



UNICA

UNIVERSITÀ
DEGLI STUDI
DI CAGLIARI



Università di Cagliari

UNICA IRIS Institutional Research Information System

This is the Author's [*accepted*] manuscript version of the following contribution:

Opizzi, M., Loi, M., & Macis, O. (2024). Entrepreneurship by Ph. D. students: intentions, human capital and university support structures. *Journal of Small Business and Enterprise Development*, 31(2), 325-349.

The publisher's version is available at:

<https://doi.org/10.1108/JSBED-12-2022-0525>

When citing, please refer to the published version.



Understanding the multifunctional role of Entrepreneurial Coaching through a Systematic Review of the Literature

Journal:	<i>Journal of Managerial Psychology</i>
Manuscript ID	JMP-01-2023-0070.R2
Manuscript Type:	Research Paper
Keywords:	coaching, Entrepreneurship, Mentoring

SCHOLARONE™
Manuscripts

1
2
3 **Understanding the multifunctional role of Entrepreneurial Coaching through a**
4
5 **Systematic Review of the Literature**
6
7
8
9

10 **ABSTRACT**
11

12
13 **Purpose**
14

15 The aim of this study is to systematise the entrepreneurial coaching literature by understanding
16 how the phenomenon has been investigated along four dimensions inspired by Gartner's (1985)
17 conceptualisation of entrepreneurship: entrepreneurial process, context, target and outcomes.
18 In so doing, this study will provide a frame of its multifunctional role and identify relevant gaps
19 and suggestions for future research.
20
21
22
23
24
25
26
27
28

29 **Design/methodology/approach**
30

31 We conducted a systematic literature review to collect existing works on entrepreneurial
32 coaching. We analysed 85 selected papers with a qualitative content analysis that allowed us to
33 highlight relevant research themes for the entrepreneurial process, context, outcomes and target.
34
35
36
37
38
39
40

41 **Findings**
42

43 Our results demonstrate that entrepreneurial coaching has a multifunctional role in
44 entrepreneurship that can be summarised in five different typologies, depending on the stage of
45 the entrepreneurial process in which it is applied, the context, the target, and the outcomes.
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Originality

As one of the first attempts to systematise studies on entrepreneurial coaching, this work extends previous conceptualisation of entrepreneurial coaching by detailing different typologies of this intervention, thereby contributing to reduced fragmentation and conceptual ambiguity.

Paper type: Literature review

Keywords

Entrepreneurial coaching; systematic literature review; qualitative content analysis

Understanding the multifunctional role of entrepreneurial coaching through a systematic review of the literature

INTRODUCTION

Entrepreneurial coaching (EC) is a developmental intervention for entrepreneurs facing different stages of the entrepreneurial process based on a collaborative relationship with a professional coach (Kotte *et al.*, 2021). Entrepreneurs face many obstacles during their journey and need specific support for each stage of the process (Audet & Couteret, 2012; Ben Salem & Lakhal, 2018; Kotte *et al.*, 2021; ; Saadoui & Affess, 2015); this has made EC a key tool in supporting entrepreneurship with a growing scientific interest for the phenomenon (e.g., Ben Salem & Lakhal, 2018; Mansoori *et al.*, 2019).

EC literature is currently characterised by heterogeneous perspectives and multidisciplinary contributions (Bachkirova & Borrington, 2018) which have caused fragmentation and conceptual ambiguity (Kotte *et al.*, 2021). This is why the term “EC” is often used interchangeably with other similar developmental interventions, such as mentoring (Audet & Couteret, 2012). Fragmentation and conceptual ambiguity make EC a concept with a fuzzy meaning and it is not possible to correctly distinguish EC from other interventions and understand its functions. This could be problematic, if we are to develop efficacious entrepreneurial coaching support services within incubators or entrepreneurship education programs.

To address these issues, we conducted a systematic literature review (SLR) of existing EC studies. We investigated how EC has been studied along four dimensions derived from the conceptualisation of entrepreneurship developed by Gartner (1985), namely entrepreneurial process, context, target and outcomes. In doing so, we respond to the fragmentation and conceptual ambiguity by systematising previous studies within an organising framework which

1
2
3 details the multifunctional role of EC. Finally, we set a research agenda to highlight relevant
4
5 gaps and possible lines of future research.
6

7
8 This paper is structured as follows. First, the theoretical background is presented. The
9
10 procedures followed in conducting the SLR are then explained, and the qualitative content
11
12 analysis (QCA) to identify the main research themes are illustrated. Finally, we present the
13
14 results and the discussion.
15
16

17 18 19 20 **THEORETICAL BACKGROUND**

21
22
23 Coaching is a partnering with clients in a thought-provoking and creative process that
24
25 inspires them to maximise their personal and professional potential (International Coach
26
27 Federation)¹, and it has been increasingly adopted in entrepreneurship. According to one of the
28
29 most extensive definition of EC, this intervention is "a custom-tailored, reflective, and results-
30
31 oriented development intervention that is directed towards entrepreneurs with different levels
32
33 of experience and across different phases of the entrepreneurial process [...] based on a
34
35 collaborative relationship between a professional coach (who may or may not have personal
36
37 entrepreneurial experience) and an entrepreneur" (Kotte *et al.*, 2021, p. 548). As a planned
38
39 intervention (see Klofsten & Öberg, 2012), EC is developed as a process with several stages,
40
41 such as contracting, assessment, intervention, and evaluation (Diermann *et al.*, 2021).
42
43
44
45

46
47 EC becomes relevant in entrepreneurship training programmes and incubators, because
48
49 it enables them to support entrepreneurs dealing with high job demands that are typical of each
50
51 stage of the entrepreneurial journey (Kotte *et al.*, 2021; Kutzhanova *et al.*, 2009). For this
52
53 reason, EC is provided independently of the person's request and is increasingly being
54
55
56
57
58
59

60
¹ <https://coachingfederation.org> (visited on January 2023)

1
2
3 incorporated into entrepreneurial training and education programmes (European Commission,
4
5 2018).

6
7
8 Past research on EC has often reiterated how fragmented this phenomenon is (e.g.,
9
10 Audet & Couteret, 2012;; Bachkirova & Borrington, 2018; Ben Salem & Lakhal, 2018; Kotte
11
12 *et al.*, 2021) and that it is characterised by a narrow selective focus on a few aspects of the
13
14 phenomenon (e.g., Diller *et al.*, 2022; Mohamed & Zouaoui, 2021). Moreover, a comprehensive
15
16 understanding of how coaching works alongside the entrepreneurial process is still missing
17
18 (Kotte *et al.*, 2021). All these aspects make it challenging to understand EC mechanisms, so
19
20 they remain a wall that blocks the advancement of inquiry on this topic (Bachkirova &
21
22 Borrington, 2018).

23
24
25
26 EC literature is also plagued by conceptual ambiguity, which has blurred its conceptual
27
28 boundaries. This means that other developmental interventions, such as mentoring and start-up
29
30 consultancy, have been used as synonyms (Audet & Couteret, 2012); see Appendix 1 for a
31
32 summary of the most adopted synonyms. The fact that different labels have been used to refer
33
34 to EC has led to a broad conceptualisation of the construct, thereby blurring its conceptual
35
36 boundaries and activating substantial debate in the literature regarding the differences and
37
38 similarities, thereof, particularly between coaching and mentoring (Kotte *et al.*, 2021). In
39
40 entrepreneurship, these two interventions share a trustful relationship (El Hallam & St-Jean,
41
42 2016); while the greatest difference is that the mentor's experience is at the heart of the
43
44 intervention (Kotte *et al.*, 2021). Conversely, coaching puts at the centre of its action the
45
46 coachee's specific objective or need (Audet & Couteret, 2012). Despite efforts to identify a
47
48 demarcation of these two constructs, the conceptual ambiguity thereof is still present in both
49
50 research and practice. Addressing conceptual ambiguity referred to in EC literature is relevant,
51
52 because study fragmentation and conceptual confusion are both detrimental to advancement
53
54 and practice in this field (Sandberg & Alvesson, 2021).

55
56
57
58
59
60

1
2
3 In light of this, this work has three objectives. (i) To address the fragmentation and
4 conceptual ambiguity by recomposing the literature on EC along four entrepreneurial
5 dimensions: entrepreneurial process, context, target and outcomes; in doing so, we develop an
6 organising framework inspired by the conceptualisation of entrepreneurship developed by
7 Gartner (1985), who pointed out that entrepreneurship is a processual phenomenon in which
8 individuals, emerging organisations, and context are iteratively interplaying. (ii) To
9 understanding the multifunctional role of EC by shedding light on its operating mechanisms.
10 (iii) To develop a research agenda to guide future research.
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

26 **METHOD**

27 **Research Design**

28 We conducted a SLR following the procedure suggested by Tranfield *et al.* (2003) and
29 the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) protocol
30 (Shamseer *et al.*, 2015). The procedure for the SLR (Figure 1) consists of: (i) identification of
31 keywords; (ii) selection of studies and quality assessment; (iii) data extraction; and (iv) data
32 synthesis.
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Insert Figure 1 about here

Identification of keywords

We used ("entrepreneur* coach*" OR coach*) AND entrepreneur*, to capture the multitudes of labels used to refer to EC. For this reason, an extensive search for journal articles was conducted on Web of Science® (WoS) and Scopus®. Due to the novelty of the topic under investigation (Kotte *et al.*, 2021); no limitations in terms of the time were imposed. The first search returned 491 articles: 255 from *WoS* and 236 from *Scopus*. After eliminating the duplicates, a total of 361 articles were obtained.

Selection of Studies and Quality Assessment

Given that EC is an emerging field of research, we decided to include both quantitative and qualitative papers (Schermyly *et al.*, 2021). In our case, for quality assessment, we (i) only considered articles from peer-reviewed journals, to attain results with high accuracy (Grégoire *et al.*, 2019); and (ii) specified precise inclusion criteria.

To be considered as part of the sample, studies needed to investigate coaching intervention within specific contexts aimed at providing individuals with entrepreneurial outcomes and skills. We kept a broad lens (i) due to the fragmentation around the phenomenon; and (ii) because coaching is not only provided independently or within organizations but is an increasingly present component in training or education programmes (Kotte *et al.*, 2021). We excluded articles that did not consider the entrepreneurial context or coaching as an entrepreneurial support tool or that did not consider it to be part of a specific programme.

Some examples of excluded articles were the study by Horne *et al.* (2022), because they did not consider an entrepreneurial context, only mentioning the "entrepreneurial marketplace" without further specifications; and studies in which EC was only marginally addressed (e.g., Svetek, 2022) or was related to other constructs similar to EC such as mentoring (e.g., Kubberod

1
2
3 *et al.*, 2018). In other cases, no clear identification of the entrepreneurial contexts and dynamics
4
5 was examined (e.g., Ribeiro *et al.*, 2020). At the end of this analysis, the final sample was
6
7 comprised of 85 papers.
8
9

10 11 12 13 **Data Extraction**

14
15
16 Drawing on Torraco's (2016) methodological indications, we built a matrix to
17
18 synthesise information for each paper (Appendix 2).
19
20
21
22
23
24

25 **Data Synthesis**

26
27
28 Data were analysed through a QCA, a technique for analysing textual data into inductive
29
30 categories (Forman & Damschroder, 2007). This is recommended when there is a significant
31
32 knowledge gap in a topic or when the existing body of knowledge is inadequately grounded in
33
34 theory, as in the case of EC (Armat *et al.*, 2018). The first author of the present SLR conducted
35
36 the analysis by filling out four different deductive categories: the stage of the entrepreneurial
37
38 process to which the coaching refers (e.g., Audet & Couteret, 2012; Kotte *et al.*, 2021); the
39
40 context (e.g., Diermann *et al.*, 2021); the outcomes (e.g., Theeboom *et al.*, 2014); and the target
41
42 (e.g., Kotte *et al.*, 2021). During the analysis of the papers, we codified each element referring
43
44 to the four categories, and identified different sub-categories. The inter-rater agreement
45
46 coefficient (Daniels, 2019) among the author and three external researchers was equal to 72%,
47
48
49
50
51 which is considered acceptable to ensure the reliability of our study (Schreier, 2012).
52
53
54
55
56
57
58
59
60

RESULTS

While presenting the descriptive results in Appendix 3, we delineate the organising framework in the following text.

Organising Framework

Figure 2 presents the organising framework of EC resulting from our SLR.

Insert Figure 2 about here

Target: For whom is EC adopted?

The target defines the recipients of the intervention. We found three sub-dimensions of targets: operating entrepreneurs (N=36, 38% of the reviewed articles), nascent entrepreneurs (N=31, 33% of the reviewed articles), and non-entrepreneurs (N=28, 29% of the reviewed articles).

Operating entrepreneurs are individuals who own their enterprise and are faced with dynamics related to the development and growth of their own business (e.g., Kotha *et al.*, 2022; Nicholls-Nixon & Maxheimer, 2022) or are coping with crisis or business failure (e.g., Na *et al.*, 2022; Schermuly *et al.*, 2021).

Nascent entrepreneurs are individuals who have taken “steps to found a new business but who have not yet succeeded in making the transition to new business owner” (Carter *et al.*, 1996, p. 151). This dimension includes pre-incubatees (e.g., Heikkinen & Stevenson, 2016); incubatees and start-uppers (e.g., Bergmann & Utikal, 2021; Nair & Blomquist, 2021); business

1
2
3 project leaders (e.g., Laaraj & Ferhane, 2019); entrepreneurs within accelerators (e.g., Mansoori
4
5 *et al.*, 2019); and aspiring entrepreneurs (e.g., Barrell *et al.*, 2021).

7
8 Finally, non-entrepreneurs are individuals who do not own a business, such as managers
9
10 or employees. In some cases, they are not even employed and do not know whether they intend
11
12 to become entrepreneurs, such as undergraduate and graduate students. These individuals are
13
14 nonetheless involved in entrepreneurial dynamics: for students, there are entrepreneurship
15
16 education programmes in which EC sessions are included (e.g., Elenurm & Moisala, 2008;
17
18 Vural & Çoruh, 2019). For managers and employees, there are intrapreneurship programmes
19
20 (e.g., Fey *et al.*, 2022; Helman, 2019; Wakkee *et al.*, 2010); which have been conceptualized
21
22 as “encompassing organizational sanctions and resource commitments to generate, develop and
23
24 implementing innovative ideas and activities in the form of product, process and organizational
25
26 innovations” (Wakkee *et al.*, 2010, p.3).

31 32 33 ***Outcomes: Which outcomes are associated with EC?***

34
35 Several EC studies have focussed on understanding coaching interventions outcomes,
36
37 thereby creating a heterogeneous and unsystematic body of knowledge. To categorise these
38
39 outcomes, we considered the subdivision provided by Theeboom *et al.* (2014) as part of their
40
41 study on coaching effectiveness; the categories are performance/skills, well-being, coping,
42
43 work attitudes, and goal-directed self-regulation.

44
45
46 The “performance/skills” category (N=41, 34% of the reviewed articles) concerns
47
48 subjective and objective outcomes reflecting performance or demonstrating behaviours needed
49
50 for an organisation to be effective. Examples we found included entrepreneurial skills from a
51
52 specific program (e.g., Suharnomo & Wahyudi, 2021); innovative work behaviours (e.g., Na *et*
53
54 *al.*, 2022); leadership (e.g., Åstebro & Hoos, 2020); venture growth (e.g., Kotha *et al.*, 2022);
55
56 internationalisation (e.g., Gao *et al.*, 2021); and increasing sales (e.g., Mukata *et al.*, 2018).

1
2
3 The “well-being” category (N=10, 8% of the reviewed articles) concerns subjective and
4 objective outcomes representing people’s well-being, health, need fulfilment and affective
5 response. Examples we found included psychological well-being (e.g., Galvão & Pinheiro,
6 2019) and reduce emotional exhaustion (i.e., burnout) (e.g., Busch *et al.*, 2021).
7
8
9
10
11

12 The “coping” category (N=7, 6% of the reviewed articles) concerns the ability to face
13 present and future jobs and stressors. Examples include entrepreneurial self-efficacy (e.g.,
14 Maxheimer & Nicholls-Nixon, 2022) and reduced stress hormone levels (e.g., Schermuly *et al.*,
15 2021).
16
17
18
19
20

21 The “work attitudes” category (N=37, 31% of the reviewed articles) concerns cognitive,
22 affective and behavioural responses towards work and career. Examples of outcome measures
23 within this category are relationship building (e.g., Bin Idris & Abu Bakar, 2020);
24 encouragement to create a new business (e.g., Hua, 2021); and satisfaction with the coaching
25 relationship (e.g., Ben Salem & Lakhhal, 2020).
26
27
28
29
30
31

32 The “Goal-directed self-regulation” category (N=24, 20% of the reviewed articles)
33 concerns the level of goal achievements (e.g., Audet & Couteret, 2012), goal attainment (e.g.,
34 Busch *et al.*, 2021); and “the processes involved in attaining and maintaining goals, where goals
35 are internally represented desired states” (Vancouver & Day 2005, p. 158). In this regard,
36 examples may be developing a vision (e.g., Freeman & Siegfried, 2015) and improving strategic
37 decision-making (e.g., Fielden & Hunt, 2011; Nujiten *et al.*, 2020).
38
39
40
41
42
43
44
45
46
47
48

49 ***Entrepreneurial process: In which entrepreneurial phases has EC been investigated?***

50
51 EC has been studied during the pre-venture creation, new venture creation, and post-
52 venture creation phases.
53
54

55
56 Studies in pre-venture creation (N=40, 47% of the reviewed articles) focus on the
57 activities preceding the founding of a new company and have primarily examined the role of
58
59
60

1
2
3 coaching at the pre-founding phase (N=27, 38% of the reviewed articles). These studies have
4 specifically shown how coaches can support coachees embarked on a learning path to develop
5 competencies and skills in entrepreneurship (e.g., Premand *et al.*, 2016) or assist the embryonic
6 activities related to the development of the new business idea (e.g., Marvel *et al.*, 2020).
7
8
9

10
11
12 Other studies have specifically looked at the incubation phase (N=13, 15% of the
13 reviewed articles) by showing how the coach might help aspiring entrepreneurs to “materialize
14 a business idea into a legally constituted enterprise with a marketable product/service”
15 (Fernández *et al.*, p.785); and cope with the uncertain phases of the entrepreneurial process
16 (e.g., Maxheimer & Nicholls-Nixon, 2022; Nair & Blomquist, 2021).
17
18
19
20
21
22
23

24 As far as the new venture creation is concerned (N=22, 26% of the reviewed articles),
25 studies have investigated the dynamics between the coach and nascent entrepreneurs (e.g.,
26 Mansoori *et al.*, 2019); the impact of a start-up training program (e.g., Ramirez-Pérez *et al.*,
27 2015); and to understand how coaches can improve the functioning of the new venture and
28 support the founders’ innovative behaviour (e.g., Gao *et al.*, 2021).
29
30
31
32
33
34

35 Finally, studies on post-venture creation (N=23, 27% of the reviewed articles) address
36 the issue of EC after the phase of venture creation, by focussing attention on scale-up,
37 succession and critical events.
38
39
40
41

42 During the scale-up phase (N=18 out of 23, 78%), entrepreneurs need to be coached to
43 improve specific individual or organisational outcomes, such as the construction and change of
44 entrepreneurial identity and increase the effectiveness of their business (e.g., Valencia, 2020).
45 Succession is the dynamic in which the business is transferred to the heir after a specific event;
46 it includes cases where the process has been managed by a coach or where the entrepreneur has
47 undergone preparatory programmes for such an eventuality. Finally, critical events are difficult
48 situations for which the coach organizationally and psychologically intervenes. In particular,
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 studies have examined the COVID-19 pandemic emergency (e.g., Na *et al.*, 2022) and the
4
5 business failure (e.g., Ben Salem & Lakhal, 2018; Schermuly *et al.*, 2021).
6
7
8
9

10 ***Context: In which settings and situations has coaching been adopted?***
11

12 Context is the place where EC is implemented. It is important to consider this dimension,
13
14 as it has recently been argued that workplace coaching needs to be seen as a contextualised,
15
16 rather than dyadic, intervention embedded in its social and organisational context (Diermann *et*
17
18 *al.*, 2021).
19

20
21 Based on the design adopted by the selected articles, we found that EC either takes place
22
23 within organisations (N=22, 26% of the reviewed papers) or within a programme (N=53, 62%
24
25 of the reviewed papers). Examples of EC within organisations, are established organisations
26
27 (e.g., Ahmed, 2020); fast-growth firms (e.g., Crompton *et al.*, 2012); and family businesses
28
29 (e.g., Valencia, 2020). Papers concerning EC within a programme, refer to entrepreneurship
30
31 support programmes (e.g., Van Coller-Peter & Cronjé, 2020); leadership development
32
33 programmes (Ulvenblad & Björklund, 2018); and entrepreneurship education programmes
34
35 attended by students (e.g., Tunstall & Neergaard, 2022).
36
37
38
39

40 Finally, we found studies in which EC is virtually implemented by using an online
41
42 platform (N=3, 4% of the reviewed papers), such as those of Hunt *et al.* (2019) and Fielden *et*
43
44 *al.* (2011). The remaining papers (N=7) did not specify a context.
45
46
47
48
49

50 **DISCUSSION**
51

52
53 In the present paper, we conducted a SLR to reorganise the fragmented, ambiguous
54
55 literature on EC. Specifically, we reviewed articles to understand how EC has been studied
56
57 along the four dimensions that characterise entrepreneurship as a processual phenomenon
58
59 (Gartner, 1985), namely entrepreneurial process, context, target and outcomes. Moreover,
60

1
2
3 through this framework, we attempted to understand how EC works within each dimension, by
4 detailing its multifunctional role. Finally, we identified suggestions for future research.
5
6

7
8 Overall, a key result of this SLR is that EC can be considered to be a broad and multi-
9 functional supportive intervention. We found that EC has been investigated along different
10 targeted individuals, in different phases of the entrepreneurial process, in different contexts and
11 with different expected outcomes.
12
13
14
15

16
17 Considering the aforementioned results, we developed an organising framework that
18 allowed us to systematise the fragmented EC literature, so we could address recent suggestions
19 for a lens to better conceptualise this phenomenon (e.g., Audet & Couteret, 2012; Ben Salem
20 & Lakhal, 2018; Kotte *et al.*, 2021) in order to theorise by proposing well-distinguished,
21 manageable categories that can support the scholar community by reducing fragmentation and
22 conceptual ambiguity (Kotte *et al.*, 2021; Sandberg & Alvesson, 2021).
23
24
25
26
27
28
29
30
31
32

33 Theoretical Implications

34
35 Based on the aforementioned organising framework, we extend the EC definition provided by
36 Kotte *et al.* (2021). Specifically, we can define EC as a **multifunctional custom-tailored,**
37 *reflective, and results-oriented development intervention that is directed towards non-*
38 **entrepreneurs and entrepreneurs with different levels of experience and across different stages**
39 *of the entrepreneurial process. It can be part of entrepreneurship education programmes,*
40 **training programmes or conducted as a stand-alone intervention. It is implemented to achieve**
41 **multi-outcomes, both individual and organizational.**²
42
43
44
45
46
47
48
49
50

51
52 Given the multifunctional traits of the intervention, we theorise five different EC
53 typologies that emerged from our organisational framework, shown in Figure 3.
54
55
56
57
58
59
60

² We used bold text to highlight the extension elements deriving from our study.

Insert Figure 3 about here

1
2
3
4
5
6
7
8
9
10
11
12 The first EC typology concerns the pre-venture creation phase. This intervention is
13 aimed at non-entrepreneurs, of whom it is unclear whether they will accrue interest in becoming
14 entrepreneurs, such as students, managers, and employees. These individuals attend
15 entrepreneurship education or training programmes in which EC is designed in order to transfer
16 general entrepreneurial knowledge and functional entrepreneurial skills. In other cases, the role
17 of EC is to encourage and stimulate participants to develop new business ideas.
18
19
20
21
22
23
24
25

26 The second EC typology concerns the pre-venture creation phase. In this case, however,
27 EC interventions are directed towards individuals who intend to become entrepreneurs who
28 attend entrepreneurship education programmes to acquire the skills and knowledge needed to
29 establish businesses and develop entrepreneurial projects. In this case, EC is targeted at
30 nurturing the capability to develop a business vision or improve the initial business idea.
31
32
33
34
35
36

37 The third EC typology refers to the business creation phase; this intervention is aimed
38 at nascent entrepreneurs. The EC implemented in a dyadic form or in group, is applied within
39 incubators or accelerators to acquire the necessary skills to develop the new enterprise and
40 improve the individual's entrepreneurial attitudes. By following these objectives, EC is
41 designed in such a way that nascent entrepreneurs become prepared to face the challenging
42 phases of scaling-up.
43
44
45
46
47
48
49

50 The fourth EC typology concerns the post-venture creation phase. In this case, the
51 intervention is considered stand-alone and is aimed at established entrepreneurs who need
52 specific support at individual and organisational performance levels. In these cases, EC
53
54
55
56
57
58
59
60

1
2
3 interventions are designed to improve strategic competency, organising competency and
4
5 technical competency.
6

7
8 The fifth and last EC typology is related to the post-venture creation phase. However,
9
10 the aim of this specific typology is to support insolvent entrepreneurs during business failure.
11
12 In this case, EC can either be stand-alone or embedded in specific programmes, and the session
13
14 can either be executed in person or virtually. The aim of this intervention is to improve
15
16 entrepreneurs' perception of coping resources and well-being at a critical and stressful moment
17
18 in the entrepreneurial process.
19

20
21 With this theorisation (see Sandberg & Alvesson, 2021), we thus contribute to the
22
23 problem of conceptual ambiguity in the EC literature. These five typologies demonstrate how
24
25 EC is a broad, multi-functional support intervention and, may therefore, overlaps with other
26
27 forms of support; this overlap is thus a natural consequence of the complexity associated with
28
29 EC, which is characterised in the content, methods, context and subjects it addresses. By
30
31 identifying these five EC typologies, we can make this complexity known and legitimise
32
33 ambiguity as an identity trait of EC. This conceptualisation will help scholars to explore the
34
35 overlap more systematically with other forms of intervention such as mentoring.
36
37
38
39
40
41

42 **Research Agenda**

43
44 To address the third objective of this work, a research agenda is proposed. Assisted by
45
46 the organising framework, this agenda should guide future inquiry by highlighting the gaps
47
48 worth studying to advance the field of research, as summarised in Table I.
49
50
51
52
53

54 -----
55
56 Insert Table I about here
57
58 -----
59
60

1
2
3
4
5
6 **Entrepreneurial process.** Few studies strive to shed light on how EC might support
7
8 entrepreneurs facing highly stressful situations, such as business failure (Anis *et al.*, 2018;
9
10 Schermuly *et al.*, 2021); this is because a common assumption has been that EC is mainly
11
12 targeted at entrepreneurs in the early stage of their journey (e.g., Audet & Couteret, 2012; Kotte
13
14 *et al.*, 2021). Beyond the more technical and financial definition of business failure (e.g., Anis
15
16 *et al.*, 2018) and given the significant results already obtained by scholars on the effects of
17
18 coaching on health and coping resources (e.g., Schermuly *et al.*, 2021), we suggest to adequate
19
20 consideration of the defining aspects of the relationship between coaches and entrepreneurs
21
22 during this challenging phase. Focussing on the relationship between the coach and the
23
24 entrepreneurs is one way to deepen the question of treatment effectiveness (e.g., Baron &
25
26 Morin, 2009); and doing so at this specific stage where the human aspect is preponderant (e.g.,
27
28 Anis *et al.*, 2018) can provide meaningful results about other operating mechanisms concerning
29
30 EC in this less common studied phase.
31
32
33
34
35
36

37 **Context.** One of the context in which EC requires further study is business incubators. This is
38
39 because research has focussed on the processes and operations of the supporting organisation
40
41 without adequately considering the content of the interventions. Within incubator programmes,
42
43 EC is referred to in different terms, such as mentoring or business coaching (e.g., Audet &
44
45 Couteret, 2012; Schutte, 2019); and is placed as a constant ingredient without knowing what
46
47 precisely it consists of. Investigating EC within incubators is relevant as they support nascent
48
49 entrepreneurs at a stage where the probability of failure is exceptionally high (Gozali *et al.*,
50
51 2015). By knowing the content of the intervention, incubators will be more adept at choosing
52
53 and planning activities.
54
55
56
57
58
59
60

1
2
3 **Target.** EC devoted to supporting entrepreneurial teams still lacks adequate studies. We suggest
4
5 investigating how coaching works for entrepreneurial teams to identify (i) elements that
6
7 differentiate it from the traditional dyadic and, thus, one-to-one coaching form; and (ii) how
8
9 this type of intervention has been shown to be effective. Understanding entrepreneurial
10
11 phenomena at the team level is currently of paramount importance. Indeed, teams have “a
12
13 greater potential than individuals to rise to the growing challenges facing organizations”
14
15 (Widdowson *et al.*, 2020; p.1; Hawkins, 2017); and thus arises the need to provide a better
16
17 understanding of how to improve the support of entrepreneurial teams. In this case, we refer to
18
19 entrepreneurial team coaching, which we defined as a developmental intervention to support
20
21 learning capabilities and dynamics of the group as a whole, with possible benefits in learning
22
23 and increased performance and well-being for individual and team members (Dassen, 2015).
24
25
26
27
28

29 **Outcomes.** Much must be done to understand how the studied outcomes can provide meaningful
30
31 information about coaching effectiveness. Considering previous studies on the topic,
32
33 Schermuly *et al.* (2021) indicated that these works ignore essential situational moderators;
34
35 indeed, these outcomes need to be more connected to the coaching context. We propose that
36
37 these outcomes should be placed within a dynamic model. The model's dynamism lies in the
38
39 fact that it must adequately consider the context, the stage of the entrepreneurial process, and
40
41 the temporal issue, especially for organisational outcomes. To methodologically capture this
42
43 complexity, we suggest adopting longitudinal designs to monitor the evolution of outcomes and
44
45 the relationship between them over time.
46
47
48
49

50 **EC and mentoring.** EC is often confused with other support interventions, particularly
51
52 mentoring. Although past studies have attempted to demarcate the conceptual boundaries
53
54 between the two interventions, this confusion persists in theory and practice. Through our work,
55
56 we defined EC as a broad intervention, and as a consequences, it may overlap with mentoring
57
58 in some cases. Future research should investigate the differences between these two
59
60

1
2
3 interventions in entrepreneurship by reading both constructs with the processual lens we
4 proposed, which considers process phases, target, context and outcomes. In this way, it will be
5 possible to identify the singular and common features of these two interventions and understand
6 when and how they overlap within the entrepreneurial domain.
7
8
9
10
11
12
13
14
15

16 **Contribution**

17
18 This SLR contributes to the literature on EC in three ways. First, we extended the
19 definition of EC devised by Kotte *et al.* (2021) and provided further details concerning the
20 target of the intervention, the types of programmes in which EC can be embedded, and the wide
21 spectrum of outcomes.
22
23
24
25
26

27
28 Second, we identified the complexity of EC, which has already been mentioned by
29 previous studies (e.g., Audet & Couteret, 2012; Bachkirova & Borrington, 2018; Kotte *et al.*,
30 2021). We provided a systematisation of these factors within four known entrepreneurial
31 dimensions (Gartner, 1985), from which theorising on the different functioning of EC emerged.
32 In so doing, we contributed to the problem of conceptual ambiguity, specifically between EC
33 and mentoring.
34
35
36
37
38
39

40
41 Finally, from our organising framework, we provided a line of research that will lead
42 future studies to investigate specific aspects of EC in a systematic manner.
43
44
45
46
47
48
49

50 **Practical Implications**

51
52 This work has practical implications for entrepreneurship support organisations. Incubators,
53 accelerators, and other training programmes can benefit from a more orderly conceptualisation
54 of coaching when defining its role within the programme. Specifically, not only can the coach's
55 intervention be structured in a precise manner according to the target group or stage of the
56
57
58
59
60

entrepreneurial process, but content, tools, and methods can be defined according to the needs of the coachees.

REFERENCES³

- *Akhmetshin, E. M., Mueller, J. E., Yumashev, A. V, Kozachek, A. V, Prikhodko, A. N., & Safonova, E. E. (2019). "Acquisition of entrepreneurial skills and competences: Curriculum development and evaluation for higher education". *Journal of Entrepreneurship Education*, Vol. 22, No. 1, pp. 1–12. Retrieved from <https://www.abacademies.org/articles/acquisition-of-entrepreneurial-skills-and-competences-curriculum-development-and-evaluation-for-higher-education-7814.html>
- *Arlotto, J., Sahut, J. M., & Teulon, F. (2011). "What is the performance of incubators? The point of view of coached entrepreneurs". *International Journal of Business*, Vol. 16, No. 4, pp. 341-352.
- Armat, M. R., Assarroudi, A., Rad, M., Sharifi, H., & Heydari, A. (2018). "Inductive and Deductive: Ambiguous Labels in Qualitative Content Analysis". *The Qualitative Report*, Vol. 23, No. 1, pp. 219–221. <https://doi.org/10.46743/2160-3715/2018.2872>
- *Åstebro, T., & Hoos, F. (2020). "Impact measurement based on repeated randomized control trials: The case of a training program to encourage social entrepreneurship". *Strategic Entrepreneurship Journal*, Vol. 15, No. 2, pp.1–25. <https://doi.org/10.1002/sej.1391>
- *Audet, J., & Couteret, P. (2012). "Coaching the entrepreneur: features and success factors". *Journal of Small Business and Enterprise Development*, Vol. 19, No. 3, pp. 515–531. <https://doi.org/10.1108/14626001211250207>
- Bachkirova, T., & Borrington, S. (2018). "Old wine in new bottles: Exploring pragmatism as a philosophical framework for the discipline of coaching". *Academy of Management Learning & Education*. No 18, pp. 337-360. <https://doi.org/10.5465/amle.2017.0268>
- *Bardasi, E., Gassier, M., Goldstein, M., & Holla, A. (2021). "The Profits of Wisdom: The Impact of a Business Support Program in Tanzania". *The World Bank Economic Review*, Vol. 35, No. 2, pp. 328-347. <https://doi.org/10.1093/wber/lhz048>
- *Barrell, A., Paalzow, A., Baltins, E., Storgårds, J., Purmalis, K., Berzina, K., Mara Irbe, M., & Ozolins, M. (2021). "Cross-border Entrepreneurial Education, Development and Knowledge and Technology Transfer: Experiences with the Cambridge–Riga Venture Camp Programme—A Reflective Report". *Journal of Entrepreneurship and Innovation in Emerging Economies*, Vol. 7, No. 1, pp. 99–105. <https://doi.org/10.1177/2393957520984035>

³ Papers signed with * are part of the sample.

- 1
2
3 *Baum, J. A., & Silverman, B. S. (2004). "Picking winners or building them? Alliance,
4 intellectual, and human capital as selection criteria in venture financing and performance
5 of biotechnology startups". *Journal of business venturing*, Vol. 19, No. 3, pp. 411-436.
6 [https://doi.org/10.1016/S0883-9026\(03\)00038-7](https://doi.org/10.1016/S0883-9026(03)00038-7)
7
8
9 *Belet, D. (2013). "The innovative Finnish team academy example: towards a new action
10 learning-based business school model". *International Journal of Human Resources*
11 *Development and Management*, Vol. 13, No. 1, pp. 42-60.
12 <https://doi.org/10.1504/IJHRDM.2013.052150>
13
14 *Ben Salem, A., & Lakhal, L. (2018). "Entrepreneurial coaching: how to be modeled and
15 measured?". *Journal of Management Development*, Vol. 37, No. 1, pp. 88–100.
16 <https://doi.org/10.1108/JMD-12-2016-0292>
17
18 *Ben Salem, A., Lakhal, L., Mbarek, R., Carrera-Jiménez A. (2018). "The role of
19 Entrepreneurial Coaching in the Restarting process after business failure." *Journal of*
20 *Entreprising Culture*, Vol. 26, No. 4, pp.379-399
21 <https://doi.org/10.1142/S0218495818500140>
22
23 *Ben-Ahmed, K. (2020). "Business coaching for Tunisian entrepreneurs: features and success
24 factors". *Global Knowledge, Memory and Communication*, Vol. 69, No. 6/7, pp. 417–
25 426. <https://doi.org/10.1108/GKMC-01-2019-0004>
26
27 *Bergmann, T., & Utikal, H. (2021). "How to support start-ups in developing a sustainable
28 business model: The case of an european social impact accelerator". *Sustainability*, Vol.
29 13, pp. 1–29. <https://doi.org/10.3390/su13063337>
30
31 *Brown, T. C., & Hanlon, D. (2004). "Developing behavioural observation scales to foster
32 effective entrepreneurship". *Journal of Small Business & Entrepreneurship*, Vol. 17, No.
33 2, pp.103-116. <https://doi.org/10.1080/08276331.2004.10593315>
34
35 *Busch, C., Dreyer, R., & Janneck, M. (2021). "Blended recovery and burnout coaching for
36 small-business copreneurs". *Consulting psychology journal-practice and research*, Vol.
37 73, No. 1, pp. 65–87. <https://doi.org/10.1037/cpb0000198>
38
39 *Cadotte, E.R. (2022). "How to use simulation games in the classroom?" *The Journal of*
40 *Entrepreneurship*, Vol. 31, No. 2, pp.90-134. DOI: 10.1177/09713557221107442
41
42 Carter, N. M., Gartner, W. B., & Reynolds, P. D. (1996). "Exploring start-up event
43 sequences". *Journal of Business Venturing*, Vol. 11, No. 3, pp. 151–166.
44 <https://doi.org/10.1007/s12094-011-0723-9>
45
46 *Cheah, K. T. (2012). "Business management coaching: Focusing on entrepreneur's current
47 position and aims". *Journal of Extension*, Vol. 50, No. 3. Article 52. Retrieved from
48 https://archives.joe.org/joe/2012june/pdf/JOE_v50_3iw6.pdf
49
50 *Cole, M. L., Cox, J. D., & Stavros, J. M. (2018). "SOAR as a mediator of the relationship
51 between emotional intelligence and collaboration among professionals working in teams:
52 Implications for entrepreneurial teams". *Sage Open*, Vol. 8, No. 2.
53
54 *Crompton, B. M., Smyrnios, K. X., & Bi, R. (2012). "Measuring the influence of business
55 coaching on fast-growth firms". *Small Enterprise Research*, Vol. 19, No. 1, pp. 16–31.
56
57
58
59
60

1
2
3 <https://doi.org/10.5172/ser.2012.19.1.16>
4
5

- 6 Daniels, K. (2019). "Guidance on conducting and reviewing systematic reviews (and meta-
7 analyses) in work and organizational psychology." *European Journal of Work and*
8 *Organizational Psychology*, Vol. 28, No. 1, pp. 1-10.
9
- 10 Dassen, M. (2015), "Drama techniques in team coaching", *International Journal of Evidence*
11 *Based Coaching and Mentoring*, Vol. 13 No. 1, pp. 43-57.
12
- 13 Diermann, I., Kotte, S., Müller, A., & Möller, H. (2022). "Initial exploration in workplace
14 coaching: coaches' thematic and methodological approach". *Coaching: An International*
15 *Journal of Theory, Research and Practice*, Vol. 15, No. 1, pp. 4-21.
16 <https://doi.org/10.1080/17521882.2021.1879188>
17
- 18 Diller, S. J., Brantl, M., & Jonas, E. (2022). "More Than Working Alliance". *Coaching |*
19 *Theorie & Praxis*, Vol. 8, No. 1, pp. 59–75. <https://doi.org/10.1365/s40896-022-00066-8>
20
- 21 *Dobrea, M., Maiorescu, I. (2015). "Entrepreneurial Outcomes and Organisational
22 Performance through Business Coaching". *Amfiteatru Economic Journal*, Vol.17, No.
23 38, pp. 247–260.
24
- 25 El Hallam, H., & St-Jean, E. (2016). Nurturing entrepreneurial learning through mentoring.
26 *Journal of Developmental Entrepreneurship*, 21(2), 1650012.
27
- 28 *Elenurm, T., & Moisala, A. (2008). "Human resources for entrepreneurship: comparing
29 orientations of Estonian and Finnish business students". *European Journal of*
30 *International Management*, Vol. 2, No. 4, pp. 454–470.
31 <https://doi.org/10.1504/EJIM.2008.021248>
32
- 33 European Commission (2018). Proposal for a council recommendation on key competences
34 for lifelong learning. Commission staff working document. Brussels.
35
- 36 *Fairchild, R., Crawford, I., & El-Fakir, A. (2019). "A development bank's choice of private
37 equity partner: a behavioural game-theoretic approach". *The European Journal of*
38 *Finance*, Vol. 25, No. 16, pp. 1510–1526.
39 <https://doi.org/10.1080/1351847X.2019.1647863>
40
- 41 Fernández, M. T., Blanco Jiménez, F. J., & Cuadrado Roura, J. R. (2015). "Business
42 incubation: innovative services in an entrepreneurship ecosystem". *Service Industries*
43 *Journal*, Vol. 35, No. 14, pp. 783–800. <https://doi.org/10.1080/02642069.2015.1080243>
44
- 45 *Fey, N., Nordbäck, E., Ehrnrooth, M., & Mikkonen, K. (2022). "How peer coaching fosters
46 employee proactivity and well-being within a self-managing Finnish digital engineering
47 company". *Organizational Dynamics*, Vol. 51, No. 3.
48 <https://doi.org/10.1016/j.orgdyn.2021.100864>
49
- 50 *Fielden, S. L., & Hunt, C. M. (2011). "Online coaching: An alternative source of social
51 support for female entrepreneurs during venture creation". *International Small Business*
52 *Journal*, Vol. 29, No. 4, pp. 345-359. <https://doi.org/10.1177/0266242610369881>
53
- 54 *Folinas, D., Pastos, P., Manthou, V., & Vlachopoulou, M. (2006). "Virtual Pre-Incubator: a
55
56
57
58
59
60

new entrepreneurship approach". *International Journal of Enterprise Network Management*, Vol. 1, No. 1, pp. 29-40. <https://doi.org/10.1504/IJENM.2006.010064>

Forman, J., & Damschroder, L. (2007). "Qualitative Content Analysis." *Empirical Methods for Bioethics: A Primer*, Vol. 11, pp. 39–62. <https://doi.org/10.1016/S1479-3709.2007.11>

*Freeman, D., & Siegfried Jr, R. L. (2015). "Entrepreneurial leadership in the context of company start-up and growth". *Journal of leadership studies*, Vol. 8, No. 4, pp. 35-39. <https://doi.org/10.1002/jls.21351>

*Fukugawa, N. (2022) "Effects of the quality of science and innovation on venture financing: evidence from university spinoffs in Japan". *Applied Economics Letters*, DOI: 10.1080/13504851.2022.2094319

*Galvão, A., & Pinheiro, M. (2019). "Psychological coaching as a driver to enhance networking capabilities of young entrepreneurs". *Tourism & Management Studies*, Vol. 15, No. 1, pp. 81–89. <https://doi.org/10.18089/tms.2019.150107>

*Gantenbein, P., & Engelhardt, J. (2012). "The role of investors for early-stage companies". *International Journal of Entrepreneurial Venturing*, Vol. 4, No. 3, pp. 276-289. <https://doi.org/10.1504/IJEV.2012.048601>

*Gao, Q., Cui, L., Lew, Y. K., Li, Z., & Khan, Z. (2021). "Business incubators as international knowledge intermediaries: Exploring their role in the internationalization of start-ups from an emerging market". *Journal of international management*, Vol. 27, No. 4. <https://doi.org/10.1016/j.intman.2021.100861>

Gartner, W. B. (1985). "A conceptual framework for describing the phenomenon of new venture creation". *Academy of management review*, Vol. 10, No. 4, pp. 696-706.

Gozali, L., Masrom, M., Norehan Haron, H., & Yuri Zagloel, T. M. (2015). "A Framework of Successful E-Business Incubator for Indonesian Public Universities". *The Asian Journal of Technology Management*, Vol. 8, No. 2, pp. 118–131. <https://doi.org/10.12695/ajtm.2015.8.2.4>

Grégoire, D. A., Binder, J. K., & Rauch, A. (2019). "Navigating the validity tradeoffs of entrepreneurship research experiments: A systematic review and best-practice suggestions". *Journal of Business Venturing*, Vol. 34, No. 2, pp. 284-310. <https://doi.org/10.1016/j.jbusvent.2018.10.002>

*Haneberg, D. H., & Aaboen, L. (2021). "Entrepreneurial learning behaviour of community insiders". *International Journal of Entrepreneurial Behaviour & Research*. <https://doi.org/10.1108/IJEBR-04-2020-0255>

*Heikkinen, K. P., & Stevenson, B. (2016). "The LAB studio model: Enhancing entrepreneurship skills in higher education". *International Journal of Innovation and Learning*, Vol. 20, No. 2, pp. 154–168. <https://doi.org/10.1504/IJIL.2016.077846>

*Helman, S. (2019). "Turning welfare reliant women into entrepreneurs: employment readiness workshops and the constitution of the entrepreneurial self in Israel". *Social Politics*, Vol. 26, No. 1, pp. 30–58. <https://doi.org/10.1093/sp/jxy020>

- 1
2
3 *Hensel, R., & Visser, R. (2020). "Does personality influence effectual behaviour?"
4 International journal of entrepreneurial behavior & research, Vol. 26, No. 3, pp. 467–
5 484. <https://doi.org/10.1108/IJEER-06-2019-0343>
6
7
8 *Holzmann, P., Hartlieb, E., & Roth, M. (2018). "From engineer to entrepreneur-
9 entrepreneurship education for engineering students: the case of the entrepreneurial
10 campus Villach". International Journal of Engineering Pedagogy, Vol. 8, No. 3, pp. 28-
11 39. <https://doi.org/10.3991/ijep.v8i3.7942>
12
13 Horne, E., Lower-Hoppe, L., & Green, B.C., (2022). "Co-creation in youth sport
14 development: examining (mis)alignment between coaches and parents". *Sport*
15 *Management Review*. <https://doi.org/10.1080/14413523.2022.2050107>
16
17
18 *Hua, R. (2021). Referee, Sponsor or Coach: "How Does the Government Harness the
19 Development of Social Enterprises? A Case Study of Chengdu, China." VOLUNTAS,
20 Vol. 32, No. 5, pp. 1054–1065. <https://doi.org/10.1007/s11266-021-00379-x>
21
22 *Hunt, C. M., Fielden, S., & Woolnough, H. M. (2019). "The potential of online coaching to
23 develop female entrepreneurial self-efficacy". *Gender in Management*, Vol. 34, No. 8,
24 pp. 685–701. <https://doi.org/10.1108/GM-02-2019-0021>
25
26 *Idris, M. M. B., & Abu Bakar, S. B. (2020). "Perceived Usefulness of Business Coaching on
27 the Relationship between Entrepreneurial Competencies and Business Success." *Journal*
28 *of Asian Finance, Economics and Business*, Vol. 7, No. 10, pp. 329–338.
29 <https://doi.org/10.13106/jafeb.2020.vol7.n10.329>
30
31
32 *Khalid, R., Raza, M., Sawangchai, A., Allauca, W. J., & Huerta, R. M. (2021). "Women
33 entrepreneurial innovative behavior: The role of lean start-up and business coaching".
34 *Studies of Applied Economics*, Vol. 39, No. 8, pp. 1-19. DOI: 10.25115/eea.v39i8.5132
35
36 Klofsten, M., & Öberg, S. (2012). "Coaching versus mentoring: Are there any differences?"
37 *New Technology Based Firms in the New Millennium* (pp. 39–47).
38 [https://doi.org/10.1108/s1876-0228\(2012\)0000009006](https://doi.org/10.1108/s1876-0228(2012)0000009006)
39
40
41 *Kostić, M., & Květoň, V. (2022). "Does innovation support and maturity matter for firms'
42 performance in a moderately developed regional innovation system in Central Europe?"
43 *Innovation: The European Journal of Social Science Research*, Vol. 35, No. 4, pp. 622-
44 649. <https://doi.org/10.1080/13511610.2020.1752156>
45
46
47 *Kotha, R., Vissa, B., Lin, Y., & Corboz, A. V. (2022). "Do ambitious entrepreneurs benefit
48 more from training?" *Strategic Management Journal*, pp. 1–27.
49 <https://doi.org/10.1002/smj.3438>
50
51 *Kotte, S., Diermann, I., Rosing, K., & Möller, H. (2021). "Entrepreneurial Coaching: A
52 Two-Dimensional Framework in Context". *Applied Psychology*, Vol. 70, No. 2, Vol.
53 518–555. <https://doi.org/10.1111/apps.12264>
54
55
56 Kubberød, E., Fosstenløkken, S. M., & Erstad, P. O. (2018). "Peer mentoring in
57 entrepreneurship education: towards a role typology". *Education and Training*, Vol.
58 60, No. 9, 1026–1040. <https://doi.org/10.1108/ET-08-2017-0109>
59
60 *Kukreti, A. R., & Broering, J. (2019). "An Entrepreneurship Venture for Training K–12

1
2
3 Teachers to Use Engineering as a Context for Learning". *Education Sciences*, Vol. 9, No.
4 1. <https://doi.org/10.3390/educsci9010054>
5

- 6
7 *Kutzhanova, N., Lyons, T. S., & Lichtenstein, G. A. (2009). "Skill-Based development of
8 entrepreneurs and the role of personal and peer group coaching in enterprise
9 development". *Economic Development Quarterly*, Vol. 23, No. 3, pp. 193–210.
10 <https://doi.org/10.1177/0891242409336547>
11
- 12 *Laaraj, N., & Ferhane, D. (2018). "The support structures in Africa as a company ' s
13 sustainability factor : evidence from Morocco". *Journal of Small Business &*
14 *Entrepreneurship*, Vol. 0, No. 0, pp. 1–18.
15 <https://doi.org/10.1080/08276331.2018.1462619>
16
- 17 *Mansoori, Y., Karlsson, T., & Lundqvist, M. (2019). "The influence of the lean startup
18 methodology on entrepreneur-coach relationships in the context of a startup accelerator".
19 *Technovation*, Vol. 84–85 (March 2017), pp. 37–47.
20 <https://doi.org/10.1016/j.technovation.2019.03.001>
21
- 22 *Marvel, M. R., Wolfe, M. T., & Kuratko, D. F. (2020). "Escaping the knowledge corridor:
23 How founder human capital and founder coachability impacts product innovation in new
24 ventures". *Journal of Business Venturing*, Vol. 35, No. 6, pp. 1–16.
25 <https://doi.org/10.1016/j.jbusvent.2020.106060>
26
- 27 *Maxheimer, M. M., & Nicholls-Nixon, C. L. (2022). "What women want (and need) from
28 coaching relationships during business incubation". *Journal of Small Business and*
29 *Entrepreneurship*, Vol. 34, No. 5, pp. 548–577.
30 <https://doi.org/10.1080/08276331.2021.1981728>
31
- 32 *Mohamed, F., & Zouaoui, S. (2021) "Impact of entrepreneur's commitment on
33 entrepreneurial coaching relationship". *Cogent Business & Management*, Vol. 8, No. 1.
34 [10.1080/23311975.2021.1989995](https://doi.org/10.1080/23311975.2021.1989995)
35
- 36 *Mukata, C., Council, Z. R., Ladzani, M. W., & Visser, T. (2018). "The Effectiveness of
37 Business Management and Entrepreneurship Training Offered By SME Service
38 Providers in Namibia". *African Journal of Business and Economic Research*, Vol. 13,
39 No. 2, pp. 81–98. <https://doi.org/10.31920/1750-4562/2018/v13n2a4>
40
- 41 *Na, C., Khalid, R., Raza, M., Ramirez-Asis, E., Huerta-Soto, R., & Jahanger, A. (2022).
42 "The role of age and business coaching in the relationship of lean startup approach and
43 innovative work behavior of women entrepreneurs during COVID-19". *Frontiers in*
44 *Psychology*, Vol. 13 (August), pp. 1–13. <https://doi.org/10.3389/fpsyg.2022.946918>
45
- 46 *Nair, S., & Blomquist, T. (2021). "Exploring docility: A behavioral approach to
47 interventions in business incubation". *Research Policy*, Vol. 50, No. 7, pp. 1–12.
48 <https://doi.org/10.1016/j.respol.2021.104274>
49
- 50 *Nicholls-Nixon, C. L., & Maxheimer, M. M. (2022). "How coaching services help early
51 stage entrepreneurs: an exploration of gender differences". *Journal of Small Business and*
52 *Enterprise Development*, Vol. 29, No. 5, pp. 742–763. [https://doi.org/10.1108/JSBED-](https://doi.org/10.1108/JSBED-09-2021-0355)
53 [09-2021-0355](https://doi.org/10.1108/JSBED-09-2021-0355)
54
- 55 *Nuijten, A., Benschop, N., Rijssenbilt, A., & Wilmink, K. (2020). "Cognitive biases in
56
57
58
59
60

- critical decisions facing SME entrepreneurs: An external accountants' perspective". *Administrative Sciences*, Vol. 10, No. 4. <https://doi.org/10.3390/admsci10040089>
- *Nyadu-Addo, R., & Mensah, M. S. B. (2017). "Entrepreneurship education in Ghana—the case of the KNUST entrepreneurship clinic". *Journal of Small Business and Enterprise Development*, Vol. 25, No. 4, pp. 573-590. <https://doi.org/10.1108/JSBED-02-2017-0062>
- *Orton, S., Umble, K., Zelt, S., Porter, J., & Johnson, J. (2007). "Management academy for public health: Creating entrepreneurial managers". *American Journal of Public Health*, Vol. 97, No. 4, pp. 601-605.
- *Pekkan, N. U., & Sisman, G. (2020). "Predicting the entrepreneurial intention: a moderated mediation model Nazmiye". *International Journal of Management and Enterprise Development*, Vol. 19, No. 3, pp. 217–235. <https://doi.org/10.1504/IJMED.2020.108712>
- *Pigozne, T., Luka, I., & Surikova, S. (2019). "Promoting youth entrepreneurship and employability through non-formal and informal learning: The Latvia case". *Center for Educational Policy Studies Journal*, Vol. 9, No. 4, pp. 129–150. <https://doi.org/10.26529/cepsj.303>
- *Pitts, G. (2008). "Life as an entrepreneur: leadership and learning". *Development and Learning in Organizations: An International Journal*, Vol. 22, No. 3, pp. 16-17. <https://doi.org/10.1108/14777280810861776>
- *Premand, P., Brodmann, S., Almeida, R., Grun, R., & Barouni, M. (2016). "Entrepreneurship Education and Entry into Self-Employment Among University Graduates". *World Development*, Vol. 77, pp. 311–327. <https://doi.org/10.1016/j.worlddev.2015.08.028>
- *Ramirez-Pérez, H., Smith, A. M., Franco-López, J., Román-Maquiera, J., & Morote, E. S. (2015). "Effects of training method and age on employability skills of mexican youth entrepreneurs". *Journal of Entrepreneurship Education*, Vol. 18, No. 2, pp. 125–134. Retrieved from <https://www.abacademies.org/articles/jeevol1822015.pdf>
- *Redien-Colloot, R., & Lefebvre, M. R. (2015). "Communication and Entrepreneurship: Influence Tactics in Business Support Situations". *International Review of Entrepreneurship*, Vol. 13, No. 4.
- *Riantoputra, C. D., & Muis, I. (2020). "New insights on psychological factors for the development of women entrepreneurs in Indonesia". *Advances in Developing Human Resources*, Vol. 22, No. 2, pp. 150-163.
- Ribeiro, N., Nguyen, T., Duarte, A. P., Oliveira, R. T., & Faustino, C. (2020). "How managerial coaching promotes employees' affective commitment and individual performance". *International Journal of Productivity and Performance Management*, Vol. 70, No. 8, pp. 2163–2181. <https://doi.org/10.1108/IJPPM-10-2018-0373>
- *Ruda, W., Martin, T. A., Arnold, W., & Danko, B. (2012). "Comparing start-up propensities and entrepreneurship characteristics of students in Russia and Germany". *Acta Polytechnica Hungarica*, Vol. 9, No. 3, pp. 97-113

- 1
2
3 Sandberg, J., & Alvesson, M. (2021). "Meanings of Theory: clarifying Theory through
4 Typification". *Journal of Management Studies*, Vol. 58, No. 2, pp. 487–516.
5 <https://doi.org/10.1111/joms.12587>
6
- 7 *Saukkonen, J., Nukari, J., Ballard, S., & Levie, J. (2016). "Start-up entrepreneurs and
8 university students in a co-learning mode: learning effects of a collaborative
9 entrepreneurial coaching programme". *Industry and Higher Education*
10 <https://doi.org/10.1177/0950422216653198>
11
- 12 *Schelfhout, W., Dochy, F., & Janssens, S. (2004). "The use of self, peer and teacher
13 assessment as a feedback system in a learning environment aimed at fostering skills of
14 cooperation in an entrepreneurial context". *Assessment & Evaluation in Higher*
15 *Education*, Vol. 29, No. 2, pp. 177-201. <https://doi.org/10.1080/0260293042000188465>
16
- 17 *Schermuly, C. C., Wach, D., Kirschbaum, C., & Wegge, J. (2021). "Coaching of Insolvent
18 Entrepreneurs and the Change in Coping Resources, Health, and Cognitive
19 Performance". *Applied Psychology*, Vol. 70, No. 2, pp. 556–574.
20 <https://doi.org/10.1111/apps.12244>
21
- 22 Schreier, M. (2012). "Qualitative content analysis in practice". SAGE
23
- 24 *Schutte, F. (2019). "Small business incubator coaching in south africa: exploring the
25 landscape". *International Journal of Entrepreneurship*, Vol. 23, No. 4, pp. 1–13.
26 Retrieved from [https://www.abacademies.org/articles/Small-business-incubator-](https://www.abacademies.org/articles/Small-business-incubator-coaching-in-south-Africa-exploring-landscape23-4.pdf)
27 [coaching-in-south-Africa-exploring-landscape23-4.pdf](https://www.abacademies.org/articles/Small-business-incubator-coaching-in-south-Africa-exploring-landscape23-4.pdf)
28
- 29 *Schutte, F., & Direng, T. (2019). "Incubation of entrepreneurs contributes to business growth
30 and job creation: A Botswana case study". *Academy of Entrepreneurship Journal*, Vol.
31 25, No. 3, pp. 1–17. Retrieved from [https://www.abacademies.org/articles/incubation-of-](https://www.abacademies.org/articles/incubation-of-entrepreneurs-contributes-to-business-growth-and-job-creation-a-botswana-case-study-8573.html)
32 [entrepreneurs-contributes-to-business-growth-and-job-creation-a-botswana-case-study-](https://www.abacademies.org/articles/incubation-of-entrepreneurs-contributes-to-business-growth-and-job-creation-a-botswana-case-study-8573.html)
33 [8573.html](https://www.abacademies.org/articles/incubation-of-entrepreneurs-contributes-to-business-growth-and-job-creation-a-botswana-case-study-8573.html)
34
- 35 *Sendouwa, R. H. Lonto, A. L., Saroinsong, S.J.R. (2019). "Entrepreneurship development
36 program in the higher education in Indonesia". *International Journal of Recent*
37 *Technology and Engineering*. <http://localhost:8080/xmlui/handle/123456789/288>
38
- 39 Shamseer, L., Moher, D., Clarke, D. G., Liberati, A., Petticrew, M., Shekelle, P., & Stewart,
40 L. A. (2015). "Preferred reporting items for systematic review and meta-analysis
41 protocols (PRISMA-P) 2015: elaboration and exploration". *Systematic Reviews*, Vol. 4,
42 No. 1, pp. 1–9. <https://doi.org/10.1136/bmj.g7647>
43
- 44 *Sitaker, M., McCall, M., Kolodinsky, J., Wang, W., Ammerman, A. S., Bulpitt, K., Pitts, S.
45 B. J., Hanson, K., Volpe, L. C., & Seguin-Fowler, R. A. (2020). "Helping farmers with
46 continuation planning for cost-offset community support agriculture to low-income
47 families". *Journal of agriculture food systems and community development*, Vol.9, No.
48 4, pp. 93–112. <https://doi.org/10.5304/jafscd.2020.094.037>
49
- 50 *Sjölundh, T., & Wahlbin, C. (2008). "Entrepreneurial students: The case of students starting
51 up companies in parallel with their studies at Jönköping University, Sweden". *Industry*
52 *and higher education*, Vol. 22, No. 6, pp. 441-452.
53
- 54 *Snihur, Y., Lamine, W., & Wright, M. (2021). "Educating engineers to develop new
55
56
57
58
59
60

business models: Exploiting entrepreneurial opportunities in technology-based firms".
Technological Forecasting and Social Change, 164.
<https://doi.org/10.1016/j.techfore.2018.11.011>

*Suharnomo, & Wahyudi, S. (2021). "Development Of An Entrepreneurship Model To Produce Young Entrepreneurs". Journal of Management Information and Decision Sciences, Vol. 24, No. 2, pp. 1–15. Retrieved from <https://www.abacademies.org/articles/development--of--an--entrepreneurship-model-to-produce-young-entrepreneurs-11788.html>

*Sukwan, O., Susaorat, P., Taewattana, T., & Langka, W. (2021). "The development of industrial students coaching model under dual vocational training system for entrepreneurial trainer: Concentration in industrial education". Kasetsart Journal of Social Sciences, pp. 262–268. Retrieved from: <https://so04.tci-thaijo.org/index.php/kjss/article/view/251195/170791>

Svetek, M. (2022). "The Role of Entrepreneurs' Perceived Competence and Cooperativeness in Early-Stage Financing". *Entrepreneurship Theory and Practice*, Vol. 0, No. 0, pp. 1–30. <https://doi.org/10.1177/10422587221127000>

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". Journal of Positive Psychology, Vol. 9, No. 1, pp. 1–18. <https://doi.org/10.1080/17439760.2013.837499>

Torraco, R. J. (2016). "Writing Integrative Literature Reviews: Using the Past and Present to Explore the Future". *Human Resource Development Review*, Vol. 15, No. 4, pp. 404–428. <https://doi.org/10.1177/1534484316671606>

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, No. 3, pp. 207–222. <https://doi.org/10.1111/1467-8551.00375>

*Tunstall, R., & Neergaard, H. (2022). "Flashmob: A Heutagogical Tool for Social Learning in Entrepreneurship Education". *Entrepreneurship Education and Pedagogy*, Vol. 5, No. 3, pp. 472–492. <https://doi.org/10.1177/25151274211017547>

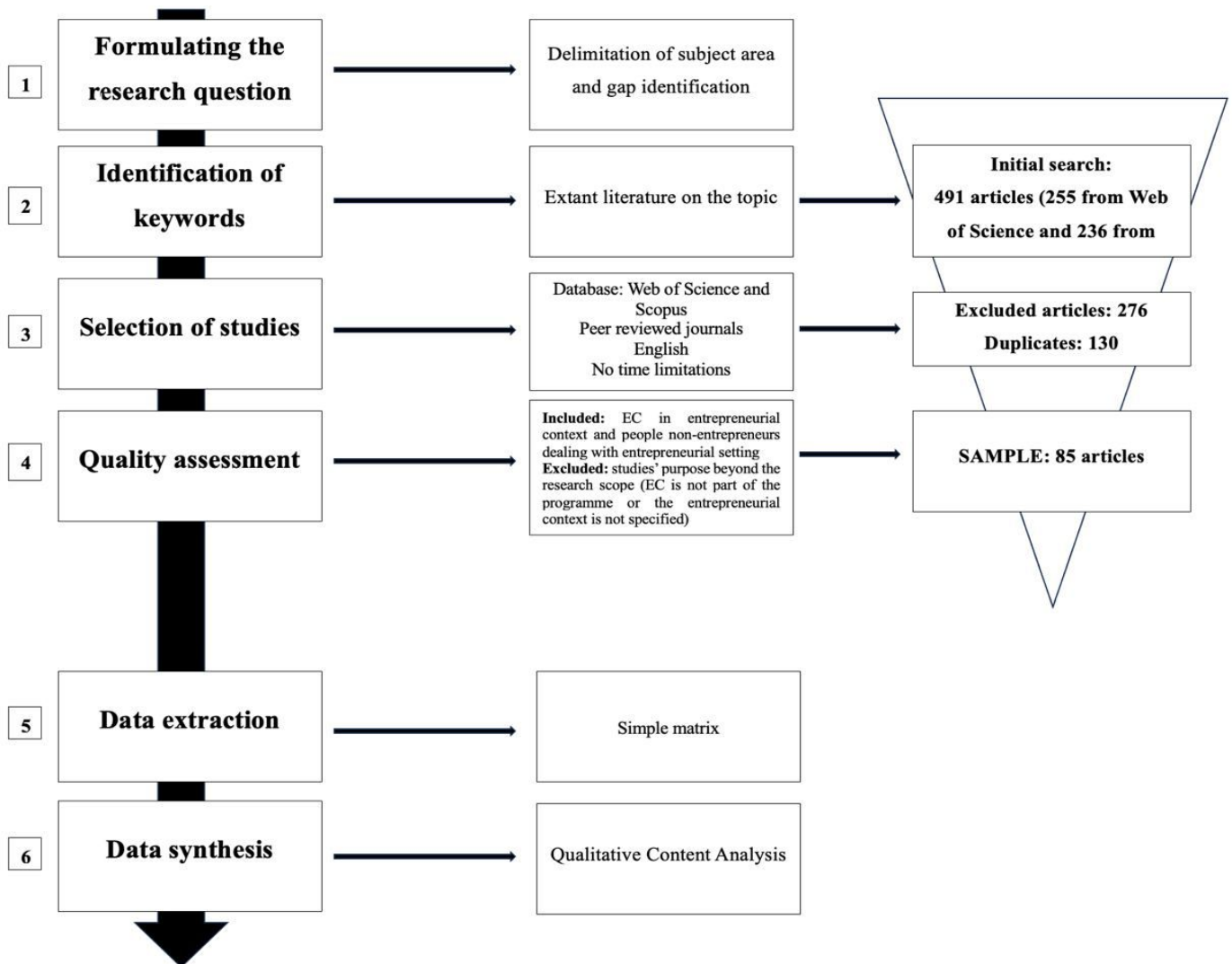
*Ulvenblad, P., & Cederholm Björklund, J. (2018). "A leadership development programme for agricultural entrepreneurs in Sweden". *The Journal of Agricultural Education and Extension*, Vol. 24, No. 4, pp. 327–343. <https://doi.org/10.1080/1389224X.2018.1473260>

*Ulvenblad, P., Blomkvist, M., & Winborg, J. (2011). "Academic entrepreneurship—the structure of incubator management and best practice reported on Swedish business incubators' websites". *International Journal of Entrepreneurship and Small Business*, Vol. 12, No. 4, pp. 445–458. <https://doi.org/10.1504/IJESB.2011.039685>

*Umble, K. E., Orton, S., Rosen, B., & Ottoson, J. (2006). "Evaluating the impact of the Management Academy for Public Health: developing entrepreneurial managers and organizations". *Journal of Public Health Management and Practice*, Vol. 12, No. 5, pp. 436–445.

- 1
2
3 *Valencia, A. (2020). "The Changes of the Entrepreneurial Identity: Case Study". *Quadernos*
4 *de Psicologia*, Vol. 22, No. 2. <https://doi.org/10.5565/rev/qpsicologia.1574>
5
6
7 *Van Burg, E., Romme, A. G. L., Gilsing, V. A., & Reymen, I. M. (2008). "Creating
8 university spin-offs: a science-based design perspective". *Journal of Product Innovation*
9 *Management*, Vol. 25, No. 2, pp. 114-128. [https://doi.org/10.1111/j.1540-](https://doi.org/10.1111/j.1540-5885.2008.00291.x)
10 [5885.2008.00291.x](https://doi.org/10.1111/j.1540-5885.2008.00291.x)
11
12 *Van Coller-Peter, S., & Cronjé, J. P. (2020). "The contribution of coaching and mentoring to
13 the development of participants in entrepreneurial development programmes".
14 *International Journal of Evidence Based Coaching and Mentoring*, Vol. 18, No. 2, pp.
15 51–67. <https://doi.org/10.24384/bg74-fc70>
16
17
18 Vancouver, J. B., & Day, D. V. (2005). "Industrial and organisation research on
19 self-regulation: From constructs to applications". *Applied Psychology*, Vol. 54, No. 2,
20 pp. 155-185. <https://doi.org/10.1111/j.1464-0597.2005.00202.x>
21
22 *Vural, M., & Çoruh, Y. (2019). "The effect of students of sports management and coaching
23 education department on entrepreneurial tendencies of career plans". *International*
24 *Journal of Evaluation and Research in Education*, Vol. 8, No. 2, pp. 351–355.
25 <https://doi.org/10.11591/ijere.v8i2.16319>
26
27
28 *Wakkee, Ingrid, Elfring, T., & Monaghan, S. (2010). "Creating entrepreneurial employees in
29 traditional service sectors: The role of coaching and self-efficacy". *International*
30 *Entrepreneurship and Management Journal*, Vol. 6, No. 1, pp. 1–21.
31 <https://doi.org/10.1007/s11365-008-0078-z>
32
33 *Wijnker, M., Van Kasteren, H., & Romijn, H. (2015). "Fostering sustainable energy
34 entrepreneurship among students: The business oriented technological system analysis
35 (BOTSA) program at Eindhoven university of technology". *Sustainability*, Vol. 7, No. 7,
36 pp. 8205-8222. <https://doi.org/10.3390/su7078205>
37
38
39 *Yusubova, A., Andries, P., & Clarysse, B. (2019). "The role of incubators in overcoming
40 technology ventures' resource gaps at different development stages". *R&D Management*,
41 Vol. 49, No. 5, pp. 803-818. <https://doi.org/10.1111/radm.12378>
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 1. Flowchart of the procedure for the review.



Psychology

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 2. Organising framework for defining dimensions of Entrepreneurial Coaching.

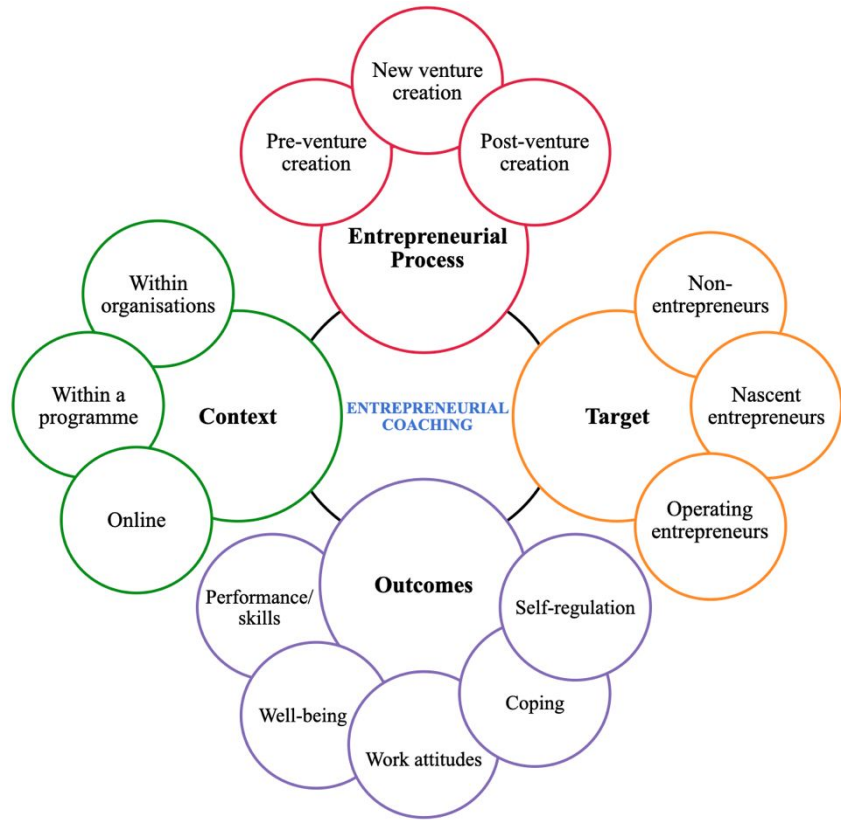


Figure 3. Entrepreneurial Coaching typologies.

Entrepreneurial Coaching typologies			
<i>EC1</i>	When: pre-venture creation To: students, managers, employees	Embedded in entrepreneurship education programmes or training programmes	Acquisition of entrepreneurial skills, entrepreneurial ideas, encouragement
<i>EC2</i>	When: pre-venture creation To: aspiring entrepreneurs	Embedded in entrepreneurship education programmes	To guide aspiring entrepreneurs towards skills for their future venture creation
<i>EC3</i>	When: new venture creation To: nascent entrepreneurs	Within business incubators or accelerators	Improving work attitudes and self-regulation. Skills for the development of their start-up
<i>EC4</i>	When: post-venture creation To: established entrepreneurs	Within organisation as a stand-alone intervention	Skills and knowledge to face problems, achieve goals (scaling-up, improve venture development)
<i>EC5</i>	When: during business failure To: insolvent entrepreneurs	Within organisation as a stand-alone intervention or specific programmes	Coping resources, well-being

psychology

Table I. Research agenda and suggestions for future research.

Dimension	Gap	Research suggestion
Entrepreneurial process	Business failure	Coaching relationship between the coach and the entrepreneurs
Context	EC within incubators	Contents and operating mechanisms
Target	Entrepreneurial teams	Entrepreneurial Team Coaching
Outcomes	Outcomes' dynamic model	Outcomes integration and longitudinal approach
EC and mentoring	Overlapping interventions	Integrate EC and mentoring within the organising framework

Appendix 1. List of the main terms identifying EC with authors and definitions.

These labels come from most entrepreneurship studies, some particularly recent (e.g., Na *et al.*, 2022; Babcock, 2021; Kurakto *et al.*, 2021). Business coaching (e.g., Crompton *et al.*, 2012; Cheah, 2012; Dobrea & Maioreescu, 2015; Schutte, 2019; Ben Ahmed, 2020; Idris & Abu Bakar, 2020; Pocek *et al.*, 2021; Na *et al.*, 2022) and mentoring (e.g., Hancox *et al.*, 2015; Heikkinen & Stevenson, 2016; Kubberod *et al.*, 2018; Kurakto *et al.*, 2021) are the terms that are most often used interchangeably with EC. Business coaching is a construct defined as “a formal relationship in which a coach and a coachee collaborate to assess the coachee’s leadership developmental tasks, to challenge current constraints exploring new possibilities, and to ensure accountability and support for reaching goals” (Blackman *et al.*, 2016, p.460). Considering the differences between coaching and mentoring, the coaching relationship is to a large extent a planned intervention with specific activities, methods, and objectives. Mentorship, on the other hand, is demand-driven. Moreover, coaching concerns general competence, whereas mentoring is a specialist task (Klofsten & Öberg, 2012) involving a relationship with a more experienced individual (Weinberg & Lankau, 2011).

In this regard, one of the works that have contributed to overcoming conceptual ambiguity is that of Kotte *et al.* (2021). Their empirical observation aimed to provide positioning for EC concerning classic workplace coaching, executive coaching, entrepreneurial mentoring, and start-up consultancy to identify its conceptual boundaries. They have placed these constructs within a two-dimensional framework, considering approaches (process consultation and expert consultation) and the focus (individual, work, venture). Meaningful results emerged from this work, as they stated that a key distinguishing characteristic of EC is the higher proportion of expert-consultation, i.e., “a consultant possessing a high level of content expertise and providing expert information, advice, and solutions to clients” (Kotte *et al.*, 2021, p. 521) remarkably like executive coaching.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

N	Terms	Research field	Authors	Definition of the construct
1	Business coaching	Entrepreneurship, Business Management	Crompton, Smyrniotis & Bi, 2012; Cheah, 2012; Dobrea & Măiorescu, 2015; Schutte, 2019; Ben Ahmed, 2020; Idris & Abu Bakar, 2020; Pocek, Politis & Gabrielsson, 2022; Na, Khalid & Raza, 2022	A means of individual development, allowing, on the one hand, the increase of managerial performances and, on the other hand, the increase of competitiveness between corporations (Dobrea & Măiorescu, 2015).
2	Psychological coaching	Entrepreneurship, education, and training	Galvão & Pinheiro, 2019	A driver for positive change and improvement of several of the required skills for successful entrepreneurship.
3	Wellness coaching	Health and wellness	Babcock, 2021	A means for helping patients to manage chronic diseases like diabetes and hypertension or achieve a variety of personal health goals.
4	Incubator coaching	Entrepreneurship	Schutte & Direng, 2019	A tool to support entrepreneurs during start-up.
5	Peer group coaching	Economics	Kutzhanova, Lyons & Lichtenstein, 2009	Coaching in the business world is represented most often by executive coaching that attempts to align individual performance and organisational goals.
6	Mentoring	Entrepreneurship, innovation and learning, education, and training	Hancox, Heron & Klucznik-Toro, 2015; Heikkinen & Stevenson, 2016; Kubberod, Fosstenlokken & Erstad, 2018; Kuratko, Neubert & Marvel, 2021	A special help entrepreneurs receive from a mentor in the early stages of their venture [...] supporting opportunity recognition (Kuratko, Neubert & Marvel, 2021).

REFERENCES

- 1
2
3
4
5 Babcock J. (2021) "The entrepreneurial characteristics of national board certified health and wellness coaches". *Coaching: An International Journal*
6 *of Theory, Research and Practice*, Vol. 14, No. 2, pp. 142-150, 10.1080/17521882.2020.1831562
7
- 8 Ben-Ahmed, K. (2020). "Business coaching for Tunisian entrepreneurs: features and success factors". *Global Knowledge, Memory and*
9 *Communication*, Vol. 69, No, 6/7, pp. 417–426. <https://doi.org/10.1108/GKMC-01-2019-0004>
10
11
- 12 Blackman, A., Moscardo, G., & Gray, D. E. (2016). "Challenges for the theory and practice of business coaching: A systematic review of empirical
13 evidence". *Human Resource Development Review*, Vol. 15, No. 4, pp. 459-486.
14
- 15 Cheah, K. T. (2012). "Business management coaching: Focusing on entrepreneur's current position and aims". *Journal of Extension*, Vol. 50, No. 3.
16 Article 52. Retrieved from https://archives.joe.org/joe/2012june/pdf/JOE_v50_3iw6.pdf
17
- 18 Crompton, B. M., Smyrnios, K. X., & Bi, R. (2012). "Measuring the influence of business coaching on fast-growth firms". *Small Enterprise*
19 *Research*, Vol. 19, No. 1, pp. 16–31. <https://doi.org/10.5172/ser.2012.19.1.16>
20
21
- 22 Dobrea, Mihaela; Maiorescu, I. (2015). "Entrepreneurial Outcomes and Organisational Performance through Business Coaching". *Amfiteatru*
23 *Economic Journal*, Vol.17, No. 38, pp. 247–260.
24
- 25 Hancox, I., Heron, K., Klucznik-Törő, A. (2015). "Coaching & facilitating young entrepreneurs from the perspectives of a coach, an education
26 manager and a jury member – the case study of the climate-kic journey programme". Paper presented at the *8th International Conference of*
27 *Education, Research and Innovation*, Seville, Spain.
28
29
- 30 Heikkinen, K. P., & Stevenson, B. (2016). "The LAB studio model: Enhancing entrepreneurship skills in higher education". *International Journal of*
31 *Innovation and Learning*, Vol. 20, No. 2, pp. 154–168. <https://doi.org/10.1504/IJIL.2016.077846>
32
33 Idris, M. M. B., & Abu Bakar, S. B. (2020). "Perceived Usefulness of Business Coaching on the Relationship between Entrepreneurial
34 Competencies and Business Success." *Journal of Asian Finance, Economics and Business*, Vol. 7, No. 10, pp. 329–338.
35 <https://doi.org/10.13106/jafeb.2020.vol7.n10.329>
36
- 37 Klofsten, M., & Öberg, S. (2012). "Coaching versus mentoring: Are there any differences?" *New Technology Based Firms in the New Millennium*
38 (pp. 39–47). [https://doi.org/10.1108/s1876-0228\(2012\)0000009006](https://doi.org/10.1108/s1876-0228(2012)0000009006)
39
40
41
42
43
44
45
46

- 1
2 Kotte, S., Diermann, I., Rosing, K., & Möller, H. (2021). "Entrepreneurial Coaching: A Two-Dimensional Framework in Context". *Applied*
3 *Psychology*, Vol. 70, No. 2, Vol. 518–555. <https://doi.org/10.1111/apps.12264>
4
- 5 Kubberød, E., Fosstenlökken, S. M., & Erstad, P. O. (2018). "Peer mentoring in entrepreneurship education: towards a role typology". *Education*
6 *and Training*, Vol. 60, No. 9, 1026–1040. <https://doi.org/10.1108/ET-08-2017-0109>
7
- 8 Kuratko, D. F., Neubert, E., & Marvel, M. R. (2021). "Insights on the mentorship and coachability of entrepreneurs". *Business Horizons*, Vol. 64,
9 No. 2, pp. 199–209. <https://doi.org/10.1016/j.bushor.2020.11.001>
10
- 11
12 Na, C., Khalid, R., Raza, M., Ramirez-Asis, E., Huerta-Soto, R., & Jahanger, A. (2022). "The role of age and business coaching in the relationship
13 of lean startup approach and innovative work behavior of women entrepreneurs during COVID-19". *Frontiers in Psychology*, Vol. 13 (August), pp.
14 1–13. <https://doi.org/10.3389/fpsyg.2022.946918>
15
- 16 Pocek, J., Politis, D., Gabrielsson, J. (2022), "Entrepreneurial learning in extra-curricular start-up programs for student". *International Journal of*
17 *Entrepreneurial Behavior & Research*, Vol. 28, No. 2, pp.325-345. <https://doi.org/10.1108/IJEER-04-2020-0206>
18
- 19
20 Schutte, F. (2019). "Small business incubator coaching in south africa: exploring the landscape". *International Journal of Entrepreneurship*, Vol.
21 23, No. 4, pp. 1–13. Retrieved from [https://www.abacademies.org/articles/Small-business-incubator-coaching-in-south-Africa-exploring-](https://www.abacademies.org/articles/Small-business-incubator-coaching-in-south-Africa-exploring-landscape23-4.pdf)
22 [landscape23-4.pdf](https://www.abacademies.org/articles/Small-business-incubator-coaching-in-south-Africa-exploring-landscape23-4.pdf)
23
- 24 Weinberg, F. J., & Lankau, M. J. (2011). "Formal mentoring programs: A mentor-centric and longitudinal analysis". *Journal of Management*, Vol.
25 37, No. 6, pp. 1527-1557. <https://doi.org/10.1177/0149206309349310>
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

Appendix 4. Descriptive analysis of the reviewed papers

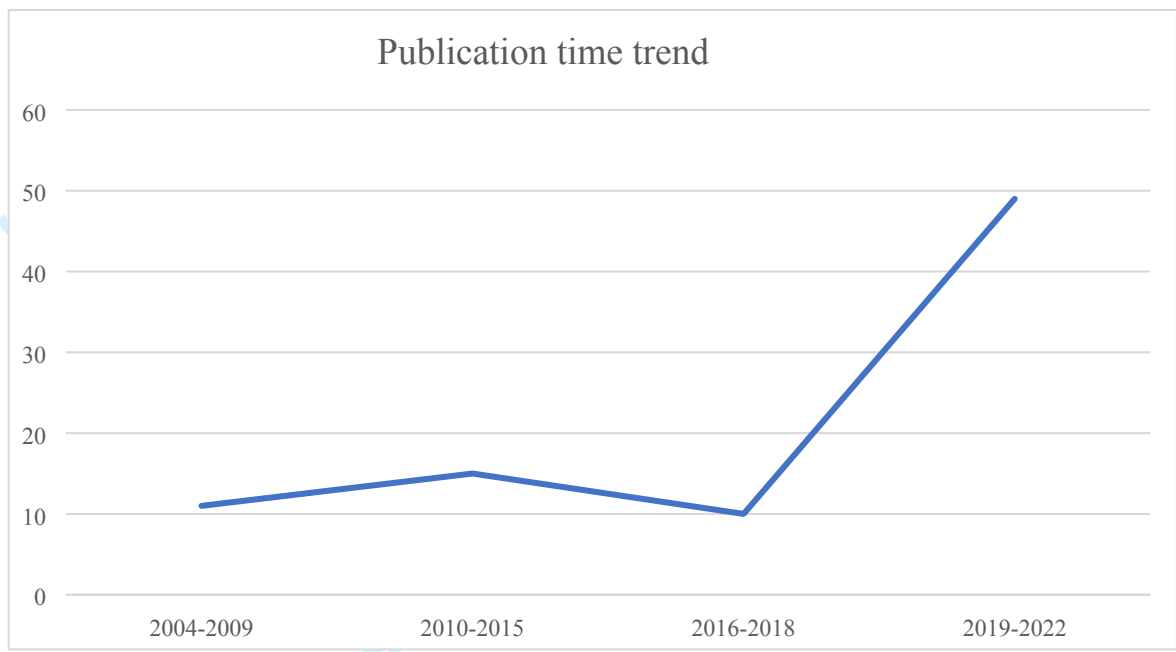
Published studies on EC are mostly empirical works (N=75 out of 85), the majority of which adopt a qualitative (N=38, 45% of the empirical papers) rather than a quantitative approach (N=32, 38% of the empirical papers). Finally, only 5 works (6% of the empirical papers) used a mixed-method approach.

Furthermore, most empirical papers adopt a cross-sectional design (N=55, 73% of the empirical papers) compared to a longitudinal one (N=20, 27% of the empirical papers).

			N	%
Approach	Empirical	Qualitative	38	45%
		Quantitative	32	38%
		Mixed methods	5	6%
	Theoretical		10	11%
TOTAL			85	100%
Research design	Empirical	Longitudinal	20	24%
		Cross-sectional	55	64%
	Theoretical		10	12%
TOTAL			85	100%

By looking at the journals, our data show that the 85 papers composing our unit of analysis were published in 74 different journals from different disciplines, including psychology, sports, management, and public health, indicating an increment of attention to EC, especially after the 2016 year.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



Managerial Psychology