Psychology in executive coaching: an integrated literature review

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Abstract

Purpose – The purpose of this paper is to identify essential psychological-informed executive coaching approaches that enhance the organisational learning and development process and outcomes through integrating existing research evidence. Since coaching has been widely used in leadership development related areas and previous studies confirmed that this generates positive effects on individual-level learning in the organisational setting. The identified frameworks and influential factors outlined in this paper can serve as explicit guidelines for the organisation and management team when setting selection and evaluation benchmarks for employing executive coaches.

Design/methodology/approach – An integrated review approach was applied to narratively synthesise 234 ($k=234$) identified peer-review articles between 1995 and 2018. This review followed a rigorous protocol that the authors consulted ten ($n=10$) experts in the field. Both qualitative and quantitative psychological-focused research evidence was included in this study.

Findings – First, certain psychological approaches, such as cognitive behavioural, solution-focused, GROW and strength-based approaches, were highlighted in current research evidence. Second, the essential factors and skills, for instance, building trust, transparency and rapport, and facilitating learning were identified. Third, the main organisational learning and development outcome evaluation methods were outlined in this review, such as the self-efficacy scale, organisational commitment, workplace psychological well-being, 360-degree feedback and the Multifactor Leadership Questionnaire.

Research limitations/implications – It is always challenging to integrate research evidence on coaching because of the diversity of theoretical disciplines upon which coaching interventions draw. Therefore, it is difficult to generate a meta-analytic review which can generate statistical results. This review also reveals room for improvement in the quality of existing coaching evidence in accordance with the criteria for evidence-based management or practice (Briner *et al.*, 2009), such as research methodology and evaluation design. Moreover, there is a lack of evidence on this reflective process which helps professional coaches to ensure the quality of their practice and organisational support.

Practical implications – This review offers a new perspective on the role psychology plays in the organisational learning and development practices. The identified coaching approaches, influential interpersonal skills and outcome evaluation methods can serve as practical guidelines when applying external coaching to facilitate a better organisational learning and development process and outcome.

Originality/value – This is the first literature review to focus on contemporary psychological-informed coaching evidence (between 1995 and 2018) in the workplace setting. Despite the rapid growth in demand for professional coaching practitioners (International Coach Federation, 2016), there is a lack of research-informed evidence to overcome the challenges faced by organisations when employing external coaches, such as what selection criteria or evaluation benchmarks to use. This review takes a practical perspective to identify essential body of knowledge and behavioural indicators required for an executive coach to facilitate an effective learning and development outcome.

Keywords Executive coaching, Literature review, Organizational learning and development, Coaching psychology, Integrated review

Paper type Literature review

1. Introduction

This paper presents an integrated literature review on psychological-focused executive coaching evidence. Executive coaching has been applied extensively in management learning strategy to support organisational outcomes according to the annual survey of the CIPD (2015, 2016): three quarters of the organisations surveyed offered coaching to their employees as well as 69 per cent of them expected to increase their capacity for coaching. Although a coach's academic background in psychology was examined being a positive mediator to enhance the executive coaching outcomes, such as the coachee's self-awareness and job performance as reported by the direct supervisor (Bozer *et al.*, 2014), there is still a lack of evidence in psychology to contribute to this area. Accordingly, an integrated evaluation across all relevant research evidence is required to specify in what way psychological interventions facilitate better desired coaching outcomes.

Briner (2012) has previously raised questions about the inadequacy of scientific evidence on coaching interventions, including the inadequacy of rigorous experimental trials and systematic reviews. In response to his scepticism about the effectiveness of coaching, a number of systematic reviews and meta-analyses of workplace coaching were promptly published (Graßmann *et al.*, 2019; Athanasopoulou and Dopson, 2018; Bozer and Jones, 2018; Blackman *et al.*, 2016; Grover and Furnham, 2016; Jones *et al.*, 2016; Sonesh *et al.*,2015; Theeboom *et al.*, 2014). These reviews established a solid foundation for the development of evidence-based coaching by confirming coaching generates positive effects on individual-level learning in the organisational setting. Nevertheless, specific practical coaching frameworks or disciplines were yet spelled out. To distinguish from previous reviews of coaching and respond to the latest coaching research trend, "how does coaching work?" (Theeboom *et al.*, 2014), we scrutinised the relevant psychological-informed evidence on executive coaching interventions (between 1995 and 2018), in order to outline the trend and gaps in current executive coaching literature as well as informing future practice. A total of 234 ($k = 234$) primary studies (both quantitative and qualitative) investigating the effects of psychological coaching approaches were identified in this review. The review results confirmed that the frameworks of psychotherapy (e.g. cognitive behavioural approach and therapeutic working alliance) play a key role in the effectiveness of executive coaching, including the coaching relationship and coachees' self-efficacy, affective organisational commitment, workplace well-being (e.g. stress) and leadership behaviours of coachees. Furthermore, several essential interpersonal coaching skills which require fundamental understanding of psychological theories (e.g. emotional support and enhancing motivation) were distinguished in this review. However, our review results indicated some gaps in the current coaching literature. First, more substantial evidence is required in other executive coaching disciplines, such as a statistical investigation (e.g. meta-analysis) on psychological coaching approaches (e.g. cognitive behavioural or solution-focused coaching) or a more process-based investigation to study "how" or "why" certain mechanisms facilitate better desired outcomes. Second, a need for the further development of coaching outcome evaluations emerges in this review study, as evaluation methods currently used were varied and drawn from other similar disciplines (e.g. counselling or training). This review results can serve as a preliminary guideline for the organisations when applying executive coaching (Smither, 2011) as a clear scope of what is known what is unknown in this area is presented.

2. What is executive coaching in the organisation?

Given that the ultimate goals of coaching engagements are all related to change (e.g. behavioural, attitudinal or motivational) in individuals, the process is seen as a socratic-based, future-focused dialogue between a facilitator (coach) and a participant (coachee/client), whose purpose is to stimulate the self-awareness and personal responsibility of the participant (Passmore and Fillery-Travis, 2011). Accordingly, our understanding of

executive coaching is being a coachee-centred learning and development intervention that aims to maximise the coachee's potential, motivation and improvement. With the increase of employing independent coaching professionals to facilitate senior managers' learning and development (CIPD, 2016), and a recent study (Jones *et al.*, 2018) indicating external coaching services generated better effects on the participant's emotional outcomes (e.g. self-efficacy) than other coaching formats, we accordingly include coaching studies which employ independent coaching practitioners in this review to maintain the focus.

3. Current challenges in executive coaching research

With the increase in employing executive coaching services, several issues arise. First, it is usually more challenging to align the personal goals of coachees with organisational objectives considering the triangular contracting process (Stokes and Jolly, 2018; Louis and Fatien Diochon, 2014). An executive coaching contracting process by external practitioners is often affected by the contextual factors, power dynamics and hierarchical positions in the organisation. Accordingly, some potential conflicts between the coach–coachee–organisation in the coaching process like confidentiality issues and loyalty conflicts occur in a triangular coaching relationship (Louis and Fatien Diochon, 2014). Second, most executive coaching practices remain shrouded in mystery due to the nature of coaching intervention: one-on-one interactions and conversations between the coach and coachee (Ellinger *et al.*, 2016). Therefore, assessing and identifying the most appropriate coaching professionals becomes one of the key challenges when leveraging executive coaching services. Following from the debates whether an executive coach needs a background in psychology (Bozer *et al.*, 2014), we aim to identify the key research areas in psychological-informed coaching approaches to initially inform what is known and what is unknown through integrating existing research evidence:

RQ1. What are the key research topics in relation to executive coaching engagements in the contemporary psychological-informed coaching study?

4. The growth of psychological approaches in coaching context

The use of psychology in leadership coaching started in late 1990s (Harris, 1999). Some coaching papers (e.g. Bono *et al.*, 2009) have argued that there is little evidence of differences in practice when comparing chartered psychologists with coaches from other professional disciplines. Nevertheless, psychology which a theoretically grounded science that underpins the processes and understanding of human change is still considered as the key element in generating better coaching outcomes (Grant, 2008; Gray, 2006; Kilburg, 2004). Bono *et al.* (2009) indicated psychologist coaches were more likely to use multisource behavioural data as diagnostic and assessment tools ($d = 0.54$) as well as to establish behavioural change goals ($d = 0.22$) in comparison with non-psychologist coaches. Bozer and Jones' (2018) systematic review outlined seven psychology-related influential factors (e.g. self-efficacy, coaching motivation and trust) in an effective coaching process and outcomes. However, there has yet to be a review that integrates all relevant and up-to-date evidence to specify which areas in psychology have been mostly applied into organisational learning and development (hereafter OL&D) strategy:

RQ2. What are the essential psychological-informed coaching approaches and theoretical frameworks in the current scientific literature? In what way do these psychological frameworks enhance the coaching process and its outcomes?

5. The development of evidence-based practice in coaching

Aligning with Briner's (2012) criticism of coaching research, the quality of existing coaching evidence is questionable, for instance the rigorousness of the research methodology and

outcome evaluations; the appropriateness of sampling strategies (Athanasopoulou and Dopson, 2018; Grover and Furnham, 2016). Regarding coaching as an intervention for developing people (either behaviourally or psychologically), fundamental questions concerning the effectiveness of coaching and the factors essential for an effective coaching outcome need to be answered through the scientific research process. For example, randomised controlled trials (hereafter RCTs) comparing coaching and its outcomes with those of other learning interventions would go beyond short-term self-reports. In comparison with other scientific subjects, such as medical science, the number of trials performed for organisational coaching remains inadequate (Jones *et al.*, 2016). Hence, a review that synthesises the quality of all available existing evidence is the crucial initial step in developing evidence-based practice.

In fact, evidence-based practice or management is more than just using RCTs or quantitative studies in coaching research. It is defined as a scientific decision-making process that promotes the use of the best available research evidence (Briner *et al.*, 2009). Based on the standard of evidence-based practice, this review considered three main aspects when assessing the studies included: the research methodology, evaluation method and sampling strategy used. This kind of analysis will provide a better picture of the quality of existing coaching research:

RQ3. What is the quality of contemporary coaching psychology evidence? (a) What are the main research methodologies used in the psychological-informed executive coaching studies reviewed? (b) What are the most commonly used coaching outcome evaluation methods in the existing coaching literature? (c) What are the participation profiles in these studies?

6. Review methods
This review adopted a quasi-systematic review methodology to scrutinise and synthesise all available relevant evidence through an explicit, transparent and accountable process (Denyer and Tranfield, 2011) due to the complexity of coaching research design. Three review processes are presented in Figure 1.

6.1 Developing the review protocol
To ensure that the review was based on a rigorous and logical process, ten coaching experts (academics or practitioners) from international locations were invited to comment on the draft proposal. Our review panel consisted of nine chartered psychologists whose main focus was the organisational coaching domain (either research or practice) along with one well-experienced scholar in organisational development, to ensure a balanced view.

After consolidating all their comments, a total of 58 search terms (e.g. cogniti* and coaching) and 8 databases (e.g. PsycINFO) were confirmed. In addition, five inclusion
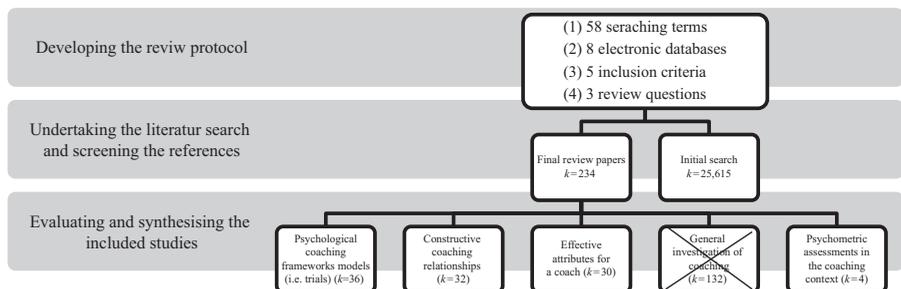

Figure 1.
Overview of the review process

criteria were defined, as follows: written in English; published between 1995 and 2018; empirical research (both quantitative and qualitative studies) setting out clear research methods, participants or evaluations and outcomes; focused on executive coaching; and clearly stated psychological coaching approaches and frameworks, including any psychological mediators, such as interpersonal interactive variables or working alliance.

6.2 Screening the references and synthesising the included studies
The aim of this stage is to conduct the literature search and extract the studies meeting the inclusion criteria. Initially, 25,615 papers were identified. Next, duplicated studies were screened out ($k = 1,201$) and the five inclusion criteria are used to extract critical references. Ultimately, a total of 234 ($k = 234$) studies were included in the final review. All the included studies were listed in an Excel table and clustered into groups on the basis of their research objectives. Afterwards, a narrative synthesis was conducted by integrating their results.

7. Findings
7.1 An overview of existing evidence
This review found that more than half ($k = 139$) of these coaching studies were published in psychology-focused peer-review journals; and nearly 40 per cent ($k = 95$) were in management-related publications. This finding is not surprising as we used several searching keywords related to psychology; nevertheless, this also meets our review purpose to outline a scope of psychological-informed coaching approaches. Unlike in previous coaching reviews (e.g. Athanasopoulou and Dopson, 2018), the impact number of the journals was not used as an evaluation criterion here. Regarding psychological-focused coaching as a fairly new research domain, most of the studies were published in coaching-focused journals (Allen, 2016). In addition, people who conduct coaching research are often pracademics (i.e. an academic and practitioner) and tend to publish their studies in more practitioner-focused journals. Despite some criticisms of potential bias as a result of the dual roles of some researchers, the majority of experimental trials in coaching, which are seen as being at the upper levels in the hierarchy of research evidence (Guyatt *et al.*, 1995), were published in these coaching-focused and practitioner-favoured, peer-review publications. Hence, in this particular case it would have been prejudicial to judge the quality of the evidence on the ranking of the journals.

The awareness of the need to apply more rigorous research methodology to examine the effectiveness of specific coaching frameworks has increased. The number of psychological coaching studies has increased considerably since the start of the twenty-first century. A total of 67 were published in the first decade of this century (between 2000 and 2009). Moreover, the number of published studies on psychological coaching was more than double this ($k = 164$) between 2010 and 2018 (Figure 2). Looking at psychological coaching trials specifically ($k = 36$), 75 per cent ($k = 27$) were published after (and including) 2010.

7.2 RQ1. The key research topics in relation to psychological-focused workplace coaching
The most researched coaching psychology topics identified by this review were examining certain coaching frameworks or models (i.e. trials) ($k = 36$), distinguishing essentials factors for constructive coaching relationships ($k = 32$) and identifying effective attributes for a coach ($k = 30$). The remaining papers were categorised into general investigation of coaching interventions ($k = 132$) and individual psychometric assessments in the coaching context ($k = 4$).

The most commonly applied psychological coaching frameworks, effective attributes of coaches and essential factors of an effective coaching relationship are discussed further in the following section (*RQ2*). The general investigation of psychological coaching
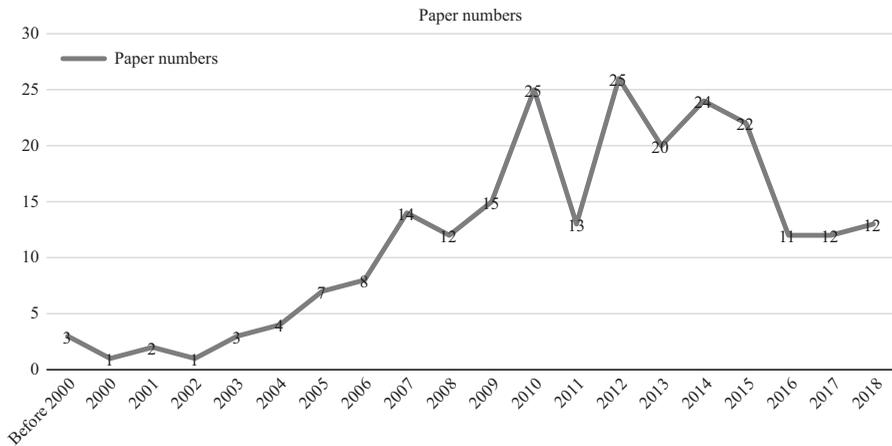
Paper numbers

Figure 2.
Distribution of
year of publication

approaches mainly consists of case studies or interviews exploring coachees' perspectives on the psychological mechanisms of the coaching process, such as leader–member exchange, positive emotion, cognitive behavioural coaching (CBC) experience and so on (e.g. Elston and Boniwell, 2011). However, it is difficult to integrate these results as they generally explore coachees' immediate reactions after the coaching programme without explicit outcome evaluations. Additionally, a few psychometric tests were developed for the purpose of understanding the coachee's workplace motivation, strengths and behaviours, such as the Strengthspotting Scale (Linley *et al.*, 2009) and Hogan's personality inventory (Mansi, 2007).

7.3 RQ2. Most frequently used psychological coaching frameworks and influential factors
From our initial analysis, several frequently examined psychological coaching frameworks and factors were identified: the CBC and coaching relationship. However, the majority of psychological coaching trials in the workplace combined frameworks (e.g. CBC combined with solution-focused) or adopted coaching methods developed by their authors (e.g. cognitive-experiential self-theory and emotional dimensions). A meta-analysis of these psychological coaching trials was not considered in this review because our main purpose was to draw a big picture of existing scientific evidence and identify the essential elements/indicators of an effective coaching process and outcomes. Table I summarises the psychological coaching approaches identified.

Psychotherapeutic theory-cognitive behavioural coaching. CBC was the most frequent exclusively studied framework in this review ($k = 8$, $n = 570$). CBC is defined as an integrative approach that combines the use of cognitive, behavioural, imaginal and problem-solving techniques and strategies within a cognitive behavioural framework to enable coachees to achieve their realistic goals by helping them to overcome blocks to change (adapted Palmer and Szymanska, 2019, p. 108). CBC originated in cognitive behavioural and problem-solving therapies in the USA and UK. The evidence of CBC in an organisational context was first published by Moen and Allgood (2009). Overall, these studies revealed positive associations between CBC and coachees' self-efficacy, self-awareness and organisational commitment (Bozer *et al.*, 2013, 2015; Bozer and Sarros, 2012). The first objective outcome evaluation of a CBC trial was not published until 2012 (Bozer and Sarros, 2012). A nine-month CBC programme with 72 executives ($n = 72$) was conducted. The results showed that job performance as reported by direct supervisors ($F(1,50) = 20.41$, $p < 0.001$, $\eta p^2 = 0.29$) and

Coaching approach	No. of papers	Research method	Psychology in executive coaching
Cognitive behavioural coaching (CBC)	8	RCT ($k = 1$) Between-subject ($k = 4$) Within-subject ($k = 3$)	
GROW model	4	RCT ($k = 2$) Between-subject ($k = 1$) Within-subject ($k = 1$)	
Strength-based coaching	3	Between-subject ($k = 3$)	
Mixed (e.g. CBC+GROW or CBC + solution-focused)	7	RCT ($k = 2$) Between-subject ($k = 4$) Within-subject ($k = 3$)	
Others (e.g. 360 degree or emotional dimensions, etc.)	14	RCT ($k = 7$) Between-subject ($k = 3$) Within-subject ($k = 4$)	**Table I.** The overview of
Total	36		psychological
Note: RCT, randomised controlled trail			coaching frameworks

supervisory-rated task performance ($F(1,94) = 14.40$, $p < 0.001$, $\eta p^2 = 0.22$) were significantly better post-coaching compared with a pre-coaching measurement. This was also the first workplace coaching trial we found that invited coachees' supervisors ($n = 28$) to participate in the outcome evaluation process.

CBC was also combined with several other psychological-informed coaching frameworks, such as solution-focused and GROW model ($k = 5$, $n = 206$). Most of the evaluations still stay at the coachee's cognitive level; for instance, the improvement of the self-efficacy (e.g. Grant, 2014), affective job commitment (e.g. Bozer *et al.*, 2014) or workplace resilience (e.g. Grant *et al.*, 2010).

The working alliance in the coaching process. The professional working relationship between coach and coachee was identified as key psychological mediator for greater coaching outcomes in this review. In addition, trust and transparency were the two key elements for supporting a constructive coaching relationship (Gyllensten and Palmer, 2007). Later, a number of coaching relationship studies (e.g. Baron and Morin, 2009) took up the concept of a therapeutic working alliance in the coaching context to confirm the interrelation between working alliance and coaching outcomes (e.g. self-efficacy). The working alliance theory which is referred to the quality and strength of the collaborative relationship between the client and therapist (Hatcher and Barends, 2006) supplies clearer purposive paths for the collaboration. The working alliance includes three features: mutual agreed goals, development tasks and bonds (Bordin, 1979) and they offer specific aspects the helper may concentrate on in the collaborative relationship.

The field of coaching relationship was categorised by the match between coach and coachee (e.g. gender or personality) and the contributions of coach and coachee to this alliance (e.g. coaches' behaviours affecting coachees' motivation to change) in this review. Several coaching relationship papers (e.g. de Haan and Duckworth, 2012; Gray and Goregaokar, 2010) examined whether gender, personality (e.g. Myers–Briggs type indicator) or perceived similarity is the main factor determining the quality of the professional relationship between coach and coachee. None of them reported statistically significant results. In fact, Baron and Morin's (2009) study suggested that the working alliance develops during the coaching process rather than being reliant on an objective matching. Therefore, some researchers (Gessnitzer and Kauffeld, 2015) have proposed that "the coaching provider and receiver's behaviours" and the "incidents" (e.g. building trust, commitment and rapport for a coachee-centred process) that occur during the coaching

process influence the effectiveness of the coaching alliance. In addition, coachees' motivation to transfer and readiness to change have been identified as key factors in the workplace coaching alliance (Baron and Morin, 2009; Grant *et al.*, 2009) .

A total of 30 included studies ($k = 30$) investigated effective attributes of a coach that enable a constructive coaching relationship. Bozer *et al.* (2014) distinguished that a coach's academic background in psychology improved coachees' self-efficacy and job performance as reported by their direct supervisors. However, other studies indicated both psychology and management-related theories (e.g. leadership and management) play equally parts in existing coaching research domain (Maritz *et al.*, 2009; Wasylyshyn, 2003). In relation to individual coach's attributes, interpersonal skills, emotional support; facilitating learning; motivation enhancement; and building the coaching relationship were specified (e.g. de Haan *et al.*, 2011; Passmore, 2010; Stevens, 2005) (Table III). Some studies demonstrated (e.g. de Haan *et al.*, 2010; de Haan and Nieß, 2012) coaches and coachees often have shared critical moments; and as a coach, being able to deal with one's own critical moments during the coaching process is one of the essential indicators in the formation of an effective coaching relationship (Day *et al.*, 2008). The triangular coaching relationship (coach–coachee–organisation) which considers the social context in the coaching process received some scholars' attention in recent years (e.g. Louis and Fatien Diochon, 2014), nevertheless, further investigation is required.

7.4 RQ3. The quality of existing coaching evidence

The research methods used in the studies were mainly case studies ($k = 72$), questionnaires ($k = 43$) and interviews ($k = 35$). This implies current stage of coaching studies remained at the level of general investigation and exploration because coaching is still a very young research domain.

In order to draw a clear picture of the current evidence, we identified the most commonly used evaluation methods from these experimental studies (Table II). A total of 119 evaluations were used ($m = 3.30$) across these trails ($k = 36$). Hence, the range of workplace coaching evaluations was considerably diverse.

Objective performance or behavioural evaluations (i.e. rated by a third-party), such as the Multifactor Leadership Questionnaire, were adopted by more than half ($k = 20$) of these trials (Table II). In addition, coachees' job satisfaction and organisational commitment were often measured after the coaching sessions ($k = 11$). Job satisfaction is a set of favourable or unfavourable feelings and emotions through which employees view their work (Newstrom, 2007), while organisational commitment is defined as the "strength of a person's bond with the organization" (Wahn, 1998, p. 256). Several studies found positive associations between employees' job satisfaction, organisational commitment and job performance (e.g. Sharma and Dhar, 2016), and hence we have classified them into the same evaluation group in this review. Moreover, coachees' self-efficacy levels were evaluated in several CBC and GROW model coaching papers (e.g. Grant, 2014). Self-efficacy is described as people's beliefs about their ability to have an effect (Bandura, 1979). Such beliefs have been identified as being the key mechanism for enhancing job performance (Alessandri *et al.*, 2015). Accordingly, self-efficacy scales have been increasingly used as a preliminary indicator of the effectiveness of learning interventions. Furthermore, the psychological well-being and states of coachees following coaching intervention also appear to be of concern to organisations, such as coachees' level of resilience, stress and anxiety (e.g. Grant, 2014)

The majority of the psychological coaching trials reviewed in this study employed scientific-based approaches to measure coachees' specific proximal and distal outcomes (Greif, 2013). However, the self-report evaluations still play a dominant role in contemporary coaching research.

Authors	Year	Journal/Issue	Coaching model	Theoretical foundation	Research method	No. of evaluations	Evaluations	Participant
Bozer and Sarros	2012	International Journal of Evidence Based Coaching and Mentoring, 10(1)	CBC	Psychotherapy	Between-subject	5	Self-job performance scale Supervisory-rated task performance scale (O) Coachee's self-awareness Coachee's self-job affective commitment Coachee's career satisfaction	96 (Ex:68, Con: 28): Israel
Bozer et al.	2015	Consulting Psychology Journal: Practice and Research, 67(3)	CBC	Psychotherapy	Within-subject	6	Gender (coach–coachee match) Coachee's job satisfaction Coachee's organisational commitment Coachee's self-awareness Personality match Performance outcome (O)	36: Israel
Bozer et al.	2013	Journal of Management Development, 32(3)	CBC	Psychotherapy	RCT	9	Coachee's learning goal orientation Coachee's pre-training motivation Coachee's feedback receptivity Coachee's developmental self-efficacy Coachee's job performance by coachee and direct supervisor (O) Coachee's supervisory-related task performance (O) Coachee's career satisfaction Coachee's self-awareness Coachee's job affective commitment	101 (Ex:72, Con: 29): Israel
Bright and Crockett	2012	Coaching: An International Journal of Theory, Research and Practice, 5(1)	CBC	Psychotherapy	Between-subject	1	Performance strategy inventory (PSI)	115: USA

(continued)

Table II.

Authors	Year	Journal/Issue	Coaching model	Theoretical foundation	Research method	No. of evaluations	Evaluations	Participant
David et al.	2016	Journal of Rational-Emotive and Cognitive-Behavior Therapy, 34	CBC	Psychotherapy	Within-subject	4	Performance appraisal Profile of Emotional Distress General Attitudes and Beliefs Scale Manager Rational and Irrational Beliefs Scale	59: Italy
Markus	2016	The Journal of Applied Behavioral Science, 52(2)	CBC – immunity to change	Psychotherapy	Within-subject	2	Motivation measures Perceived progress measures	71 [Ex:46, Con:25]: USA
Moen and Allgood	2009	Organization Development Journal, 27(4)	Cognitive-process	Psychotherapy	Between-subject	1	Leadership self-efficacy	127 senior managers and executives (no other details): Norwegian
Ratiu et al.	2016	Journal of Rational-Emotive and Cognitive-Behavior Therapy, 35	CBC	Psychotherapy	Within-subject	1	Multifactor leadership questionnaire (O)	11 mid-level managers: Romania
Nielsen et al.	2015	Safety Science, 71 (B)	GROW	Behaviourism	RCT	8	Process evaluation: safety participation (O) Process evaluation: affective commitment Process management: trust Effect evaluation: safety behaviour (O) Safety leadership (O) Safety knowledge (O) Safety involvement (O)	92 (coaching only): Denmark
Moen and Federici	2012	Coaching: An International Journal of	GROW	Behaviourism	RCT	3	Goal setting Self-efficacy	20 executives: Norwegian

Authors	Year	Journal/Issue	Coaching model	Theoretical foundation	Research method	No. of evaluations	Evaluations	Participant
		Theory, Research and Practice, 5(2)					Attribution Style Assessment Test (ASAT)	
Burke and Linley	2007	*International Coaching Psychology Review, 2(1)*	GROW	Behaviourism	Within-subject	3	Self-concordance-perceived locus of causality (PLOC) – type of motivation Alignment with personal value Coachee's commitment	26 senior managers
Evers et al.	2006	*Consulting Psychology Journal: Practice and Research, 58(3)*	GROW	Behaviourism	Between-subject	2	Outcome expectations Self-efficacy beliefs	60 (Ex:30, Con:30)
MacKie	2014	*Consulting Psychology Journal: Practice and Research, 66(2)*	Strength-based	Positive psychology	Between-subject	4	Realise2 Strength Inventory Multifactor leadership questionnaire (O) Adherence to strengths protocol scale (process) Manual adherence checklist	31(Ex:14, Con:17): Australia
MacKie	2015a	*Coaching: An International Journal of Theory, Research and Practice, 8(2)*	Strength-based	Positive psychology	Between-subject	4	Multifactor leadership questionnaire (O) Belief coaching readiness Core self-evaluation scale (CSES) Developmental readiness questionnaire	30 (Ex:13, Con:17): Australia
Mackie	2015b	*International Coaching Psychology Review, 10(2)*	Strength-based	Positive psychology	Between-subject	1	MLQ 360-multifactor leadership questionnaire (O)	31(Ex:14, Con:17): Australia
Bozer et al.	2014	*Personnel Review, 43(6)*	CBC + solution-focused	Psychotherapy	Between-subject	7	Academic background Credibility of coaching source measure Job performance (Griffin et al, 2007, 27-item scale)	101 (Ex:72, Con:29): Israel

Table II.

Authors	Year	Journal/Issue	Coaching model	Theoretical foundation	Research method	No. of evaluations	Evaluations	Participant
							Coachee's supervisory-rated task performance (O) Coachee's self-awareness Coachee's job affective commitment Coachee's job satisfaction	
Lemisiou	2018	*International Coaching Psychology Review*, Vol. 13 No. 2	(1) Solution-focused (2) Strength-based	Psychotherapy and positive psychology	Within-subject	1	Emotional and social intelligence was the ESCI-360o (O)	44: Greece
Grant	2014	*Journal of Change Management*, 14(2)	CBC + solution-focused	Psychotherapy	Within-subject	6	Goal attainment scale (GAS) Solution-focused thinking Change readiness Leadership self-efficacy Resilience Workplace satisfaction	38
Grant *et al.*	2009	*Journal of Positive Psychology*, 4(5)	(1) 360-degree (2) CBC (3) Solution-focused (4) GROW	Psychotherapy	RCT	4	Goal attainment scale (GAS) Resilience Depression, anxiety and stress (DASS-21) Workplace well-being index	41 executives: Australia
Yu *et al.*	2008	*International Coaching Psychology Review*, 3(2)	CBC + solution-focused	Psychotherapy	Within-subject	8	Taking charge Core performance behaviours (O) Innovative behaviour measure (IBM) (O) Goal attainment scale (GAS) Self-reflection self-insight (SRIS) Motivation-role-breadth self-efficacy scale (RBSES) Positive affect - negative affect (PANAS)	10 managers: Australia

Table II.

Authors	Year	Journal/Issue	Coaching model	Theoretical foundation	Research method	No. of evaluations	Evaluations	Participant
Grant et al.	2010	Consulting Psychology Journal: Practice and Research, 62(3)	CBC+GROW + solution-focused	Psychotherapy and behaviourism	RCT	5	Scales of psychological well-being (SPWB) / Goal attainment scale / Resilience / Depression, anxiety and stress / Workplace well-being index / Leadership style	45 leaders in schools: Australia
Weinberg	2016	International Coaching Psychology Review, 11(1)	(1) Solution-focused (2) 360 feedback	Psychotherapy and behaviourism	Between-subject	2	The General health Questionnaire (GhQ-12) / Workplace environment (oMWe)	76 (Ex:46, Con:30)
Sherlock-Storey et al.	2013	The Coaching Psychologist, 9(1)	(1) Positive psychological capacities through micro-interventions (2) Resilience intervention	Positive psychology	Within-subject	2	Psychological capital questionnaire / Attitude to organisational change measure (readiness for change)	12 managers
Howard	2015	Frontiers in Psychology, 6(445)	Role of the positive emotional attractor (PEA) vs negative emotional attractor (NEA) in intentional change	Positive psychology	RCT	1	360 feedback on emotional competence inventory (O)	18
Salazar et al.	2012	Competitiveness Review: An International Business Journal, 22(5)	Emotion dimensions, constructive approach to the psychology of learning		Between-subject	3	Level of acceptance of proposed improvement measures / Level of application of the measures / Level of satisfaction among participating managers	240
Moen and Federici	2012	Organization Development Journal, 30(3)	Self-directed learning -interpersonal skills and coachees' motivation	Person-centred coaching psychology/ humanistic perspective	RCT	1	Needs satisfaction work scale	144 executives and middle managers (Ex:70, con:74): Norwegian

(continued)

Table II.

Table II.

Authors	Year	Journal/Issue	Coaching model	Theoretical foundation	Research method	No. of evaluations	Evaluations	Participant
Nieminen et al.	2013	Human Resource Development Quarterly, 24(2)	MSF-multisource feedback	Behaviourism	Within-subject	1	MSF-multisource feedback (O)	469 managers (Ex:227, Con:242): USA
Jarzebowski et al.	2012	International Coaching Psychology Review, 7(1)	Positive and authentic feedback	Positive psychology	RCT	3	Coachee's motivation level Coachee's mood scale Regulatory focus questionnaire (RFQ)	29 (Ex:17, Con:12): Australia
Olivero et al.	1997	Public Personnel Management, 26(4)	Goal setting and feedback	Constructive, behaviourist and experiential psychology	Within-subject	1	Coachee's productivity	23: USA
Jones et al.	2006	Leadership and Organization Development Journal, 27(7)	Building relationship, GROW and 360 feedback	Psychotherapy and behaviourism	RCT	1	Individual flexibility scale (proactivity, adaptability, resilience and general flexibility)	67 (Ex:23, Con:44): Australia
Cerni, T., Curtis, G.J. and Colmar, S. H.	2010a	International Coaching Psychology Review, 5(1)	Epstein CEST-constructive thinking	Psychotherapy	RCT	1	Multifactor leadership questionnaire (MLQ) 5X (O)	14 school principals (Ex:8, Con:6)
Luthans and Peterson	2003	Human Resource Management, 42(3)	360 feedback coaching	Behaviourism	Within-subject	4	Managerial feedback profile (MFP)-360 degree (O) Coachee's job satisfaction Coachee's organisational commitment Coachee's turnover intention	20 managers
Cerni, T., Curtis, G.J. and Colmar, S.	2010b	Journal of Leadership Studies, 4(3)	Cognitive-experiential self-theory (CEST)	Psychotherapy	RCT	3	Multifactor leadership questionnaire (MLQ) 5X (O) Rational-experimental inventory-long from (REI-L) Constructive thinking inventory (CTI)	14 school principals (Ex:8, Con:6)

Authors	Year	Journal/Issue	Coaching model	Theoretical foundation	Research method	No. of evaluations	Evaluations	Participant
Kochanowski et al.	2010	Journal of Leadership and Organizational Studies, 17(4)	Positive feedback	Behaviourism and positive psychology	Between-subject	1	Influence behaviour questionnaire (IBQ)(O)	30 managers (Ex:15, Con:15): USA
Bowles et al.	2007	Leadership and Organization Development Journal, 28(5)	Goal setting	Constructive, behaviourist and experiential psychology	Between-subject	3	Participant buy-in (rated by the coach) (O) Leadership competency (rated by the coach)(O) Performance (rated by subordinates) (O)	30 middle managers and 29 executive managers: USA Army
Williams and Lowman	2018	Consulting Psychology Journal: Practice and Research, 70(3)	Goal-focused coaching and process oriented coaching	Constructive, behaviourist	RCT and a switching-replications	2	Leadership competencies Overall leadership behaviours (O) Leadership Practices Inventory (LPI) (O)	64: USA

Notes: Ex, experimental group; Con, control group; O, objective evaluation

Table II.

In relation to the research participants in the studies, we first reviewed the 39 experimental trials. More than half of these studies ($k = 20$) involved the coachees' organisations (e.g. line managers or subordinates) in the evaluation process by adopting objective, behaviour-based assessment schemes (e.g. 360-degree feedback) (see Table II). However, organisational perspectives were not extensively canvassed in the majority of studies. A few of the qualitative ones invited the coaching sponsors, such as HR practitioners and line managers, to articulate their views on the essential ingredients of an effective coaching process (Dagley, 2010). Furthermore, de Haan and Nieß (2015) applied a combined research methodology (interviews with a quantitative coding process) to analyse the critical moments for the coach, coachee and sponsors during the coaching process in terms of enhancing the coaching relationship and outcomes.

8. Conclusion

This review clarifies the psychological research evidence, such as cognitive behavioural approach, in the workplace learning domain, specifically in executive coaching setting. In addition, the research focus of workplace learning has been shifted to process orientation by investigating contextual factors like the professional helping relationship between the coaching dyad that enhance coaching outcomes.

Overall, this review suggests that a forward-looking cognitive state in coachees should be encouraged at the initial stage of the coaching engagement. Also, a coaching relationship is more likely to be effective when coachees have sufficient understanding of themselves (i.e. self-realisation) and when their long-term considerations (i.e. self-actualisation) are prioritised above short-term development goals. Accordingly, psychology can play an important role in executive coaching engagements, especially the application of psychotherapeutic theories in order to facilitate realistic thinking and motivation to change. Considering the lack of a standardised benchmark for external coaching selection and evaluation purposes, the conceptual psychological-focused coaching framework presented below can serve as preliminary guideline for the organisation when employing executive coaching services. In general, there are three messages for the future workplace learning practices, in particular in coaching intervention. First, the employed executive coach should obtain fundamental psychological knowledge, such as cognitive- and behavioural-based science since some frameworks like CBC and GROW model have been indicated to establish the learner's (i.e. coachee) positive mindset for change. Second, the executive coach should build up an effective professional helping relationship with coachees at the initial stage by using the behaviours identified from this review, for instance interpersonal skills and emotional support and motivation enhancement (Table III). Third, scientific validated evaluations should be adopted to promote evidence-based practice. This review has identified certain most frequently applied coaching evaluations, for example, 360-degree multifactor feedback, self-efficacy belief, organisational commitment and psychological well-being (Table II and Figure 3).

This review took a distinct angle and approach to scrutinise psychological-informed executive coaching evidence. This review initially clarifies a prolonged debate between psychological and non-psychological coaching practice. Despite the intensive literature discussion on the significant role psychology plays in the executive coaching context; our review results reveal existing scientific evidence only indicated psychotherapeutic-rooted theories (e.g. CBC and working alliance) with stronger foundation on executive coaching outcomes. Our intention is not to examine which psychological approach stands out but to raise awareness of the need to incorporate psychological-informed coaching practice into OL&D strategy, and the identified research gaps can be research trends to follow up.

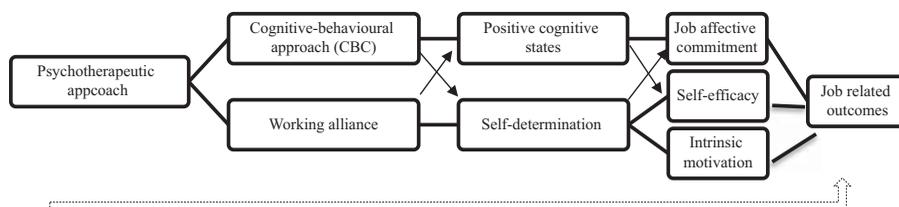| Theme	Behaviours/Skills	References
Interpersonal skills and emotional support	Emotional support Communication skills (e.g. active listening, approachable and open) Dealing with clients' critical moments Empathy	Cox and Bachkirova (2007), O'Dell (2011), Greif (2010), Maritz *et al.* (2009), Passmore (2010), de Haan and Nieß (2012)
Facilitating learning	Willingness to help Promoting a learning orientation Creating a learning environment	Stevens (2005), Gettman (2008), Drum (2007), de Haan *et al.* (2011)
Motivation enhancement	Motivational reinforcement Helping clients to overcome negative mindsets	Marshall (2006), Gettman (2008)
Building the relationship	Authenticity Honesty Building trust and rapport	Maritz *et al.* (2009), Drum (2007), Stevens (2005), Griffiths and Campbell (2008), Passmore (2010), Kleinberg (2001)

Table III.
Essential effective attributes, skills and behavioural indicators for an external coach

Figure 3.
A preliminary psychological-focused coaching framework at the workplace

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