur; entrepreneurial skills/competencies) rather than general (e.g., self-efficacy as a leader or improved interpersonal skills). This pattern of outcomes confirms that entrepreneurs need to be considered a very specific target population of coaching (Kotte et al., 2020) that requires from the coach a familiarity with their particular job demands (e.g., high responsibility, little social support; Stephan, 2018; Tetrick et al., 2000) and an awareness of their goals and needs for support in coaching. The specificities that emerge from the particular pattern of outcomes are also reflected in requirements on the part of coaches that are identified as being among input factors (namely expertise and experience with the small business sector; ideally own entrepreneurial experience) as well as in the range of specific roles coaches assume towards entrepreneurs (e.g., as an educator imparting business-relevant knowledge and sharing entrepreneurial experience or as a business-development assistant validating business ideas).

Second, what is also striking regarding the pattern of outcomes of entrepreneurial coaching is that a comparable number of studies reports on outcomes across the different levels from the individual to the venture (i.e., at the learning level, the behavior level and the results level) and finds support (both qualitative and, partly, quantitative) for coaching outcomes at each of these levels. By contrast, in the workplace coaching literature in general, outcomes at the results level are generally reported far less frequently than at the learning and behavior level (Ely et al., 2010; Jones et al., 2016). Moreover, the results level includes almost exclusively individual outcomes, while organizational performance outcomes

are rarely reported (Kotte, 2019). What is strikingly different then in synthesizing studies on EC is the high number of outcomes reported at the results level (18 of the 31 included studies) and, within the results level, the high number of organizational, or venture level, results (12 studies, compared to nine studies covering individual level results). As opposed to employed professionals and non-owner executives, the individual entrepreneur and their venture are much more closely tied to one another given the multiple roles entrepreneurs assume, often concurrently (as founder, owner, managing director, operative agent etc.; Jayaraman et al., 2000; St-Jean, 2011). Additionally, the reason to seek coaching is often driven by concern for the venture's success (e.g., Baker, 2014). Against this background, the effects of coaching on organizational-level results are both more central to the coaching engagement and more easily traceable than in classical employee workplace coaching. In this regard, entrepreneurial coaching is therefore more similar to coaching top-level executives who have a similarly prominent role in strategic decision-making and whose actions can likewise have a substantial impact upon the company's success (Berman, 2019; Böning, 2015).

5.2 The prominent place of coach roles among process factors

When synthesizing the state of the literature on process factors of EC, what stands out is the prevalence with which coach roles are investigated. Although the workplace coaching literature identifies coach behavior as one of the underresearched areas of process research requiring further investigation (e.g., Athanasopoulou & Dopson, 2018; Gessnitzer & Kauffeld, 2015), 16 out of the 31 studies included in our synthesis report on coach behavior and, of these, 15 report on coach roles or functions.

First, the prominent place of coach roles could indicate that the coach role in entrepreneurial coaching is more ambiguous, contested, and manifold than in classical workplace coaching. Indeed, the studies in our SLR report a broad range of roles for entrepreneurial coaches, ranging from the empathic companion/counsellor focused on the individual entrepreneur's needs and problems to the business development assistant who supports the entrepreneur in structuring and validating business ideas and strategies. Coach roles in entrepreneurial coaching thus appear to span a broader range than merely adopting a primarily process-oriented approach to consultation focused on the individual coachee and their tasks and roles, such as is characteristic of classical workplace coaching (Kotte et al., 2020). In

addition, they also seem to share some of the characteristics of expert-oriented types of consultation such as start-up consultancy (Müller & Diensberg, 2011; Schein, 1990). EC therefore appears to require the coach to handle a more complex set of roles and to constantly – and consciously – navigate their role between a process- and an expert-consultation approach as well as between a focus on the individual entrepreneur, their company, and/or the individual entrepreneur's relationship to their organization (Fatien Diochon et al., 2019; Kotte et al., 2020; Verzat et al., 2010). In light of the Social Exchange Theory (SET; Blau, 1964; Cropanzano et al., 2017; Cropanzano & Mitchell, 2005), coach behavior forms part of a process of interdependent actions with the potential to create trust, commitment, and a positive relationship over time. SET assumes that the actor in the higher power position usually engages in an initiating action that in turn evokes behavioral and attitudinal responses from the other actor and both ultimately form a relationship (Cropanzano et al., 2017). As entrepreneurial coaches also assume expert-consultation functions, they may hold a higher power position towards their coachees and thus the way in which they interact with their coachees may be particularly relevant in influencing their coachees' attitudes and behavior. Entrepreneurial coaches are therefore challenged to balance the range of functions they fulfil towards their coachees in order to build a high-quality working alliance: They need to be cautious to not create too much asymmetry in the relationship to their coachees on the one hand while also not disappointing their coachees' expectations of expert-knowledge based support on the other hand.

Second, the emphasis on coach roles in the studies in our SLR may also be reflective of the closer interconnection of coaching and mentoring in the field of entrepreneurship, both in research and practice (e.g., Crompton, 2012; Koopmann, 2013). Although the differentiation between coaching and mentoring in the general workplace coaching and mentoring literatures is not uncontested (e.g., Stokes et al., 2020), the two streams of literature differ substantially with regard to the consideration given to coach/mentor roles and functions: In contrast to the workplace coaching literature, where the investigation of coach behavior, and in particular of coach functions, is only emerging, investigating mentor functions is firmly established in the mentoring literature. The prominent place of coach roles that emerged from our synthesis of the empirical studies on EC may therefore reflect the fact that in the entrepreneurial context, coaching and mentoring overlap more strongly than in other contexts due to the stronger emphasis on the

business/entrepreneurial experience and expertise required of the coach (Brinkley & Le Roux, 2018; Kotte et al., 2020; Matotola & Bengesi, 2019). While, in contrast to the mentoring literature, a consensus on a unified taxonomy/structure of coach roles has not yet emerged from the empirical studies we synthesized, the range of coach functions investigated so far nonetheless shares similarities with the differentiation of mentor functions (namely a psychosocial, career-related, and role-modeling function; e.g., Dickson et al., 2014). This is especially so if one considers that, for the *entrepreneurial* context, Dowejko and Chan (2019) have suggested the addition of a fourth, company-related, mentor function.

5.3 The entrepreneur's coachability as a critical factor in EC

The entrepreneurs' openness to change and receptivity to feedback emerged as relevant success factors of EC, both among input and process factors. The frequent reporting of the coach roles as advisor/educator and sparring partner points in a similar direction: These coach functions can only successfully be performed if the entrepreneur is receptive to their coach's expertise and feedback. These findings are in line with the general workplace coaching literature which identifies coachees' motivation to be coached, as well as personal attributes like openness to experience, as predictors of coaching success (Athanasopoulou & Dopson, 2018; Bozer & Jones, 2018).

However, it appears particularly challenging for entrepreneurs to find the right balance between openness to feedback and a necessary level of immunity to criticism. They often have to fight for and defend their initial founding idea, defending it against multiple obstacles and skeptics (Fatien Diochon et al., 2019).

At the same time, 'coachability' appears crucial for entrepreneurs, both with regard to personal growth and development and in terms of business success. Evidence suggests that entrepreneurs' perceived coachability, that is their openness and willingness to integrate feedback, increases investors' likelihood to invest in a start-up (Ciuchta et al., 2018). Studies that examine the role of investors in start-up success corroborate the importance of entrepreneurs' coachability. Both Bock et al. (2018) and Colombo and Grilli (2010) found that start-ups supported by venture capitalists are more successful than those without venture capitalist support. They attribute these positive effects not only to a selection effect (i.e., investors

choosing more promising ventures in the first place) but also to a coaching function that investors fulfill in terms of providing guidance and advice to entrepreneurs. The synthesis of studies in our SLR identifies clarity about one's own blind spots, self-reflexivity, and the acquisition of learning-related strategies (e.g., the ability to learn from experience) as among the outcomes of EC. In this sense, based on our SLR, coachability can also be conceived as an outcome of EC that can further help entrepreneurs in the establishment and development of their business.

5.4 Scant research but important role of contextual factors: Embeddedness of EC and additional stakeholders

Our SLR identifies a lack of research on the contextual factors of EC. Only seven of the 31 studies included in our review report on contextual factors, namely the institutional embeddedness of coaching, entrepreneurs' overall situation and conditions and surrounding economic conditions. The rare consideration especially of the influence of the institutional embeddedness of entrepreneurial coaching engagements is striking, as about one third of the included studies report on EC interventions that are at least partially embedded in more comprehensive programs/grants or within incubators or accelerators. The few studies that analyze institutional influences highlight the rather negative impact of boundary conditions that are predetermined outside of the coach-coachee-dyad (e.g., time frame, scope of coaching themes, choice of coach) as well as emphasize the important influence of the incubator manager, both positive and negative. In this regard, entrepreneurial coaching shows important similarities with classical workplace coaching where organizational stakeholders outside of the coach-coachee-dyad (e.g., commissioning parties such as the coachee's supervisor or the human resources department) are relevant and are involved, more or less directly, at different stages of a coaching engagement (e.g. Burger & Van Coller-Peter, 2019; Louis & Fatien Diochon, 2014). It appears equally important to conceptualize EC in terms of triangular and multi-stakeholder relationships, that is between the entrepreneur, the coach, the incubator manager, and possibly additional stakeholders such as investors (e.g., Fatien Diochon et al., 2019). Interestingly, while improved external relations, which explicitly include improved relations with investors, are reported among EC outcomes, investors' impact or role in EC has not been investigated in any of the studies included in our SLR. Instead, the literature on the role of investors for start-ups is rather

decoupled from the literature on EC. Some authors consider that investors themselves may fulfill a coaching function (Bock et al., 2018; Colombo & Grilli, 2010). However, the interplay of coaches, entrepreneurs, investors and additional stakeholders such as incubator managers has not yet been investigated beyond case descriptions (Fatien Diochon et al., 2019), although such multi-stakeholder landscapes are typical of the entrepreneurial ecosystem and entrepreneurs' related job demands.

5.5 Limitations and Implications for Future Research

EC is a vibrant but nascent field of research, as reflected in the characteristics of the studies that could be included in our SLR: The earliest study was published in 2006, with 65% of included studies published in 2015 or later. A majority of the studies is qualitative. Only 58% of the studies have undergone a peer-review publication process. The study basis on which our SLR is built therefore entails a number of limitations for our SLR. What we can presently state with certainty is that EC is effective from the subjective perspective of those involved in EC, most notably the entrepreneurs. We also identify a range of input, process, and contextual factors. However, study quality was very heterogeneous, and some studies showed particular quality issues. For example, in four studies the author also assumes the role of the coach. Potentially confounding factors are frequently not considered. Furthermore, remarkably few studies describe the coaching intervention under investigation in sufficient detail, which is particularly problematic given the fuzzy use and increasing popularity of the term 'coaching' in the entrepreneurial context.

Regarding outcome research on EC, the field has now moved beyond a stage where further explorative analyses of outcome are necessary. Rather, the vast range of outcomes has been sufficiently explored. What is needed now are quantitative (or mixed-method), longitudinal study designs to test actual outcomes more robustly, ideally adopting randomized control group designs. The field has also moved to a stage where a range of input and process factors have been identified and can now be operationalized quantitatively and tested within more complex statistical models in order to analyze their interplay. For example, it would be interesting to determine how the coach's different types of experience and expertise impact upon their coach roles/behavior and the working alliance and in turn on EC outcomes. Given that the coaching interventions were so poorly described, it is also time to define more clearly what the

coaching intervention entails. This in turn would allow for the investigation of the impact of structural characteristics of the coaching intervention on the analysis (e.g., time frame, setting etc.). An area of future research that is still at an early stage and therefore needs more in-depth exploration is the contextual factors. Qualitative studies should investigate the dynamics of the multi-stakeholder relationships between coaches, entrepreneurs, institutional representatives (e.g., incubator managers) and venture capitalists, given that these relationships are often very challenging (Fatien Diochon et al., 2019). Moreover, although entrepreneurs share particular job demands that differentiate them from employed professionals, different types of entrepreneurs are likely to differ substantially in their coaching needs. Given that many studies focus on early-stage entrepreneurs or do not specify the entrepreneurs' stage, it is particularly timely to explore differences in EC for entrepreneurs at different stages of the entrepreneurial process (e.g., start-up vs. business consolidation stages).

5.6 Practical Implications

Our SLR on EC yields practical implications for coaches, entrepreneurs, and other professionals from the field of entrepreneurial education (e.g., incubator managers).

Coaches who work with entrepreneurs need to particularly reflect the roles/functions they assume in EC. Although, at the initial contracting stages of the coaching engagement, business expertise and entrepreneurial experience are helpful if not crucial in order to gain the entrepreneur's trust (as revealed by their prominent place among input factors), coaches also need to be able to move beyond expert-advice and the associated coach roles in order to fully engage and challenge the person of the entrepreneur and their relationship to their venture (Kotte et al., 2020; Verzat et al., 2010). Coaches, when working with entrepreneurs, need to be aware of the range of different roles they can assume and be able to deliberately switch between the different roles over the course of the coaching engagement. This means that they need to be aware of their own preferred roles and blind spots. The range of coach roles identified in our SLR (see Table 4) can serve as a basis for coaches' individual reflection and for coaching supervision.

For entrepreneurs, our SLR brings clarity as to what they can expect from coaching and how they need to involve themselves in order to benefit from coaching. First, our SLR provides entrepreneurs with an

understanding of the range of roles that coaches assume (see Table 4). This can help them to assess whether they consider coaching to be potentially useful for them (or whether they would rather opt for a different type of entrepreneurial support) and the various roles they expect the coach to assume when interacting with them. Second, it provides entrepreneurs with an overview of possible outcomes of EC that can help them specify their goals for coaching (see Table 2). Third, the important role of coachability as identified through our SLR points entrepreneurs towards their own responsibility in making the coaching engagement successful. Being aware that coachability is not only required of them in order to most benefit from coaching but that being perceived as coachable also helps them gain support from investors might help them become more open towards feedback, challenges and advice even if they may be 'hard to take'.

For incubator managers (and other professionals involved in providing or brokering entrepreneurial education), our SLR shows that they need to be aware of their impact on the process and the success of coaching engagements. They influence EC both by setting boundary conditions (e.g., managing their pool of coaches, matching coach and entrepreneur, defining time structure and content focus) and more directly by involving themselves in the coaching engagement (e.g., being present during the contracting stage or ongoing conversations with coaches and entrepreneurs).

For coaches, entrepreneurs and incubator managers alike, our SLR raises awareness regarding the impact of boundary conditions that are created when EC is institutionally embedded, which can be both positive (e.g., funding for the coaching, an additional sparring partner for the coach) and negative (restricted freedom of choice regarding time, content and matching). Moreover, by comparing the lack of studies in EC on stakeholder relations to the increasing awareness of their importance in the workplace coaching literature, our SLR shows that triangular relations are likely to play a similarly important, although still underexplored, role in EC. Dealing with diverging expectations and negotiating interests across stakeholders is therefore important for all parties involved in EC.

5.7 Conclusion

Research on EC is a vibrant, yet early-stage field of research characterized by studies that are still predominantly qualitative and very heterogeneous regarding their scientific rigor. On the basis of our

review, we conclude that, although EC is considered effective from the perspective of entrepreneurs, coaches, and partly third parties, the field needs to move on to quantitative and more robust control-group designs in order to test the actual effectiveness of EC. Similarly, the range of potential input and process factors that have been identified need to be tested in their interplay rather than in isolation in order to determine their influence on the success of EC. Contextual factors have remained largely unexplored and require further investigation. By assessing the state of play in EC, we are not only advancing the field by identifying relevant areas for future research. We are also deriving practical implications for coaches, entrepreneurs, and other professionals in the field of entrepreneurial education in order to contribute to a more effective use of EC as a type of support for entrepreneurs who constitute a highly relevant population for national and international economies.

References

Athanasopoulou, A., & Dopson, S., 2018. A systematic review of executive coaching outcomes: Is it the journey or the destination that matters the most? *The Leadership Quarterly*, *29*(1), 70–88. https://doi.org/10.1016/j.leaqua.2017.11.004.

*Audet, J., & Couteret, P., 2012. Coaching the entrepreneur: features and success factors. *Journal of Small Business and Enterprise Development*, *19*(3), 515–531. https://doi.org/10.1108/14626001211250207.

*Baker, K. H., 2014. *Business coaching and leader efficacy development: A comparative study*, dissertation, Walsh College of Accountancy and Business Administration.

*Ben Salem, A., & Lakhal, L., 2018. Entrepreneurial coaching: how to be modeled and measured? *Journal of Management Development*, *37*(1), 88–100. https://doi.org/10.1108/JMD-12-2016-0292.

*Ben Salem, A., Lakhal, L., Mbarek, R., & Carrera-Jiménez, J. A., 2018. The role of entrepreneurial coaching in the restarting process after business failure. *Journal of Enterprising Culture*, *26*(4), 379–399. https://doi.org/10.1142/S0218495818500140.

Berman, W. H., 2019. Coaching C-suite executives and business founders. *Consulting Psychology Journal: Practice and Research*, *71*(2), 72–85. https://doi.org/10.1037/cpb0000128.

Blau, P. M. (1964). *Exchange and power in social life*. Wiley.

Bock, C., Huber, A., & Jarchow, S., 2018. Growth Factors of Research-Based Spin-Offs and the Role of Venture Capital Investing. *Journal of Technology Transfer*, *43*(5), 1375–1409. https://doi.org/10.1007/s10961-017-9635-3.

Boland, A., Cherry, M. G., & Dickson, R. (Eds.), 2017. *Doing a systematic review: A student's guide* (2nd edition). Sage.

Böning, U., 2015. *Business-Coaching: Feldstudie zum Einzel-Coaching mit Top-, Senior- und Mittelmanagern aus großen Wirtschaftsunternehmen [Business-coaching: A field study on one-on-one coaching with top, senior and middle managers from large commercial enterprises]* (Dissertation). University of Osnabrück, Osnabrück, Germany.

Bozer, G., & Jones, R. J., 2018. Understanding the factors that determine workplace coaching effectiveness: A systematic literature review. *European Journal of Work and Organizational Psychology*, *27*(3), 342–361. https://doi.org/10.1080/1359432X.2018.1446946.

Briner, R. B., & Denyer, D., 2012. Systematic review and evidence synthesis as a practice and scholarship tool. In D. M. Rousseau (Ed.), *The Oxford handbook of evidence-based management.* Oxford University Press.

Briner, R. B., Denyer, D., & Rousseau, D. M., 2009. Evidence-Based Management: Concept Cleanup Time? *Academy of Management Perspectives*, *23*(4), 19–32. https://doi.org/10.5465/amp.23.4.19.

*Brinkley, M.-L., & Le Roux, I., 2018. Coaching as a support function for potential entrepreneurs. *The Southern African Journal of Entrepreneurship and Small Business Management*, *10*(1), 30. https://doi.org/10.4102/sajesbm.v10i1.99.

Burger, Z., & Van Coller-Peter, S., 2019. A guiding framework for multi-stakeholder contracting in executive coaching. *SA Journal of Human Resource Management, 17.* https://doi.org/10.4102/sajhrm.v17i0.1114.

Ciuchta, M. P., Letwin, C., Huvaj, M. N., Stevenson, R., & McMahon, S., 2018. Betting on the Coachable Entrepreneur: Signaling and Social Exchange in Entrepreneurial Pitches. *Entrepreneurship: Theory & Practice*, *42*(6), 860–885. https://doi.org/10.1177/1042258717725520.

*Cloet, H., & Vernazobres, P., 2012. La place du coaching dans l'accompagnement de l'entrepreneuriat: l'évolution des idées et des pratiques en France, sa traduction dans les faits en Languedoc-Roussillon. [The place of coaching in the support of entrepreneurship: the evolution of ideas and practices in France, its translation into facts in Languedoc-Roussillon]. *Revue Management Et Avenir* (53), 121–141. https://doi.org/10.3917/mav.053.0121.

Colombo, M. G., & Grilli, L., 2010. On growth drivers of high-tech start-ups: Exploring the role of founders' human capital and venture capital. *Journal of Business Venturing*, *25*(6), 610–626. https://doi.org/10.1016/j.jbusvent.2009.01.005.

Cooper, S. E., 2019. Introduction to the special issue on coaching elite performers. *Consulting Psychology Journal: Practice & Research*, *71*(2), 63–71. https://doi.org/10.1037/cpb0000140.

*Crompton, B. M., 2012. *The effect of business coaching and mentoring on small-to-medium enterprise performance and growth* (Dissertation). RMIT University, Melbourne.

*Crompton, B. M., & Smyrnios, K. X., 2011. *What difference does business coaching make to entrepreneurs' firm performance and future growth?* Paper presented at the 56th ICSB World Conference, Stockholm, Sweden. https://doi.org/10.5840/questions2011119.

*Crompton, B. M., Smyrnios, K. X., & Bi, R., 2012. Measuring the influence of business coaching on fast-growth firms. *Small Enterprise Research*, *19*(1), 16–31. http://dx.doi.org/10.5172/ser.2012.19.1.16.

Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. *Academy of Management Annals*, *11*(1), 479–516. https://doi.org/10.5465/annals.2015.0099

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874–900. https://doi.org/10.1177/0149206305279602

Dowejko, M. K., & Chan, E., 2019. *Mentoring functions in entrepreneurial formal mentorship.* Paper presented at the European Academy of Management, 19th Conference, Lisbon, Portugal. https://doi.org/10.5465/AMBPP.2018.12263.

Downs, S. H., & Black, N., 1998. The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of Epidemiology and Community Health*, *52*(6), 377–384. https://doi.org/10.1136/jech.52.6.377.

*Dumitrașciuc, L. F., 2019. Developing the self-confidence of the romanian entrepreneurs by applying the life coaching process. *Ovidius University Annals, Series Economic Sciences*, *19*(2), 474–477.

*Dumitrașciuc, L. F. & Jitaru, L., 2019. The influence of the life coaching process on entrepreneurial talents in romania. *Ovidius University Annals, Series Economic Sciences, 19*(1), 427–431.

Ely, K., Boyce, L. A., Nelson, J. K., Zaccaro, S. J., Hernez-Broome, G., & Whyman, W., 2010. Evaluating leadership coaching: A review and integrated framework. *The Leadership Quarterly*, *21*(4), 585–599. https://doi.org/10.1016/j.leaqua.2010.06.003.

Fatien Diochon, P., Martin, F., & Kotte, S., 2019. *Entrepreneurial coaching: Handling conflicting hats.* Presentation at the 11th ESMT Berlin Coaching Colloquium, Berlin, Germany.

Gessnitzer, S., & Kauffeld, S., 2015. The Working Alliance in Coaching: Why Behavior Is the Key to Success. *The Journal of Applied Behavioral Science*, *51*(2), 177–197. https://doi.org/10.1177/0021886315576407.

Grant, A. M., & Cavanagh, M., 2004. Toward a Profession of Coaching: Sixty-Five Years of Progress and Challenges for the Future. *International Journal of Evidence Based Coaching and Mentoring*, *2*(1), 1–16.

Greif, S., 2013. Conducting organizational-based evaluations of coaching and mentoring programs. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *The wiley-blackwell handbook of the psychology of coaching and mentoring* (pp. 445–470). Wiley-Blackwell.

Guyatt, G. H., Oxman, A. D., Vist, G. E., Kunz, R., Falck-Ytter, Y., Alonso-Coello, P., & Schünemann, H. J., 2008. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ* (336), 924–926.

*Hagedorn, A., 2018. *The impact of social capital for venture creation: Essays on its role in management support and crowdinvesting* (Dissertation). HHL Leipzig Graduate School of Management, Leipzig, Germany.

*Hamzani, U. & Achmad, D., 2017. Micro, small and medium enterprises (MSMEs) coaching program. *Journal of Business and Economics Review*, *2*(3), 20-25.

Hopewell, S., Clarke, M., & Mallett, S., 2005. Grey literature and systematic reviews. In H. R. Rothstein, A. J. Sutton, & M. Borenstein (Eds.), *Publication bias in meta-analysis: Prevention, assessment and adjustments* (pp. 49–72). John Wiley & Sons.

*Hunt, C., 2010. *A longitudinal study to explore and examine the potential and impact of an e-coaching programme on the learning and self-efficacy of female entrepreneurs in the north west of England* (Dissertation), Manchester Business School, Manchester, England.

Jayaraman, N., Khorana, A., Nelling, E., & Covin, J., 2000. CEO founder status and firm financial performance. *Strategic Management Journal*, *21*(12), 1215–1224. https://doi.org/10.1002/1097-0266(200012)21:12<1215::AID-SMJ146>3.0.CO;2-0.

Jones, R. J., & Bozer, G., 2018. Advances in the psychology of workplace coaching. *Applied Psychology: An International Review*, *67*(4), 768–772. https://doi.org/10.1111/apps.12164.

Jones, R. J., Woods, S. A., & Guillaume, Y. R. F., 2016. The effectiveness of workplace coaching: A meta-analysis of learning and performance outcomes from coaching. *Journal of Occupational and Organizational Psychology*, *89*(2), 249–277. https://doi.org/10.1111/joop.12119.

Kirkpatrick, D. L., 1976. Evaluation of training. In *Training and development handbook: A guide to human resource development* (2nd ed., pp. 1–27). McGraw-Hill Book Co.

Koopmann, R. G. M., 2013. *Coaching and Mentoring Entrepreneurs; more definitions won't work*. Enschede, Netherlands. University of Twente.

Kotte, S., Diermann*, I., Rosing, K., & Möller, H., 2020. Entrepreneurial Coaching: A Two-Dimensional Framework in Context. *Applied Psychology: An International Review*, 1–38. https://doi.org/10.1111/apps.12264.

Kraiger, K., Ford, J. K., & Salas, E., 1993. Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training Evaluation. *Journal of Applied Psychology, 78*(2), 311–328. https://doi.org/10.1037/0021-9010.78.2.311.

*Kutzhanova, N., Lyons, T. S., & Lichtenstein, G. A., 2009. Skill-based development of entrepreneurs and the role of personal and peer group coaching in enterprise development. *Economic Development Quarterly*, *23*(3), 193–210. https://doi.org/10.1177/0891242409336547.

Kyrö, P., 2006. The continental and Anglo-American approaches to entrepreneurship education - differences and bridges. In A. Fayolle & H. Klandt (Eds.), *International entrepreneurship education: Issues and newness* (pp. 93–111). Edward Elgar.

Lackéus, M., 2015. *Entrepreneurship in education: What, why, when, how*. Retrieved from https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf.

*Lawless, M., 2009. *The influence of life coaching on entrepreneurs' goal planning and attainment* (master thesis). Waterford Institute of Technology.

*Loersch, C., 2015. *Business start-ups and the effect of coaching programs* (Dissertation). Universtität Potsdam, Potsdam, Germany. Retrieved from http://publishup.uni-potsdam.de/opus4-ubp/frontdoor/index/index/docId/7260/.

Louis, D., & Fatien Diochon, P., 2014. Educating coaches to power dynamics: Managing multiple agendas within the triangular relationship. *Journal of Psychological Issues in Organizational Culture*, *5*(2), 31–47. https://doi.org/10.1002/jpoc.21140.

*Malta Campos, T. & Oliveira Lima, E., 2019. Um estudo sobre os fatores que influenciam no desenvolvimento de competências empreendedoras. [A study on the factors that influence the development of entrepreneurial skills]. *Revista Pretexto, 201*(1), 38–56. http://dx.doi.org/10.21714/pretexto.v20i1.3231.

*Mansoori, Y., Karlsson, T., & Lundqvist, M., 2019. The influence of the lean startup methodology on entrepreneur-coach relationships in the context of a startup accelerator. *Technovation, 84/85*, 37–47. https://doi.org/10.1016/j.technovation.2019.03.001.

Matotola, S., & Bengesi, K., 2019. Motivation as a potential gear towards business establishment by young entrepreneurs incubated in higher learning institutions business incubators in Tanzania. *Journal of Business Studies and Economics* (1), 155–173.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G., 2009. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097.

Morris, M. H., Webb, J. W., Fu, J., & Singhal, S., 2013. A Competency-Based Perspective on Entrepreneurship Education: Conceptual and Empirical Insights. *Journal of Small Business Management*, *51*(3), 352–369. https://doi.org/10.1111/jsbm.12023.

Müller, K.-D., & Diensberg, C. (Eds.), 2011. *Beiträge zu Gründung, Unternehmertum und Mittelstandsentwicklung: Vol. 4. Methoden und Qualität in Gründungslehre, Gründungscoaching und Gründungsberatung: Interventionen und Innovation [Methods and quality in teaching entrepreneurship, entrepreneurial coaching and start-up consultancy: Interventions and innovations]* (1st ed.). Eul.

Nolan, C. T., & Garavan, T. N., 2016. Human Resource Development in SMEs: A Systematic Review of the Literature. *International Journal of Management Reviews*, *18*(1), 85–107. https://doi.org/10.1111/ijmr.12062.

*Oberschachtsiek, D. & Scioch, P., 2015. The outcome of coaching and training for self-employment. A statistical evaluation of outside assistance support programs for unemployed business founders in Germany. *Journal of Labour Market Research, 48*(1), 1-25. https://doi.org/10.1007/s12651-014-0161-6.

*Ostrowski, E. J., 2018. *Coming from the cold: The experience of group coaching as a setting for entrepreneurial learning and change* (Dissertation). Fielding Graduate University, Santa Barbara.

*Popescul, L. F., 2017. The Impact of Life Coaching Sessions on the Behavior of Future Romanian Entrepreneurs - Pilot Study. *Ovidius University Annals, Series Economic Sciences*, *17*(2), 449–454.

*Saadaoui, S., & Affess, H., 2015. Evaluating the role of coaching on developing entrepreneurial self-efficacy. *European Journal of Business and Social Sciences*, *3*(11), 54–61.

Schein, E. H., 1990. A general philosophy of helping: Process consultation. *Sloan Management Review*, *31*(3), 57–64.

*Schermuly, C. C., Wach, D., Kirschbaum, C., & Wegge, J., 2020. Coaching of insolvent entrepreneurs and the change in coping resources, health, and cognitive performance. *Applied Psychology: An International Review*, 1–19. https://doi.org/10.1111/apps.12244.

*Shaw, S. A., 2013. *A generic qualitative exploration of the lived experience of entrepreneurs coached through their business startup* (Dissertation). Minneapolis, USA.

*Smile, D., Mawuko, D., & Franklin, O., 2015. Business coaching and the development of agric-businesses in Africa. *Proceedings of the European Conference on Innovation & Entrepreneurship*, 683–690.

Social Care Institute for Excellence, 2010. *SCIE Systematic Research Reviews: Guidelines*. Retrieved from https://www.scie.org.uk/publications/researchresources/rr01.asp.

Stephan, U., 2018. Entrepreneurs' mental health and well-being: A review and research agenda. *Academy of Management Executive*, *32*(3), 290–322. https://doi.org/10.5465/amp.2017.0001.

St-Jean, E., 2011. Mentor functions for novice entrepreneurs. *Academy of Entrepreneurship Journal*, *17*(1), 65–84.

Stokes, P., Fatien Diochon, P., & Otter, K., 2020. "Two sides of the same coin?" Coaching and mentoring and the agentic role of context. *Annals of the New York Academy of Sciences.* Advance online publication. https://doi.org/10.1111/nyas.14316.

Tetrick, L. E., Slack, K. J., Da Silva, N., & Sinclair, R. R., 2000. A comparison of the stress–strain process for business owners and nonowners: Differences in job demands, emotional exhaustion,

satisfaction, and social support. *Journal of Occupational Health Psychology*, *5*(4), 464–476. https://doi.org/10.1037/1076-8998.5.4.464.

*Topp, E. M., 2006. *Presence-based coaching: The practice of presence in relation to goal-directed activity* (Dissertation). Palo Alto, California, USA.

Tranfield, D., Denyer, D., & Smart, P., 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, *14*(3), 207–222. https://doi.org/10.1111/1467-8551.00375.

Van Praag, C. M., & Versloot, P. H., 2007. What is the value of entrepreneurship? A review of recent research. *Small Business Economics*, *29*(4), 351–382. https://doi.org/10.1007/s11187-007-9074-x.

Verzat, C., Gaujard, C., & François, V., 2010. Accompagner des futurs entrepreneurs en fonction de leurs besoins à chaque âge de vie. [Accompanying future entrepreneurs according to their needs at each stage of life]. *Gestion 2000*, *27*(3), 59–74.

Volkmann, C., Wilson, K. E., Mariotti, S., Rabuzzi, D., Vyakarnam, S., & Sepulveda, A. (Eds.), 2009. *Educating the next wave of entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st century*. World Economic Forum. https://doi.org/10.2139/ssrn.1396704.

Wells, G. A., Shea, B., O'Connell, D., Peterson, J., Welch, V., Losos, M., & Tugwell, P., 2000. *The Newcastle-Ottawa Scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses*. Retrieved from http://www.ohri.ca/programs/clinical_epidemiology/oxford.asp.

*Yusubova, A., Andries, P., & Clarysse, B., 2019. The role of incubators in overcoming technology ventures' resource gaps at different development stages. *R&D Management*, *49*(5), 803–818. https://doi.org/10.1111/radm.12378.

Zaza, S., Wright-De Agüero, L. K., Briss, P. A., Truman, B. I., Hopkins, D. P., Hennessy, M. H., Sosin, D. M., Anderson, L., Carande-Kulis, V. G., Teutsch, S. M., & Pappaioanou, M., 2000. Data collection instrument and procedure for systematic reviews in the guide to community preventive services. *American Journal of Preventive Medicine*, *18*, 44–74.

Figure 1. *Flow of information through the different phases of a systematic review (adapted from Moher et al., 2009)*

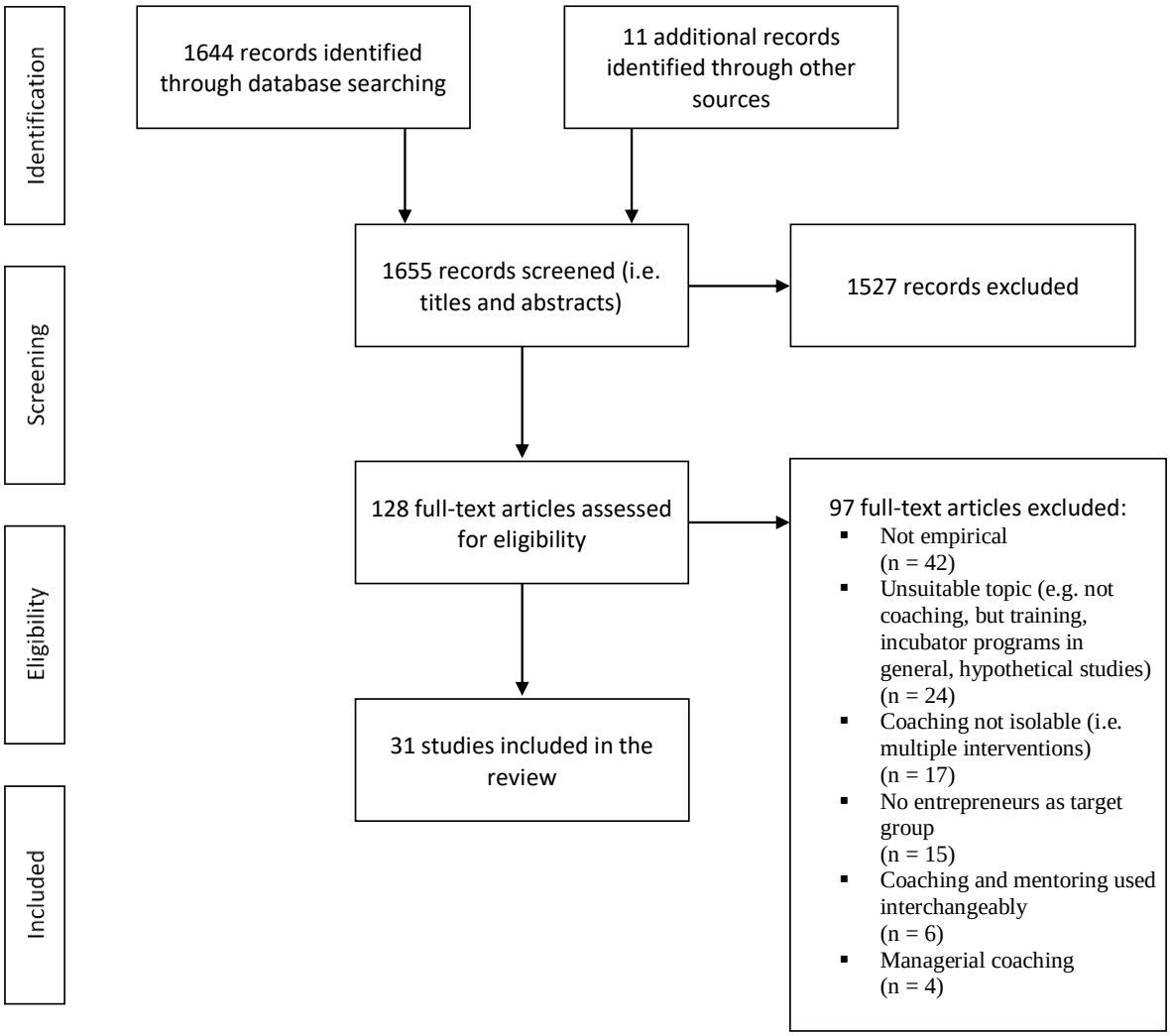

Table 1

Characteristics of Studies Included in the Systematic Literature Review on Entrepreneurial Coaching

No.	Author(s), publication year, publication type	Study design	Sample	Nationality of Sample	Coaching intervention (context, time frame)	Measured Influencing Factor(s)	Measured Outcome Level
1	Audet & Couteret (2012), journal article	Qualitative, cross-sectional	Entrepreneurs (n = 6) + coaches (n = NA)	Canada	Incubator setting; weekly sessions	Input Process Context	Reactions Behavior
2	Baker (2014), dissertation	Quantitative, cross-sectional, control-group	SME leaders (n = 64; n = 29 having received coaching, n = 35 control group)	USA	Monthly (45%) or weekly (41%) sessions for at least 1 year	None	Affective L.
3	Ben Salem & Lakhal (2018), journal article	Quantitative, cross-sectional	SME successors (n = 111)	Tunisia	NA	Process	Results (global success)
4	Ben Salem et al. (2018), journal article	Qualitative, cross-sectional	SME entrepreneurs (n = 15)	Tunisia	NA	None	Affective L. Behavior
5	Brinkley & Le Roux (2018), journal article	Qualitative, cross-sectional, control-group	Entrepreneurs (n = 12; n = 10 intervention group, n = 2 control group)	South Africa	Incubator setting	Input Process	Cognitive L. Affective L. Behavior
6	Cloet & Vernazobres (2012), journal article	Qualitative, cross-sectional	Institutional representatives + coaches (n = 12)	France	Incubator setting	Process	Reactions Cognitive L. Behavior Results
7	Crompton (2012), dissertation (study 2)	Quantitative, longitudinal, control-group	Entrepreneurs (n = 125; n = 45 with vs. n = 80 without previous coaching experience)	Australia	90 minutes weekly, maximum of 6 sessions	Process	Reactions
8	Crompton & Smyrnios (2011), conference paper	Qualitative, cross-sectional	Entrepreneurs (n =39)	Australia	NA	Input Process	Reactions Cognitive L. Affective L. Behavior Results
9	Crompton et al. (2012), journal article	Quantitative, cross-sectional, control-group	Entrepreneurs (n = 200; n = 100 using vs. n = 100 not using coaching)	Australia	NA	None	Reactions Affective L. Results
10	Dumitrașciuc (2019), journal article	Qualitative, cross-sectional	Entrepreneurs (n = 20)	Romania	NA	Process	Cognitive L. Affective L.

							Behavior Results
11	Dumitrașciuc & Jitaru (2019), journal article	Qualitative, cross-sectional	Entrepreneurs (n = 6)	Romania	5 sessions, one every two weeks	Process	Behavior Results
12	Hagedorn (2018a), dissertation (study 1)	Qualitative, cross-sectional	Entrepreneurs (n = 10; incl. n = 4 reporting on coaching)	Germany	NA	Input Process Context	Cognitive L. Behavior
13	Hagedorn (2018b), dissertation (study 2)	Qualitative, cross-sectional	Coaches (n = 25)	Germany	NA	Input Process	Affective L.
14	Hamzani & Achmad (2017), journal article	Quantitative, cross-sectional	Entrepreneurs (n = 50)	Indonesia	NA	None	Results
15	Hunt (2010), dissertation	Mixed-methods: quantitative longitudinal, qualitative cross-sectional	Quantitative: female entrepreneurs (T1: n = 56; n = 30 intervention group, n = 26 control group; T2: n = 39; n = 24 intervention group, n = 15 control group) + coaches (n = 21); Qualitative (T2): entrepreneurs (n = 11) + coaches (n = 7)	England	One session of 1.5 hours every two weeks, 12 sessions on average	Process	Reactions Cognitive L. Affective L. Behavior Results
16	Kotte*, Diermann* et al. (2020), journal article	Qualitative, cross-sectional	Coaches (n = 44) + entrepreneurs (n = 23)	Germany	Institutionally embedded (29.08%); on average 7.5 sessions	Input Process Context	Reactions Cognitive L. Affective L. Behavior Results
17	Kutzhanova et al. (2009), journal article	Qualitative, cross-sectional	Entrepreneurs (n = 17) + 1 program manager + coaches (n = NA)	USA	Institutionally embedded; weekly sessions	Process	Reactions Cognitive L. Behavior
18	Lawless (2009), master thesis	Qualitative, longitudinal, control-group	Entrepreneurs (n = 8; n = 4 intervention group, n = 4 control group)	Ireland	5 sessions of 45 minutes over ten weeks	None	Behavior
19	Loersch (2014a), dissertation (study 1)	Mixed-methods, longitudinal, control-group	Quantitative: entrepreneurs (n = 1,641; n = 513 intervention group, n = 1,128 control group); Qualitative: n = 45 (15 entrepreneurs, 15 coaches, 15 regional offices)	Germany	Institutionally embedded; 11.5 sessions on average, 1-6 months	Input Context	Affective L. Results (individual + company level)
20	Loersch (2014b), dissertation (study 2)	Mixed-methods, longitudinal, control-group	Quantitative (n = 1,295 formerly unemployed entrepreneurs, n = 489 intervention group, n = 806 control group); Qualitative: n = 45 (15 entrepreneurs, 15 coaches, 15 regional offices)	Germany	Institutionally embedded; on average 10.94 sessions, between 1 and 6 months	Input Context	Affective L. Results (individual+ company-level)

21	Malta Campos & De Oliveira Lima (2019), journal article	Qualitative, longitudinal	Entrepreneurs (n = 7, incl. one solo entrepreneur, 2 entrepreneurial teams)	Brazil	Weekly sessions over 4 months	Input	Cognitive L. Affective L. Behavior Results
22	Mansoori et al. (2019), journal article	Qualitative, longitudinal	T1: 17 teams (n = 41 entrepreneurs); T2 (after 10 weeks): 10 teams (n = NA entrepreneurs)	Sweden	Institutionally embedded; weekly sessions over 15 weeks	Input Process Context	Cognitive L. Affective L. Behavior Results
23	Oberschachtsiek & Scioch (2015), journal article	Quantitative, longitudinal, control-group	Data set from the Integrated Employment Biographies in Germany; entrepreneurs (n = 34,733; n = 7,204 receiving coaching; n = 27,529 control group)	Germany	Institutionally embedded, limited to one year after start-up	None	Results
24	Ostrowski (2018), dissertation	Qualitative, cross-sectional	Entrepreneurs (n = 8)	USA	Between 8 weeks and 4 years	Process	Cognitive L. Affective L. Behavior Results
25	Popescul (2017), journal article	Qualitative, cross-sectional	Entrepreneurs (n = 5)	Romania	2 sessions lasting 40 minutes each	Process	Affective L. Behavior
26	Saadaoui & Affess (2015), journal article	Quantitative, cross-sectional	Entrepreneurs (n = 262)	Tunisia	NA	None	Affective L.
27	Schermuly*, Wach* et al. (2020), journal article	Quantitative, longitudinal	Entrepreneurs (n = 19) Coaches (n = NA)	Germany	On average 4.14 sessions, on average 124 days	Process	Cognitive L. Affective L. Behavior Results
28	Shaw (2013), dissertation	Qualitative, cross-sectional	Entrepreneurs (n = 9)	USA	Between 1 and 4 monthly sessions	Process Context	Cognitive L.
29	Smile et al. (2015), conference paper	Mixed-methods, cross-sectional	Entrepreneurs (n = 68)	Ghana	Institutionally embedded; 6 months	None	Cognitive L. Behavior Results
30	Topp (2006), dissertation	Mixed-methods, longitudinal	Entrepreneurs (n = 14) Observers (n = 4)	USA	6 sessions of 30-60 minutes	Process	Reactions Cognitive L. Affective L. Behavior Results
31	Yusubova et al. (2019), journal article	Qualitative, cross-sectional	Entrepreneurs (n = 8, incl. n = 4 follow-up interviews, coaching only for n = 3 in commercialization stage)	Belgium	Institutionally embedded	None	Cognitive L.

Note. L. = Learning. * indicates that both authors contributed equally to an article (shared first authorship).

Table 2

Outcomes of Entrepreneurial Coaching

Categories	**Primary studies assessing category** [ab] = entrepreneurs' self-report + coach-report, [b] = coach-report, [c] = third party-report; [d] = objective; * = quantitative measure; grey = quantitative measure, nonsignificant effect	**No. of studies** assessing category
Global coaching success	Audet & Couteret, 2012, Ben Salem & Lakhal, 2018; Crompton et al., 2012*; Schermuly et al., 2020*	**4**
Reaction		**8**
Satisfaction with coaching	Crompton, 2012*; Crompton & Smyrnios, 2011; Crompton, Smyrnios, & Bi, 2012*; Kotte et al., 2020 [ab]; Topp, 2006	5
Satisfaction with coach	Hunt, 2010*	1
Benefit from support	Cloet & Vernazobres, 2012[c]; Hunt, 2010[ab]; Kotte et al., 2020[ab]; Kutzhanova et al., 2009	4
Learning		**25**
Cognitive learning		*16*
Declarative knowledge		8
Business-related knowledge	Cloet & Vernazobres, 2012[c]; Kotte et al., 2020; Smile et al., 2015; Yusubova et al., 2019	4
Knowledge on business support opportunities	Hunt, 2010*	1
Self-awareness and -perception (general, as entrepreneur, as leader)	Brinkley & Le Roux, 2018; Cloet & Vernazobres, 2012[bc]; Kotte et al., 2020[ab]; Malta Campos & Oliveira Lima, 2019; Ostrowski, 2018; Topp, 2006	6
Clarity about fears/blind spots/ambitions/ motivations/priorities	Cloet & Vernazobres, 2012[b]; Hunt, 2010; Ostrowski, 2018	3
Knowledge (unspecified)	Cloet & Vernazobres, 2012[c]	1
Procedural knowledge 'how to'		16
Business-related (e.g. write business plan, develop strategy, imagine possibilities, start and run a business)	Brinkley & Le Roux, 2018; Cloet & Vernazobres, 2012[b]; Crompton & Smyrnios, 2011; Hagedorn, 2018a; Kotte et al., 2020[ab]; Kutzhanova et al., 2009; Smile et al., 2015; Yusubova et al., 2019	8

			People-/other-related (e.g. perspective taking, delegating)		Crompton & Smyrnios, 2011; Hunt, 2010; Kotte et al., 2020[ab]; Malta Campos & De Oliveira Lima, 2019	4
			Self-related			6
				Self-reflexivity, (self-)critical thinking, distancing oneself mentally	Cloet & Vernazobres, 2012[bc]; Brinkley & Le Roux, 2018; Kotte et al., 2020; Kutzhanova et al., 2009	4
				Change in resource perception (e.g. coping resources, own achievements)	Dumitrasciuc, 2019; Schermuly et al., 2020*	2
				Openness towards others/environment & alignment of own intentions with relevant environment	Cloet & Vernazobres, 2012[b]	1
			Learning-related (e.g. learn from experience, identify learning opportunities and strategies)		Brinkley & Le Roux, 2018; Crompton & Smyrnios, 2011; Dumitrașciuc & Jitaru, 2019; Shaw, 2013	4
			General: New cognitive strategies (e.g. to develop own solutions)		Brinkley & Le Roux, 2018; Mansoori et al., 2019; Ostrowski, 2018; Smile et al., 2015	4
	Affective learning					*19*
		Well-being				9
			Psychological well-being (e.g. feeling serene/ fulfilled, experiencing flow)		Brinkley & Le Roux, 2018; Crompton & Smyrnios, 2011; Kotte et al., 2020; Schermuly et al., 2020*; Topp, 2006*	5
			Stress and exhaustion (e.g. decrease in stress hormone levels and vital exhaustion)		Schermuly et al., 2020*([d])	1
			Satisfaction with balancing professional and private life		Hunt, 2010; Ostrowski, 2018	2
			Life satisfaction		Loersch, 2015a* (for formerly employed: decrease); Loersch, 2015b* (for formerly unemployed: increase)	1
		Self-related emotions and self-regulation				13
			Self-confidence, self-esteem		Brinkley & Le Roux, 2018; Dumitrașciuc, 2019; Hagedorn, 2018b[b]; Hunt, 2010*; Kotte et al., 2020; Malta Campos & Oliveira Lima, 2019; Mansoori et al., 2019; Ostrowski, 2018; Popescul, 2017	9
			Self-efficacy (in general, as entrepreneur, as leader)		Baker, 2014*; Crompton, Smyrnios, & Bi, 2012*; Hunt, 2010*; Kotte et al., 2020[ab]; Malta Campos & Oliveira Lima, 2019; Mansoori et al., 2019; Saadaoui & Affess, 2015*; Topp, 2006	8

			Self-regulation ability (incl. locus of control)	Baker, 2014*; Crompton, Smyrnios, & Bi, 2012*; Hunt, 2010*	3
		Emotional intelligence		Brinkley & Le Roux, 2018; Topp, 2006	2
		Changed value system		Hunt, 2010*	1
		Attitudes towards work			8
			Work engagement and motivation	Hunt, 2010*; Kotte et al., 2020; Malta Campos & Oliveira Lima, 2019; Mansoori et al., 2019; Popescul, 2017	5
			Alleviating emotional shock in cases of unforeseen business failure	Ben Salem et al., 2018	1
			Satisfaction with business growth	Hunt, 2010*	1
			Job satisfaction	Loersch, 2015a* (for formerly employed: decrease); Loersch, 2015b* (for formerly unemployed: increase)	2
Behavior					**19**
	Task-oriented				*16*
		Skill-development			9
			Entrepreneurial skills/competencies	Cloet & Vernazobres, 2012[c]; Crompton, 2012; Malta Campos & Oliveira Lima, 2019; Smile et al., 2015	4
			Communication and presentation skills	Brinkley & Le Roux, 2018; Cloet & Vernazobres, 2012[c]; Malta Campos & Oliveira Lima, 2019	3
			Marketing skills	Hunt, 2010*; Smile et al., 2015	2
			Self-management skills (i.e. ability to cope with stress, balance work and life, mobilize resources and push one's boundaries)	Cloet & Vernazobres, 2012[b]; Hagedorn, 2018a; Hunt, 2010*	3
			Unspecified skills	Hunt, 2010*; Kutzhanova et al., 2009; Mansoori et al., 2019	3
		Goal-setting and implementation (e.g. develop, change, and prioritize goals, develop a vision, stay accountable to own goals/plans)		Brinkley & Le Roux, 2018; Cloet & Vernazobres, 2012[c]; Hunt, 2010*; Kutzhanova et al., 2009; Lawless, 2009; Malta Campos & Oliveira Lima, 2019; Popescul, 2017; Topp, 2006	8
		Analyzing, planning and structuring			11
			Strategic planning and structuring (e.g. clarify business strategy, engage in planning activities, adopt long-term orientation)	Cloet & Vernazobres, 2012[b]; Hunt, 2010*; Kotte et al., 2020[ab]; Kutzhanova et al., 2009; Lawless, 2009; Malta Campos & Oliveira Lima, 2019	6

			Analytical, more focused/vigilant behavior	Brinkley & Le Roux, 2018; Dumitrașciuc & Jitaru, 2019; Kutzhanova et al., 2009; Malta Campos & Oliveira Lima, 2019; Schermuly et al., 2020*; Topp, 2006	6
			New daily routines, organize work differently	Ostrowski, 2018; Topp, 2006	2
	Relations-oriented				*6*
		Act in a more team-oriented way (e.g. give feedback to team members, develop better relationships, improve collaboration behavior)		Brinkley & Le Roux, 2018; Kotte et al., 2020; Malta Campos & Oliveira Lima, 2019	3
		Other relations-oriented behavior (e.g. act more authentically, improve leadership behavior, manage conflicts, share visions)		Cloet & Vernazobres, 2012[b]; Smile et al., 2015; Topp, 2006	3
	Change-oriented				*8*
		Ability to deal with risks and uncertainty		Hunt, 2010*; Topp, 2006	2
		Ability to resolve problems		Ben Salem et al., 2018; Brinkley & Le Roux, 2018; Malta Campos & Oliveira Lima, 2019	3
		Ability to be innovative and develop the business (e.g. take (strategic) decisions)		Cloet & Vernazobres, 2012[b]; Kotte et al., 2020[ab]; Kutzhanova et al., 2009; Malta Campos & Oliveira Lima, 2019; Smile et al., 2015	5
	Externally directed (e.g. act differently with customers/investors, increase networking behavior, build alliances)			Cloet & Vernazobres, 2012[b]; Hunt, 2010*; Kotte et al., 2020[ab]; Mansoori et al., 2019; Topp, 2006	*5*
	Unspecified behavior change (e.g. improved professional behavior and unspecified learning transfer)			Audet & Couteret, 2012; Cloet & Vernazobres, 2012[c]; Crompton & Smyrnios, 2011; Dumitrașciuc & Jitaru, 2019	*4*
Results					**18**
	Individual-level				*9*
		Individual development and growth (general, personal, professional)		Brinkley & Le Roux, 2018; Crompton & Smyrnios, 2011, Hagedorn, 2018b[b]; Hunt 2010*[ab]; Shaw, 2013; Topp, 2006*	6
		Achievements (e.g. goal attainment, development of ideas, new role/posture)		Crompton & Smyrnios, 2011; Ostrowski, 2018	2
		Performance (e.g. increased effectiveness, improved work quality)		Crompton & Smyrnios, 2011; Dumitrașciuc & Jitaru, 2019; Kotte et al., 2020	3

		Social capital (e.g. new contacts, expanded network, opportunities for social/peer learning)		Hunt, 2010*[ab]; Kotte et al., 2020; Mansoori et al., 2019; Ostrowski, 2018	4
		Economic situation			3
			Staying self-employed (vs. exit into dependent employment)	Oberschachtsiek & Scioch, 2015* (positive effect); Loersch, 2015a* (for formerly employed: negative effect); Loersch, 2015b* (for formerly unemployed: positive effect)	3
			Changed net income	Loersch, 2015b* (for formerly unemployed: increase); Loersch, 2015a* (for formerly employed: decrease)	2
	Team-level				*5*
		Interpersonal results (e.g. increased employee motivation, better team climate/communication, changed conflict management)		Malta Campos & Oliveira Lima, 2019; Kotte et al., 2020[ab]; Mansoori et al., 2019; Topp, 2006	4
		Performance-oriented results (e.g. improved teamwork, productivity, internal processes)		Kotte et al., 2020[ab]; Malta Campos & Oliveira Lima, 2019; Smile et al., 2015	3
	Company-level				*12*
		Financial performance (e.g. increased revenues/sales, general financial improvement)		Crompton & Smyrnios, 2011; Dumitrașciuc & Jitaru, 2019; Hamzani & Achmad, 2017*; Malta Campos & Oliveira Lima, 2019; Smile et al., 2015	5
		Growth/ productivity (e.g. business development, increased productivity, firm growth)		Crompton et al., 2012*; Dumitrașciuc & Jitaru, 2019; Kotte et al., 2020[ab]; Smile et al., 2015*	4
		Positioning in the market (e.g. establishment of new contracts, increased customer base, better position oneself)		Cloet & Vernazobres, 2012[c]; Crompton & Smyrnios, 2011; Smile et al., 2015	3
		Changes in headcount and business scope (e.g. increase/decrease in headcount, new products/ business opportunities, loss thereof through focus on one)		Loersch, 2015b* (for formerly unemployed: increase); Loersch, 2015a* (for formerly employed: decrease); Ostrowski, 2018; Topp, 2006	4

Note. References without an explicit indication of source are based exclusively on entrepreneurs' perspectives and use a qualitative study design.

Table 3

Input Factors Found to be Relevant Regarding the Effectiveness of Entrepreneurial Coaching

Categories	**Primary studies assessing category** [ab] = entrepreneurs' self-report + coach-report, [b] = coach-report, [c] = third party-report; [d] = objective; * = quantitative measure; grey = quantitative measure, nonsignificant effect	**No. of studies** assessing category
Coach characteristics		**7**
Entrepreneurial experience (e.g. experience in starting a business, experience with small business context)	Audet & Couteret, 2012; Brinkley & Le Roux, 2018; Kotte et al., 2020[ab]	3
Expert knowledge (e.g. about coachees' business area)	Hagedorn, 2018a; Kotte et al., 2020[ab]	2
General experience (e.g. as coach)	Crompton & Smyrnios, 2011; Hagedorn, 2018b[b]; Kotte et al., 2020[ab]; Mansoori et al 2019	4
Skills (unspecific)	Hagedorn, 2018b[b]	1
Entrepreneur characteristics		**5**
Motivational preconditions		4
Openness, motivation, receptiveness (to coaching, change, feedback) vs. (-) resistance to change	Audet & Couteret, 2012; Hagedorn, 2018b[b]; Kotte et al., 2020[ab]; Malta Campos & De Oliveira Lima, 2019	4
(-) Misleading expectations	Audet & Couteret, 2012; Kotte et al., 2020[ab]	2
Level of experience		2
Level of entrepreneurial experience (e.g. first time vs. serial founder)	Kotte et al., 2020[b]	1
Education level	Loersch, 2015a*(positively moderates the negative effect of coaching on survival in self-employment, negatively moderates the negative effect of coaching on income and satisfaction)	1
Gender	Loersch, 2015a* (more negative coaching effects for men for formerly employed) Loersch, 2015b* (no gender differences in effects for formerly unemployed)	2
Personality	Hagedorn, 2018b[b]	1

Note. References without an explicit indication of source are based exclusively on entrepreneurs' perspectives and use a qualitative study design.

Table 4

Process Factors Found to be Relevant Regarding the Effectiveness of Entrepreneurial Coaching

Categories	**Primary studies assessing category** [ab] = entrepreneurs' self-report + coach-report, [b] = coach-report, [c] = third party-report; [d] = objective; * = quantitative measure; grey = quantitative measure, nonsignificant effect	**No. of studies** assessing category
Working Alliance		**9**
Bond-related (e.g. chemistry, trust, credibility, confidentiality, moral contract, commitment, personalized and constructive dialogue, being collaborative, (-) behaving according to own interests)	Audet & Couteret, 2012; Crompton & Smyrnios, 2011; Kotte et al., 2020[ab]; Kutzhanova et al., 2009; Hagedorn, 2018b[b]; Mansoori et al., 2019; Popescul, 2017; Shaw, 2013	8
Task-related (e.g. explain mode of operation)	Kotte et al., 2020[ab]	1
Goal-related (e.g. define and track goals)	Kotte et al., 2020[ab]	1
Overall relationship quality	Schermuly et al., 2020*	1
Coach Behavior		**16**
Coach roles		15
Advisor/educator	Crompton, 2012*, Hunt, 2010; Kotte et al., 2020[ab]; Kutzhanova et al., 2009	4(8)
Provide advice/guidance vs. (-) lack of directive advice	Ben Salem & Lakhal, 2018*, Brinkley & Le Roux, 2018; Crompton & Smyrnios, 2011; Hagedorn, 2018a; Kotte et al., 2020	5
Share experience	Hagedorn, 2018a, Hunt, 2010; Kotte et al., 2020[ab]	3
Companion/counsellor	Kotte et al., 2020[ab]; Crompton, 2012*	2(11)
Be empathetic, listen	Audet & Couteret, 2012; Ben Salem & Lakhal, 2018*; Crompton, 2012*; Crompton & Smyrnios, 2011; Hagedorn, 2018a; Kotte et al., 2020[ab]; Popescul, 2017	7
Support, encourage, motivate, be positive	Ben Salem & Lakhal, 2018*; Brinkley & Le Roux, 2018; Crompton & Smyrnios, 2011; Hagedorn, 2018a; Hagedorn, 2018b[b]; Kotte et al., 2020[ab]; Popescul, 2017	7
Identify and address problems	Kutzhanova et al., 2009; Hunt, 2010; Crompton, 2012*	3
Sounding board/sparring partner	Crompton, 2012*; Crompton & Smyrnios, 2011; Hunt, 2010; Kutzhanova et al., 2009 / Hagedorn, 2018b[b]; Kotte et al., 2020[ab]; Kutzhanova et al., 2009	7(12)

			Challenge, question critically (incl. to observe)	Ben Salem & Lakhal, 2018*; Crompton & Smyrnios, 2011; Dumitrașciuc & Jitaru, 2019; Cloet & Vernazobres, 2012[b]	4
			Give strong/direct feedback	Brinkley & Le Roux, 2018; Crompton & Smyrnios, 2011; Kutzhanova et al., 2009; Mansoori et al., 2019	4
			Be facilitative	Crompton & Smyrnios, 2011, Hunt, 2010; Kutzhanova et al., 2009	3
		Business development assistant (e.g. structuring and validating business ideas)		Crompton & Smyrnios, 2011; Kotte et al., 2020[ab]; Hagedorn, 2018b[b]; Hunt, 2010	4
		Network facilitator/broker		Crompton, 2012*, Hagedorn, 2018b[b]; Hunt, 2010; Kotte et al., 2020[ab]	4
		Skill trainer (i.e. foster/practice skills, e.g. communication, marketing)		Kotte et al., 2020[ab]; Hagedorn, 2018b[b]	2
		Implementation guide (e.g. define action plans, provide tools, hold entrepreneurs) accountable)		Kotte et al., 2020[ab]; Shaw, 2013	2
	Methods, tools, or approaches used				6
		Verbal techniques (e.g. ask questions, discuss problems)		Crompton & Smyrnios, 2011; Dumitrașciuc & Jitaru, 2019; Hunt, 2010;	3
		Models and tools (e.g. white board)		Crompton & Smyrnios, 2011	1
		Action learning method		Audet & Couteret, 2012	1
		Coaching approach (e.g. presence-based; coach style)		Topp, 2006; Crompton, 2012*	2
Entrepreneur behavior					**4**
	Commitment to relationship (e.g. keeping appointments)			Audet & Couteret, 2012	1
	Reflect critically vs. (-) resist advice			Hagedorn, 2018b[b]; Kotte et al., 2020[ab]	2
	Learn vicariously (e.g. from other group members' feedback)			Ostrowski, 2018	1
Structure of the coaching intervention					**5**
	Distance vs. face-to-face (e.g. phone or online coaching)			Audet & Couteret, 2012; Hunt, 2010*[ab]	2
	Timing (e.g. frequency of meetings, lengths of sessions)			Audet & Couteret, 2012; Crompton, 2012*; Hunt, 2010*[ab]	3
	Setting (i.e. group coaching)			Ostrowski, 2018	1
	Others (i.e. coaches' enforcement of standards)			Ben Salem & Lakhal, 2018*	1
Content focus (i.e. focus on individual coachee/work/venture; focus on customers/clients, strategy, goals, environment)				Crompton, 2012*; Kotte et al., 2020[ab]	**2**

Note. References without an explicit indication of source are based exclusively on entrepreneurs' perspectives and use a qualitative study design. Numbers in brackets encompass references to the respective coach role at all levels of abstraction.

Table 5

Contextual Factors Found to be Relevant Regarding the Effectiveness of Entrepreneurial Coaching

Categories		**Primary studies assessing category** [ab] = entrepreneurs' self-report + coach-report, [b] = coach-report, [c] = third party-report; [d] = objective; * = quantitative measure; grey = quantitative measure, nonsignificant effect	**No. of studies** assessing category
Institutional embeddedness			**5**
	Boundary conditions of embeddedness in program/grant (e.g. set time frame, scope of coaching themes, choice of coach)	Kotte et al., 2020[ab]; Mansoori et al., 2019; Shaw, 2013	3
	Influence of incubator manger (e.g. regarding matching process, reporting structure)	Audet & Couteret, 2012	1
	No embeddedness: Coaches acting more freely/ independently	Hagedorn, 2018a	1
Entrepreneurs' overall situation and conditions			**1**
	Entrepreneurial stage	Kotte et al., 2020[ab]	1
	Job demands	Kotte et al., 2020[ab]	1
General economic conditions			**2**
	Regional high unemployment rate	Loersch, 2015a* (positively moderates negative coaching effects) Loersch, 2015b* (positively moderates positive coaching effects)	2
	Regional low self-employment rate	Loersch, 2015a* (positively moderates negative coaching effects) Loersch, 2015b* (positively moderates positive coaching effects)	2

Note. References without an explicit indication of source are based exclusively on entrepreneurs' perspectives and use a qualitative study design.

7. Publication Status and Scope of Responsibility

Study	Publication	Scope of Responsibility
1	**Conference contributions:** Diermann, I., Müller, A., Möller, H. & Kotte, S. (2018, September). "What should we work on today?" – An interview study on coaches' thematic and methodical approach to the initial exploration in workplace coaching. Presentation at the 11th Annual Coaching in Leadership and Healthcare Conference, Institute of Coaching, Harvard Medical School, Boston, Massachusetts, USA. Kotte, S., Müller, A., Diermann, I. & Möller, H. (2018, September). „Womit sind Sie heute hier?": Eine Interviewstudie zum inhaltlichen und methodischen Vorgehen von Coaches bei der Eingangsdiagnostik. Presentation at the 51 th Congress of Deutsche Gesellschaft für Psychologie, Frankfurt/Main. **Accepted and published online:** Diermann, I., Kotte, S., Müller, A., & Möller, H. (2021). Initial exploration in workplace coaching: Coaches' thematic and methodological approach. *Coaching: An International Journal of Theory, Research, and Practice*. https://doi.org/10.1080/17521882.2021.1879188. **Planned submission for publication of the subsequent quantitative study:** Müller, A. A., Kotte, S., Diermann, I., & Möller, H. (in preparation). *Constructing a Full Picture of the Coaching Client: Coaching Practices During the Initial Exploration in Workplace Coaching and How They Relate to Coach Characteristics.*	First authorship; Jointly responsible for conceptual development and data analyses; Primarily responsible for literature research, manuscript development and discussion of results. Jointly responsible for conceptual development and study design.
2	**Conference contributions:** Diermann, I., Kotte, S., Rosing, K. & Möller, H. (2019, September). A conceptual model of entrepreneurial coaching. Presentation at the 11 th Congress of Fachgruppe Arbeits-, Organisations- und Wirtschaftspsychologie (AOW), Deutsche Gesellschaft für Psychologie, Braunschweig. Diermann, I., Kotte, S., Rosing, K. & Möller, H. (2019, August). A conceptual model of entrepreneurial coaching. Presentation at the 79 th Annual Meeting of the Academy of Management, Boston, Massachusetts, USA. Diermann, I., Kotte, S., Rosing, K. & Möller, H. (2019, Juli). A conceptual model of entrepreneurial coaching. Presentation at the 19 th. Conference of the European Academy of Management (Euram), Lisbon, Portugal.	Shared first authorship; Jointly responsible for conceptual development; Solely responsible for data collection and main part of data analyses and literature research; Jointly responsible for manuscript development and discussion of results.

	[Honored with the Best Paper Award of the Entrepreneurship Track] Diermann, I., Kotte, S., Rosing, K. & Möller, H. (2019, Juni). A conceptual model of entrepreneurial coaching. Presentation at the 19th Conference of the European Association of Work and Organizational Psychology (Eawop), Turin, Italy. **Accepted and published online:** Kotte, S.*, Diermann, I.*, Rosing, K. & Möller, H. (2020). Entrepreneurial Coaching: A Two-Dimensional Framework in Context. *Applied Psychology – An International Review*, 1–38. https://doi.org/10.1111/apps.12264.	
3	**Submitted for publication:** Diermann, I. & Kotte, S. Entrepreneurial Coaching: A Systematic Literature Review. Submitted at *Entrepreneurship: Theory and Practice* (24.03.2021).	First authorship; Jointly responsible for conceptual development and discussion of results; Primarily responsible for literature research, data analyses and manuscript development.