Abstract

Purpose: This article develops a programme theory for Cognitive Behavioural Coaching (CBC) in workplace settings to provide a theoretical foundation for its application. While CBC is frequently cited as an evidence-based coaching approach, its effectiveness in organisational contexts remains contested. This review aims to clarify how CBC interventions generate outcomes.

Methods: A realist review methodology was used to explore the underlying mechanisms of CBC interventions in workplace settings. A total of 68 relevant articles were analysed to identify patterns of causation and key contextual factors influencing CBC outcomes. The study follows Pawson et al.'s (2005) realist approach, addressing what works, in what circumstances, and how.

Findings: The review generates seven provisional programme theories explaining CBC effectiveness across three key themes: cognitive processes, behavioural mechanisms, and goal progression. The findings illustrate the conditions under which CBC facilitates positive change or fails to do so, highlighting both its potential benefits and risks.

Practical Implications: By developing programme theory, this review provides practitioners and researchers with a framework to design, implement, and evaluate CBC interventions more effectively. The findings contribute to bridging the gap between coaching theory and practice, ensuring CBC applications in organisational settings are context-sensitive and evidence-based.

Conclusion: This study advances the theoretical foundation of CBC by explaining its mechanisms of action and context-dependent effectiveness. The proposed programme theories provide a conceptual roadmap for future research and practical applications of CBC in workplace coaching.

Keywords: Cognitive Behavioural Coaching, Workplace Coaching, Realist Review, Programme Theory, Well-being.

Purpose: Coaching Industry and Need for Evidence-Based Coaching (EBC)

One-to-one coaching is gaining popularity as a well-being and development intervention in organisations. The International Coaching Federation (ICF), the main accrediting body for coaching practices, reported that the industry had a revenue increase of 60% from 2019" (ICF, 2023). Despite this growth, coaching is under-regulated compared to established professions in psychology and mental health, such as psychotherapy and counselling (Passmore & Evans-Krimme, 2021). This creates challenges for organisations in assessing coaches and risks client confusion, potentially leading to malpractice or unintended outcomes (Grant, 2016). Therefore, evidence-based approaches are needed to assist in understanding how coaching works, who should be qualified as a coach, and what the expected outcomes are.

The diversity in coaches' backgrounds reflects the wide range of methodological approaches in practice (Minzlaff, 2019). Grant (2006) proposes the term evidence-based coaching (EBC) to describe a knowledge base informed by empirical research. This can be achieved through research in coaching psychology, defined as the application of behavioural science to improve life, work and well-being for individuals

without significant mental health issues (Grant, 2006). Studies in behavioural sciences since the 1990s suggest that coaching can enable behavioural change to enhance goal attainment and well-being (Grant, 2003; Grant, 2015; Green et al., 2006). However, theoretical approaches derived from behavioural sciences and psychology have been applied to coaching practices without sufficient empirical testing (Lai & Palmer, 2019).

This article addresses this knowledge gap by using realist methodology to develop programme theory to explore how coaching mechanisms produce outcomes in organisational contexts.

EBC: Cognitive-Behavioural (CB) Approach

Cognitive behavioural coaching (CBC) combines cognitive, behavioural and problem-solving techniques to help clients achieve their realistic goals (Palmer & Szymanska, 2008). It is the most researched form of EBC (Minzlaff, 2019). However, CBC's initial advocacy relied on the evidence base of cognitive behavioural therapy, which overlooks key differences between coaching and therapy such as target population, context and practitioner qualifications (Grover & Furnham, 2016; Neenan, 2008).

CBC derives its theoretical premise from several theories, such as the cognitive therapy model (Figure 1), and the goal-setting theory (Beck, 1967; Beck, 1991; Locke & Latham, 1990; Passmore et al., 2012). The cognitive therapy model theorises that individuals' perception of situations shapes their emotions and behaviours. This perception reflects cognition, referring to the process and content of thoughts (Fenn & Byrne, 2013). Problems arise when cognitive distortions occur, identified as maladaptive or biased thought patterns that disrupt accurate perception and contribute to maladaptive emotions and behaviours (Beck, 2020). Metacognition, or the awareness and regulation of one's own thought processes, plays a critical role in identifying and challenging distortions, enabling individuals to reflect on and modify their cognitive patterns to foster more adaptive outcomes (Wells, 2002). The goal-setting theory emphasises the significance of determining specific and challenging goals for motivation and performance (Locke & Latham, 1990). Together, these theories inform CBC's cognitive, emotional, behavioural and goal progression mechanisms.

Thus, CBC posits that emotions and subsequent behaviours stem from thought processes. It aims to change negative thoughts that cause counterproductive behavioural patterns through self-reflection and the individual's ability to observe one's thoughts to recognise problematic thinking

patterns and modify them to optimise personal functioning (Passmore et al., 2012). CBC also adopts a behavioural, action-based approach where the coach and coachee design a structured, goal-directed set of actions towards the coachee's goals (Neenan, 2008; Neenan & Dryden, 2013). Ultimately, CBC prepares coachees to develop a mentality to independently self-coach (Cox et al., 2014b; Neenan, 2008).

Figure 1: Beck's Cognitive Model (Beck;1991)

Review Rationale

Workplace coaching interventions are context-dependent as they are influenced by organisational culture, leadership, interpersonal relations, competing priorities and timing (Theeboom et al., 2014). Consequently, these interventions evolve based on internal feedback loops (Cox et al., 2014a; Peterson, 2007). Coaching is cross-disciplinary spanning disciplines such as psychology, behavioural science, business, adult education and philosophy (Grant & Cavanagh, 2007; Lai & McDowall, 2014). Therefore, intervention design can be cross-fertilised with other therapeutic, psychological, and behavioural interventions. Seeing coaching as a social complex intervention (a multifaceted, context-sensitive process involving dynamic interactions between individuals and their environments) highlights the need for a methodology that can

unpack these complexities. Realist methodology is suited to this purpose, as it explores how and why interventions work in specific contexts, focusing on the interplay between context, mechanisms, and outcomes (Pawson, 2006b).

Rooted in realist philosophy, realist reviews are theory-driven and focus on understanding how and why certain outcomes occur in specific contexts (De Weger et al., 2020). Theories are commonly presented as Context-Mechanism-Outcome (CMO) configurations (as explained in Figure 3 below) detailing the elements of programme theory. Programme theory explains hypotheses on how the programme works. This review's CMO configurations explain how CBC interventions generate goal attainment and well-being outcomes (Jagosh et al., 2014). The review question is,

Regarding workplace CBC interventions, what works, or does not work? In what context and how?

This review aims to develop provisional CMO configurations that can be further refined through primary research (Pawson et al., 2005).

Methods

This study is registered on PROSPERO (ID: CRD42023407219). The study protocol detailing the review

methods is Published to ensure reproducibility (Abdelfatah et al., 2025). This review is structured and presented according to the RAMESES publication standards for realist reviews (Wong et al., 2015). Figure 2 outlines the process of completing a realist review which is discussed in more detail in this section.

Figure 2: Realist Review Process adapted from Wong et al. (2005)

Step 1: Defining Review Scope

To define the scope, a pre-search of the literature was conducted using broad terms such as "well-being," "mental health," and "coaching" via "Google Scholar" and "One Search." The Context-Intervention-Mechanism-Outcome (CIMO) framework (Booth et al., 2018) was employed to refine keywords and clarify the search strategy, emphasising realist elements (C, M, O) alongside the intervention (I). The refined CIMO framework is detailed in Figure 3. Stakeholder groups (three coaches, two coachees, and three HR representatives) were consulted to ground the review in a real-world perspectives (Malengreaux et al., 2024). Their feedback highlighted the need to explore how cognitive-behavioural coaching (CBC) influences well-being and goal attainment in workplace settings, ensuring the review remained relevant to practice.

Step 2: Search Strategy

The team worked with an information specialist to develop a sensitive search—a thorough approach to identify all potentially relevant articles, including those where key terms might not appear explicitly in titles or abstracts. Three rounds of searches were conducted across six databases (PsycArticles, PsycINFO, SocINDEX, ERIC, Medline, Academic Search Ultimate), encompassing all literature published up to 2024.

The first iteration focused on evidence-based coaching techniques and empirical methods, including systematic reviews and meta-analyses. The second iteration gathered evidence on CBC outcomes, identifying articles linking CBC with goal attainment, well-being, self-limiting beliefs, and self-defeating behaviours resulting from cognitive distortions. The third search was conducted towards the end to identify new publications relevant to the review.

Step 3 and 4: Document Appraisal and Data Extraction

We included diverse evidence types, including various study designs and commentaries (Duddy & Roberts, 2022). Titles and abstracts were initially screened for relevance followed by full-text screening. Decisions on inclusion were

guided through team discussions when unclear (Pawson, 2006a; Pawson et al., 2005).

Documents were appraised considering relevance, rigour and richness (Dada et al., 2023; Wong et al., 2015). Relevance was assessed by whether the article contributed to refining or testing programme theory. Rigour was evaluated based on its explanatory power and data credibility, plausibility and trustworthiness, while richness was judged by the depth of details on context and concepts being researched (Dada et al., 2023). Evaluative judgments did not determine article inclusion but informed the review's analysis and synthesis process. Tables 1 and 2 outline the appraisal criteria and inclusion criteria per the CIMO framework.

Table 1: Appraisal Criteria (Dada et al., 2023; Wong et al., 2015)

Table 2: Relevance Criteria

Data were extracted using NVivo (1.7.1), starting with deductively creating codes based on an adapted tool from Brown et al. (2021). The original tool was designed to extract data for realist reviews, focusing on identifying Context-Mechanism-Outcome (CMO) configurations. For this review, the tool was adapted to specifically incorporate codes related to

coaching, goal attainment, and well-being outcomes. This tool served as a guide for initial coding, with new codes added inductively as data emerged to refine the programme theory. Book chapters and qualitative studies, offering rich insights into intervention mechanisms and participant experiences, were coded first, followed by mixed methods and quantitative studies, which mainly informed outcome-related theories. Data extraction ceased upon reaching theoretical saturation (Wong et al., 2013).

Step 5: Analysis and Synthesis Process

Analysis and synthesis were done iteratively (Dalkin et al., 2021). Coded text with explanatory value was highlighted and annotated to document causal processes. Annotations and codes were organised into CMO categories, with each CMO created as a code and memo in NVivo to track references and thoughts for refinement. This process involved thoughts about situating mechanisms, juxtaposing data, consolidating outcomes, and reconciling differences to explain contradictory outcomes and resolve them based on previously conducted appraisals (Wong et al., 2013). CMO testing and refinement continued until no further adjustments were needed, and all articles were considered. The final CMOs are presented below.

Results

The CMOs are configured in reference to the approach by Dalkin et al. (2015) who distinguishes between the resource (provided by the programme) and reasoning (how individuals respond to those resources) elements of mechanisms, as detailed in key definitions section in Figure 3. The presented CMO configurations reflect the resource mechanisms (R) activated when introduced in suitable contexts (C) to trigger the reasoning mechanisms (RM) on the coachee's behalf and generate proximal outcomes (O), in the short term as a direct output from the programme, and distal outcomes (DO) that might take longer to manifest after the programme (Jagosh et al., 2014). Figure 4 summarises the configured CMOs.

Figure 4: Context-Mechanism-Outcome-Configuration

Study and Sources Characteristics

A total of 68 relevant articles were deemed relevant for this review, including 26 commentaries from key authors that did not include empirical evidence. Other sources include 11 book chapters, 13 quantitative studies, two protocols (studies not published), one qualitative study, three book reviews, seven books, three literature reviews, a mixed methods study and a descriptive case study. Figure 5 presents the search flow chart.

Figure 5: Search Flow Chart

Overview of Reported Outcomes

Out of the reviewed articles, 44 were theoretical papers and did not include empirical evidence. In this type of literature contained information about CBC theories, concepts, techniques and frameworks. The remaining articles had an empirical element. Studies mostly reported significant improvements after the application of CBC, in metacognitive awareness (Beddoes-Jones & Miller, 2007; Grant, 2003; Gyllensten et al., 2010), well-being (Hultgren et al., 2016; Jones et al., 2021; Lungu et al., 2021), goal striving and attainment (Hultgren et al., 2016; Spence et al., 2008), hope (Green et al., 2006), self-determined motivations (Jones et al., 2021), quality of life and work performance (David & Cobeanu, 2016). Other studies reported significant reductions in stress (Gardiner et al., 2013; Ogba et al., 2020), decisional and behavioural procrastination (Karas & Spada, 2009), perfectionism, self-handicapping (Kearns et al., 2007) and maladaptive cognitions (David & Cobeanu, 2016). While the validity of these outcomes could be subject to methodological critiques, the focus of this review is on the proposed mechanisms for these effects. Supplementary material detailing the included articles is available upon request.

Main Findings

Contextual Factors

This section presents the contextual factors identified as necessary to trigger CBC mechanisms and outcomes. These factors are grouped in this section as they are mostly discussed in the literature as general prerequisites to successful coaching. Given that links between context and mechanisms or outcomes were not evident from the data within the reviewed literature, those links were not forced during configuration (Jagosh, 2023). Thus, the potential contextual factors are presented alongside the provisional CMOs in Figure 4.

The recent meta-analysis conducted by Tomoiagă and David (2023) revealed that the mode of delivery (in-person, online, or in group settings), domain of CBC coaching (health, life, executive), participants' age and duration of the intervention in weeks do not significantly alter effectiveness. This result suggests that CBC practitioners can strategically integrate various delivery formats and methods without being constrained by contextual factors. However, other contextual factors that were found to impact coaching mechanisms are divided into four categories concerning the coachee attributes, organisational factors, coach qualifications and coaching alliance.

In the first category, two necessary coachee attributes are identified. The first is the coachee's capacity for reflection (Neenan, 2008) or, as termed by Michalos (2014), introspection (C1), which is the skill of practising "inner silence with self-observation" (Michalos, 2014, p. 403), in examining one's thoughts and emotions. The absence of reflective ability can hinder the coaching efforts in generating self-awareness for the coachee and hence impede the process of identifying problematic thinking. The second attribute is a coachee's readiness and motivation to change (C2), as according to Minzlaff (2019) CB approaches are primarily chosen to assist those who are actively seeking help. Further, Tomoiagă and David (2023), identifies higher effect sizes for female coachees, but this gender dimension has not been thoroughly explored in the existing CBC literature.

The second category pertains to organisational factors that can influence outcomes. Anstiss and Passmore (2012) propose the term 'controlled motivation' to describe the external pressures that organisations place on employees to engage in coaching interventions, which is also likely to be met with resistance from coachees. Hence, an important contextual factor to consider is how the organisations are presenting and communicating (C3) coaching interventions to their employees to avoid evoking resistance. In a recent realist review looking

into programmes to enhance well-being at work, Micklitz et al. (2021) supports that employees are more inclined to participate in programmes framed as professional development initiatives and more reluctant to engage with mental health programmes, especially in cultures where mental health issues are stigmatised. Active communication can be established via awareness sessions (C4), or sometimes training, presenting the main techniques of CB approaches to help the coachees adjust expectations (Green et al., 2006; Neenan, 2008). Additionally, Tomoiagă and David (2023) identifies that continued participation in coaching sessions correlates positively with improvement, emphasising the value of sustained engagement for optimal outcomes.

The third category of contextual factors entails the coach's qualifications. Typically, CBC interventions aim to address the specific issue of each coachee to mutually devise specific strategies and actions to tackle this issue (Kearns et al., 2007). Thus, the coach's ability to assess and conceptualise each case (C5) is crucial in personalising the coaching experience to generate beneficial outcomes as per each coachee's need (Breitmeyer, 2016). The coach also needs to know how to build rapport (C6) with his/her coachee to address potential resistance to coaching in the workplace or reluctance to share personal or non-work related concerns.

The fourth category focuses on the coaching alliance (C7), identified as a primary antecedent to coaching outcomes (Wang et al., 2021). O'Broin and Palmer (2009) characterise an effective coaching alliance as involving both parties' agreement to collaborate on goals, tasks and sharing views on how the coachee's issue will be addressed. They reference Stober and Grant (2006) on the importance of collaboratively shaping the structure of this alliance through open discussion and agreement. This agreement fosters transparency in the relationship aiding the trust-building process (C8).

Provisional Programme Theory

Drawing on the configured Context-Mechanism-Outcome (CMO) configurations, an overarching "IF-THEN-LEADING TO" statement (Punton et al., 2020) was developed to summarise the overarching programme theory,

"If employees participate in CBC, they learn to identify, challenge, and replace negative automatic thoughts, cognitive distortions, and self-limiting beliefs. This leads to a more proactive mindset, improved goal attainment, and enhanced well-being. These outcomes are driven by psychological mechanisms (e.g., increased metacognition and improved stress responses) and practical mechanisms (e.g., effective goal-setting, action planning, and feedback)."

Figure 4 and Table 3 present the configured CMOs. Each CMO is further described in this section along with corresponding evidence from the literature.

Figure 5: Context – Mechanism – Outcome Configurations

Table 3: Review Findings: Context – Mechanism – Outcomes Configurations

CMO 1 and 2: Coaching conversations for exploration

The first two CMOs concern the development of personal individual skills and readiness for the change necessary to engage with CBC conversations. According to Greif et al. (2022), coaching is a future-oriented, Socratic dialogue between a coach, who acts as a facilitator, and the coachee, aimed at enhancing self-awareness and fostering personal responsibility. These conversations are also aimed at cultivating coachees' psychological skills to address existing maladaptive thinking patterns to moderate their impact on behaviour and emotions.

Coaching is seen as "a systematic and intensive promotion of result-oriented problem- and self-reflection", where reflections are targeted more towards the social and organisational contexts (Greif et al., 2022, p. 4). Metacognition defined as thinking about thinking (Brewin, 2006), describes the awareness and understanding of one's thought processes. It allows the cultivation of thinking skills in terms of the ability to observe thoughts without passing judgment. Thoughts are manifested in one's internal dialogue which, according to Palmer and Williams (2013), represents the inner critical voice that tends to promote caution and self-doubt and may adversely impact views of the self over time if not rationalised. Metacognitive skills, which include reflecting on, monitoring,

and regulating thinking, enable individuals to evaluate and modify their cognitive processes. Self-reflection and thought observation subsequently allow individuals to test logically the validity and utility of their thoughts and their impact on their emotions and behaviours (Neenan, 2008). Thus, elevated self-awareness (RM1) and meta-cognitive skills (RM2) might be primarily useful to lead the coachee to identify their problematic thoughts and emotions (O1), enhance their self-directed learning, and impose a more balanced and adaptive way of thinking, leading to better decision making (O3) and problem-solving capabilities (Beddoes-Jones & Miller, 2007). CBC exercises, including keeping a thought diary for self-reflection (R1), participating in guided discovery coaching conversations and inference chaining questioning activities, are designed (following the ABCDE model) to increase metacognitive skills (RM2) and self-awareness (RM1), thus, identifying psychological blocks (O1) (Greif et al., 2022; Minzlaff, 2019; Neenan, 2008; Neenan & Dryden, 2013; Palmer & Szymanska, 2008; Palmer & Williams, 2013; Passmore & Leach, 2022; Willson, 2021). These psychological blocks manifest in thinking biases, i.e., self-limiting, and unhelpful beliefs that lead to problematic emotions and behaviours. This is regarded as the first stage in CBC, given that in cognitive theory, CB approaches promote that "the route to emotional change is cognitive

change," more specifically by altering thinking (Neenan, 2008, p. 4).

The second CMO concerns self-directed mental techniques. Specifics of self-directed mental techniques (R2) were not explicitly discussed in the included literature; however, these refer to exercises taught to the coachee to control his/her attention and reduce emotional reactivity (RM3) (Minzlaff, 2019). Gyllensten et al. (2010) give psychoeducation and relaxation exercises as examples. The practice of such techniques allows the coachee to understand their emotional state and reason with oneself. Palmer (2009) adds that such clarity does not deny the coachee the experience of having negative emotions but helps them replace unhelpful negative mood states or emotions, such as depression, guilt, and anger, with more helpful ones such as sadness and annoyance. This facilitates the coachee's emotional handling and self-regulation (O2) which allows them to use their cognitive resources better to attain goals and enhance performance (DO1).

CMO 3: Coaching conversations for cognitive re-orientation

This CMO presents the development of coaching conversations beyond exploration and upon identification of psychological blocks. It outlines using cognitive techniques to re-orient coachee's maladaptive thought processes and

promote the adoption of positive and productive thinking. This process then completes the cognitive preparation needed for the coachee to engage with designated goals via the behavioural coaching route.

As maladaptive beliefs and thinking biases are identified, coachees may challenge those unhelpful beliefs with the coach's guidance, using cognitive re-orientation techniques (R3). This includes reframing one's perspective based on objective evidence, and coupling maladaptive beliefs with performance and well-being issues, to justify to the coachee why the identified beliefs are problematic. Cognitive re-orientation techniques also include visualisation exercises and exposing the coachee to challenging situations, to ground new perspectives with new real-life evidence. Whilst challenging maladaptive beliefs, coaches check for assumptions and deal with inaccuracies to normalise thoughts and gradually restructure those beliefs (David, 2016; Kearns et al., 2007; Minzlaff, 2019; Palmer & Williams, 2013). Consequently, coachees may be able to replace their unhelpful beliefs and negative thinking (RM4).

As employees replace their thinking biases, negative thinking, and self-limiting beliefs (RM4) with effective functional ones, they engage in rational thinking (RM5) as searching for

constructive ways to cope with difficulties. This is referred to as the 'new effective outlook' in the ABCDE model and is characterised by being constructive, adaptive, balanced, and self-enhancing. Given the bidirectional relationship between cognition and emotions (where negative thoughts can impact emotions and a prevailing mood, as a sustained emotional state, can influence subsequent cognitive processes), the engagement in adaptive thinking perhaps causes positive emotion change (O4) and stress reduction (O5), which directly enhances well-being (David, 2016; Edgerton & Palmer, 2022; Minzlaff, 2019; Neenan, 2008; Palmer & Williams, 2013). Additionally, stress might also be addressed directly within coaching conversations, by treating internal perceptual stressors or perceptions of external stressors as negative thinking patterns to be challenged and replaced. Moreover, as self-limiting beliefs are replaced (RM4), employees might be more able to make decisions rationally (O3). Rational decisions are based on facts, not rigid beliefs, thus enhancing one's decision-making skills (David, 2016; Minzlaff, 2019). Another implication of engaging in rational thinking is an increase in pathway and agency thinking (RM6), leading to an increase in hope (O7) and goal striving (O7) which can positively impact goal attainment and performance accordingly (Grant, 2017; Green et al., 2006; Hultgren et al., 2016).

CMO 4 and 5: Behavioural experiments and goal-setting

Both CMO 4 and 5 introduce the behavioural element of the CB approach. To avoid having problem- and self-reflections being an endless process, coaching seeks solutions and results, which can manifest in insights, decisions, actions or definable goals (Greif et al., 2022). CMO 4 outlines taking the newly earned thought processes to be tested and validated in the real world through designing behavioural experiments. CMO 5 links this cognitive re-orientation process to the coachee's journey of self-development by setting valuable goals for the coachee to attain. This goal attainment is regarded to be the ultimate goal of the coaching process.

Given that enhancing goal attainment and performance is central to the coaching practice, neglecting the practical side of coaching will not yield the desired behavioural change, and might result in a poor coaching relationship. Addressing psychological blocks alone is therefore insufficient; a concrete action plan is crucial to facilitate change and enhance the coachee's satisfaction with progress. Throughout the CBC process, thoughts are considered as hypotheses to be verified. Upon replacement of maladaptive beliefs (RM4), the coach assists the coachee in carrying out experiments (R4) to validate their thoughts (RM7) and generate positive ideas that lead to

positive behavioural adjustments. Experimentation is deemed useful to test the appearance of counterproductive behaviours and performance blocks (RM8) and construct new productive behaviours (O8).

Additionally, the coach and coachee work on goal-setting and goal-directed action planning (R4), which can directly enhance goal attainment (Green et al., 2006; Hultgren et al., 2016). This is coded in relation to the goal theory (Locke & Latham, 2006), which dictates that goals motivate action, as they create a discrepancy between the actual and desired performance. For goal attainment (DO1), goals need to be identified in a specific, measurable, achievable, relevant and time-bound (SMART) format. Secondly, developing goal-directed action plans is crucial for goal attainment, including the deconstruction of goals into achievable action items to be monitored and further evaluated.

CMO 6 & 7: Progress Monitoring, Feedback and Evaluation

The final two CMOs concern the coaching efforts made during goal progression. Once the coachee commences working on their designated goals, coaching conversations are directed towards periodic follow-ups to support achieving the coachee's goals.

Coachees report back to the coach with progress on the agreed-upon goals (R6) which enables them to monitor, maintain (RM10), or adjust their perfor¬mance (DO1) continuously. This process helps sustain performance and prevent a return to unhelpful thinking patterns (O9) as potential relapses are anticipated and managed through coping strategies discussed during coaching sessions. However, attention to how feedback is given is important as constant positive feedback is argued to have the potential to decrease motivation and performance as it can reduce its perceived value, foster a sense of complacency, and entitlement, and impact intrinsic motivation (Evans & Dobrosielska, 2021). In compliance with goal theory (Latham & Locke, 1991; Locke & Latham, 2006), it is important for coaching feedback to be given constructively in the form of improvement goals based on monitored past performance. It is expected that bringing a goal, defined as a specific target and its evaluation standard, together with feedback, defined as the degree to which this standard was met during past performance, might lead to better goal striving and motivation for performance. The process of monitoring and feedback also facilitates self-regulation. Self-regulation in this context translates into improvement in goal-setting, self-monitoring (apart from the coach) and self-rewarding and punishing (Locke & Latham, 2006).

Further, the evaluation aspect of this process, coded in CMO 7, incorporates self-evaluation and progress evaluation. The coach attempts to broaden the person's scheme of self-evaluation to avoid self-worth diminishing. The coach also attempts to review issues to performance and help coachees identify strategies to tackle such obstacles in the future; this is done by filling a task assignment record. Using these records, the tasks are reviewed at the start of every session to remove impediments to goal achievements and ensure progress. Additionally, the feedback loops also feed into the cognitive processes nurtured within the coaching process. When this is complemented with a constructive and positive way of thinking, employees are more likely to work with solution-seeking methodologies (M15) and gain problem-solving skills (M16), which reduce stress (O7), enhance goal attainment (O3), that indirectly enhance well-being (O8) (Grant, 2017; Minzlaff, 2019).

At the end of this iterative complex process, the relationship between goal attainment and well-being is viewed via the lens of a new relevant theory, namely satisfaction theory, which suggests that emotional responses are triggered via an automatic subconscious appraisal of significance or value (Latham & Locke, 1991). Through this lens, goal attainment is viewed as one's appraisal of their performance standards. It can

be inferred that the higher the value of the goal to the coachees, the more satisfied they get upon attaining or achieving the desired performance standard, and the more it reflects on their well-being.

Discussion

This realist review reveals that CBC follows a complex and iterative process. Coachees typically progress through cognitive exploration, re-orientation, and behavioural activation. These stages are supported by goal setting, feedback, and reflective evaluation. Importantly, these mechanisms only produce intended outcomes under specific contextual conditions. These findings align with existing literature on coaching psychology but also reveal gaps and tensions that warrant further exploration.

Individual-level contextual factors were found to be particularly influential. Coachees' self-reflective capacity and readiness to engage with change were essential for successful outcomes. This aligns with cognitive-behavioural theory, which assumes a degree of volition and introspective ability (Neenan, 2008; Minzlaff, 2019). In contrast, coachees lacking these attributes may struggle, suggesting that pre-coaching assessments could help identify suitable candidates and tailor interventions.

However, in organisational settings, employees often enter coaching due to external pressures rather than intrinsic motivation (Anstiss & Passmore, 2012). This raises questions about how CBC can be adapted for individuals with low self-reflective tendencies or resistance to change. This is not sufficiently addressed in the CBC literature.

Organisational framing also matters. Whether coaching is positioned as a developmental opportunity or a remedial intervention has implications for engagement and resistance. This dynamic echo broader critiques of workplace well-being initiatives which can unintentionally stigmatise support-seeking (Micklitz et al., 2021). Additionally, the issue of power imbalances in top-down coaching arrangements, and how they may further erode trust, remains underexplored (de Haan & Gannon, 2017).

Tomoiagă and David (2023) demonstrate significant positive impacts, particularly in improving performance, with a large effect size highlighted as a key finding. Moderately positive effects were also observed for abilities, affect, and cognitive outcomes. This review identified multiple phases of CBC to achieve the aforementioned outcomes. Initial stages focus on developing metacognitive skills and emotional regulation through reflection and psychoeducation (Palmer & Williams, 2013). This is followed by cognitive restructuring, enabling

coachees to challenge maladaptive beliefs and replace them with adaptive thought patterns (David, 2016). However, the review's limited exploration of specific self-directed mental techniques warrants further investigation. While the review cites examples, a deeper understanding of their effectiveness and implementation is needed.

Later stages involve behavioural experimentation and SMART goal setting, which promote cognitive consolidation and performance improvement (Locke & Latham, 2006). The review emphasised the importance of constructive feedback and ongoing evaluation, which reinforce motivation, prevent relapse, and support long-term behaviour change (Grant, 2017; Evans & Dobrosielska, 2021). The review could benefit from a more nuanced discussion of potential challenges in goal setting, such as the complexities of aligning individual goals with organisational objectives. The discussion could be enriched by exploring different feedback delivery methods and their impact on motivation and adherence.

Overall, the findings highlight that CBC is most effective when aligned with individual readiness, supportive organisational cultures, and strong coaching alliances. Further empirical work is needed to refine these context-mechanism-outcome (CMO) configurations and explore their variation across settings.

Comparison with Existing Literature

A Critical Overview of Coaching Research

The empirical literature has major methodological challenges. These include small, non-representative samples, over-reliance on self-report data, lack of long-term follow-up and inconsistent definitions of outcomes which make comparisons difficult (Grant & Cavanagh, 2007; Grover & Furnham, 2016). Theeboom et al. (2014) highlight the absence of research on how coaching works. Many studies lack detail on intervention design (Jones et al., 2016), and few explore causal mechanisms (Tomoiagă & David, 2023). Organisational resistance and limited research skills among coaches further restrict study quality (David, 2016). Negative coaching effects are under-researched, though potential harms—like stress or emotional exhaustion—have been identified (Schermuly, 2014).

Conclusion

Review Strengths, Limitations and Future Direction

This review, conducted using the RAMESES guidelines (Wong, Greenhalgh, et al., 2013), is the first known realist review to explore CBC as a workplace well-being intervention. While the review offers valuable insights, its findings are limited

by the quality and availability of relevant literature. Although the realist approach allows for diverse sources, minimal robust empirical evidence limits the strength of the conclusions. Moreover, the available literature did not fully support an in-depth analysis of how specific contexts interact with resource mechanisms or how these lead to varying outcomes. The review provides a foundation for understanding CBC's potential mechanisms and outcomes in workplace settings, but it does not offer an inclusive view of mechanisms and outcomes. Importantly, the initial programme theories developed will be further explored and refined through primary data collection with key stakeholders. Given resource constraints, this review focused strictly on CBC literature. Future studies should draw from related disciplines to strengthen the evidence base and enhance theoretical development through cross-disciplinary analysis and empirical testing.

References

Abdelfatah, O. A., Simpson, J., Giga, S., & Harding, A. (2025). A study protocol of a realist synthesis to develop programme theories for cognitive behavioural coaching in the workplace in an Egyptian consultancy organisation. *protocols.io*.

Anstiss, T., & Passmore, J. (2012). Motivational interviewing. In M. Neenan & S. Palmer (Eds.), *Cognitive behavioural coaching in practice: An evidence based approach.* (pp. 33-52). Routledge/Taylor & Francis Group. http://search.ebscohost.com/login.aspx?direct=true&db

=psyh&AN=2011-27892-002&site=ehost-live&authtype=ip,shib&user=s1523151

Beck, A. T. (1967). Depression: Clinical, experimental, and theoretical aspects. *Haper & Row*.

Beck, A. T. (1991). Cognitive therapy: A 30-year retrospective. *American psychologist*, *46*(4), 368-375. https://doi.org/10.1037/0003-066X.46.4.368

Beck, J. S. (2020). *Cognitive behavior therapy: Basics and beyond*. Guilford Publications.

Beddoes-Jones, F., & Miller, J. (2007). Short-term cognitive coaching interventions: Worth the effort or a waste of time? *The Coaching Psychologist*, *3*(2), 60-69. https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2008-02660-006&site=ehost-live&authtype=ip,shib&user=s1523151

Booth, A., Wright, J., & Briscoe, S. (2018). Scoping and Searching to Support Realist Approaches. In (pp. 147-166). https://doi.org/10.4135/9781526451729.n10

Breitmeyer, A. M. (2016). Cognitive behavioral coaching and its assessment tools: A brief review. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *34*(4), 241-243. https://doi.org/10.1007/s10942-016-0255-x

Brewin, C. R. (2006). Understanding cognitive behaviour therapy: A retrieval competition account. *Behaviour Research and Therapy*, *44*(6), 765-784.

Brown, A., Lafreniere, K., Freedman, D., Nidumolu, A., Mancuso, M., Hecker, K., & Kassam, A. (2021). A realist synthesis of quality improvement curricula in undergraduate and postgraduate medical education: what works, for whom, and in what contexts? *BMJ Qual Saf*, *30*(4), 337-352. https://doi.org/10.1136/bmjqs-2020-010887

Cox, E., Bachkirova, T., & Clutterbuck, D. (2014a). Theoretical Traditions and Coaching Genres: Mapping the Territory. *Advances in Developing Human Resources*, *16*, 139-160. https://doi.org/10.1177/1523422313520194

Cox, E., Bachkirova, T., & Clutterbuck, D. A. (2014b). *The complete handbook of coaching*. Sage.

Dada, S., Dalkin, S., Gilmore, B., Hunter, R., & Mukumbang, F. C. (2023). Applying and reporting relevance, richness and rigour in realist evidence appraisals: Advancing key concepts in realist reviews. *Research Synthesis Methods*, *14*(3), 504-514.

Dalkin, S., Forster, N., Hodgson, P., Lhussier, M., & Carr, S. M. (2021). Using computer assisted qualitative data analysis software (CAQDAS; NVivo) to assist in the complex process of realist theory generation, refinement and testing. *International Journal of Social Research Methodology*, *24*(1), 123-134. https://doi.org/10.1080/13645579.2020.1803528

Dalkin, S. M., Greenhalgh, J., Jones, D., Cunningham, B., & Lhussier, M. (2015). What's in a mechanism?

Development of a key concept in realist evaluation. *Implementation Science*, *10*(1), 49. https://doi.org/10.1186/s13012-015-0237-x

David, O. (2016). The foundations and evolution of cognitive behavioral coaching in organizations: An interview with Dominic DiMattia. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *34*(4), 282-288. https://doi.org/10.1007/s10942-016-0257-8

David, O. A., & Cobeanu, O. (2016). Evidence-based training in cognitive-behavioural coaching: Can personal development bring less distress and better performance? *British Journal of Guidance & Counselling*, *44*(1), 12-25. https://doi.org/10.1080/03069885.2014.1002384

de Haan, E., & Gannon, J. (2017). The coaching relationship. In T. Bachkirova, G. Spence, & D. Drake (Eds.), *The SAGE handbook of coaching*. (pp. 195-217). Sage Publications, Inc. http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2017-07502-011&site=ehost-live&authtype=ip,shib&user=s1523151

De Weger, E., Vooren, N., Wong, G., Dalkin, S., Marchal, B., Drewes, H., & Baan, C. (2020). What's in a Realist Configuration? Deciding Which Causal Configurations to Use, How, and Why. *The International Journal of Qualitative Methods*, *19*. https://doi.org/10.1177/1609406920938577

Duddy, C., & Roberts, N. (2022). Identifying evidence for five realist reviews in primary health care: A comparison of search methods. *Research Synthesis Methods*, *13*(2), 190-203.

Edgerton, N., & Palmer, S. (2022). SPACE: A psychological model for use within cognitive behavioural coaching, therapy and stress management. *Coaching Practiced*, 1-18.

Evans, T. R., & Dobrosielska, A. (2021). Feedback-seeking culture moderates the relationship between positive feedback and task performance. *Current Psychology*, *40*(7), 3401-3408.

Federation, I. C. (2012). 2012 ICF Global Coaching Study Final Report.

Federation, I. C. (2020). 2020 ICF Global Coaching Study Final Report.

Fenn, K., & Byrne, M. (2013). The key principles of cognitive behavioural therapy. *InnovAiT*, *6*(9), 579-585.

Gardiner, M., Kearns, H., & Tiggemann, M. (2013). Effectiveness of cognitive behavioural coaching in improving the well-being and retention of rural general practitioners. *The Australian Journal of Rural Health*, *21*(3), 183-189. https://doi.org/10.1111/ajr.12033

Grant, A. M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social*

Behavior and Personality: an international journal, *31*(3), 253-263. https://doi.org/10.2224/sbp.2003.31.3.253

Grant, A. M. (2006). A personal perspective on professional coaching and the development of coaching psychology. *International Coaching Psychology Review*, *1*(1), 12-22.

Grant, A. M. (2015). Coaching the brain: Neuro-science or neuro-nonsense? [Letter to the Editor]. *Coaching Psychologist*, *11*(1), 21-27. https://search.ebscohost.com/login.aspx?direct=true&db=asn&AN=103192140&site=ehost-live&authtype=ip,shib&user=s1523151

Grant, A. M. (2016). What can Sydney tell us about coaching? Research with implications for practice from down under. *Consulting Psychology Journal: Practice and Research*, *68*(2), 105-117. https://doi.org/10.1037/cpb0000047 (International Perspectives on Becoming a Master Coaching Psychologist)

Grant, A. M. (2017). Solution-focused cognitive–behavioral coaching for sustainable high performance and circumventing stress, fatigue, and burnout. *Consulting Psychology Journal: Practice and Research*, *69*(2), 98-111. https://doi.org/10.1037/cpb0000086 (Fatigue in the Workplace)

Grant, A. M., & Cavanagh, M. J. (2007). The Goal-Focused Coaching Skills Questionnaire: Preliminary findings. *Social Behavior and Personality: an international journal*, *35*(6), 751-760. https://doi.org/10.2224/sbp.2007.35.6.751

Green, L. S., Oades, L. G., & Grant, A. M. (2006). Cognitive-behavioral, solution-focused life coaching: Enhancing goal striving, well-being, and hope. *The Journal of Positive Psychology*, *1*(3), 142-149. https://doi.org/10.1080/17439760600619849

Greif, S., Möller, H., Scholl, W., Passmore, J., & Müller, F. (2022). Coaching definitions and concepts. In *International handbook of evidence-based coaching: theory, research and practice* (pp. 1-12). Springer.

Grover, S., & Furnham, A. (2016). Coaching as a Developmental Intervention in Organisations: A Systematic Review of Its Effectiveness and the Mechanisms Underlying It. *PLOS ONE*, *11*(7), e0159137. https://doi.org/10.1371/journal.pone.0159137

Gyllensten, K., Palmer, S., Nilsson, E.-K., Regnér, A. M., & Frodi, A. (2010). Experiences of cognitive coaching: A qualitative study. *International Coaching Psychology Review*, *5*(2), 98-108. https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2011-02981-001&site=ehost-live&authtype=ip,shib&user=s1523151

kristina.gyllensten@gmail.com

Hultgren, U., Palmer, S., & O'Riordan, S. (2016). Developing and evaluating a virtual coaching programme: A pilot study. *The Coaching Psychologist*, *12*(2), 67-75. https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2017-14057-003&site=ehost-live&authtype=ip,shib&user=s1523151

ICF. (2023). ICF 2023 Annual Report: A year of impact through excellence.

Jagosh, J. (2023). Coding, Configuring and Conveying in Realist Analysis, Online Training. In: Center for Advancement in Realist Evaluation and Synthesis.

Jagosh, J., Pluye, P., Wong, G., Cargo, M., Salsberg, J., Bush, P., Herbert, C., Green, L., Greenhalgh, T., & Macaulay, A. (2014). Critical reflections on realist review: Insights from customizing the methodology to the needs of participatory research assessment. *Research Synthesis Methods*, *5*. https://doi.org/10.1002/jrsm.1099

Jones, J. K., Turner, M. J., & Barker, J. B. (2021). The effects of a cognitive–behavioral stress intervention on the motivation and psychological well-being of senior UK police personnel. *International Journal of Stress Management*, *28*(1), 46-60. https://doi.org/10.1037/str0000218

10.1037/str0000218.supp (Supplemental)

Karas, D., & Spada, M. M. (2009). Brief cognitive-behavioural coaching for procrastination: a case series. *Coaching: An International Journal of Theory, Research and Practice*, *2*(1), 44-53. https://doi.org/10.1080/17521880802379700

Kearns, H., Forbes, A., & Gardiner, M. (2007). A cognitive behavioural coaching intervention for the treatment of perfectionism and self-handicapping in a nonclinical population. *Behaviour Change*, *24*(3), 157-172.

Lai, Y.-L., & McDowall, A. (2014). A systematic review (SR) of coaching psychology: Focusing on the attributes of effective coaching psychologists. *International Coaching Psychology Review*, *9*(2), 120-136.

Lai, Y.-L., & Palmer, S. (2019). Psychology in executive coaching: an integrated literature review. *Journal of Work-Applied Management*, *11*(2), 143-164. https://doi.org/10.1108/jwam-06-2019-0017

Latham, G. P., & Locke, E. A. (1991). Self-regulation through goal setting. *Organizational behavior and human decision processes*, *50*(2), 212-247.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Prentice-Hall, Inc.

Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, *15*(5), 265-268.

Lungu, A., Boone, M. S., Chen, S. Y., Chen, C. E., & Walser, R. D. (2021). Effectiveness of a Cognitive Behavioral Coaching Program Delivered via Video in Real World Settings.

Telemedicine journal and e-health : the official journal of the American Telemedicine Association, *27*(1), 47-54. https://doi.org/10.1089/tmj.2019.0313

Malengreaux, S., Martens, M., Castellano Pleguezuelo, V., Olujuwon, I., Van Belle, S., Renmans, D., & Belrhiti, Z. (2024). Stakeholder involvement in realist evaluation: A scoping review and best fit framework synthesis. *Evaluation*, 13563890241279562.

Michalos, A. C. (2014). *Encyclopedia of quality of life and well-being research*. Springer Netherlands Dordrecht.

Micklitz, K., Wong, G., & Howick, J. (2021). Mindfulness-based programmes to reduce stress and enhance well-being at work: a realist review. *BMJ open*, *11*(3), e043525.

Minzlaff, K. A. (2019). Organisational coaching: integrating motivational interviewing and mindfulness with cognitive behavioural coaching. *Coaching: An International Journal of Theory, Research and Practice*, *12*(1), 15-28. https://doi.org/10.1080/17521882.2018.1478437

Neenan, M. (2008). From Cognitive Behaviour Therapy (CBT) to Cognitive Behaviour Coaching (CBC). *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *26*(1), 3-15. https://doi.org/10.1007/s10942-007-0073-2

Neenan, M., & Dryden, W. (2013). *Life coaching: A cognitive behavioural approach*. Routledge.

O'Broin, A., & Palmer, S. (2009). Co-creating an optimal coaching alliance: A Cognitive Behavioural Coaching perspective. *International Coaching Psychology Review*, *4*(2), 184-194. https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2009-23379-006&site=ehost-live&authtype=ip,shib&user=s1523151

Ogba, F. N., Onyishi, C. N., Ede, M. O., Ugwuanyi, C., Nwokeoma, B. N., Victor-Aigbodion, V., Eze, U. N., Omeke, F., Okorie, C. O., & Ossai, O. V. (2020). Effectiveness of SPACE model of cognitive behavioral coaching in management of occupational stress in a sample of school administrators in South-East Nigeria. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *38*(3), 345-368. https://doi.org/10.1007/s10942-019-00334-2

Palmer, S. (2009). Deserted Island technique: Demonstrating the difference between musturbatory and preferential beliefs in cognitive behavioural and rational coaching. *The Coaching Psychologist*, *5*(2), 127-129. https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2010-01416-009&site=ehost-live&authtype=ip,shib&user=s1523151

palmer@centresofexpertise.com

Palmer, S., & Szymanska, K. (2008). Cognitive behavioural coaching: An integrative approach. In S. Palmer & A. Whybrow (Eds.), *Handbook of coaching psychology: A guide for practitioners*. (pp. 86-117). Routledge/Taylor & Francis Group.

https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2007-18824-006&site=ehost-live&authtype=ip,shib&user=s1523151

Palmer, S., & Williams, H. (2013). Cognitive behavioral approaches. In J. Passmore, D. B. Peterson, & T. Freire (Eds.), *The Wiley-Blackwell handbook of the psychology of coaching and mentoring*. (pp. 319-338). Wiley Blackwell. https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-25977-017&site=ehost-live&authtype=ip,shib&user=s1523151

Passmore, J., & Evans-Krimme, R. (2021). The future of coaching: A conceptual framework for the coaching sector from personal craft to scientific process and the implications for practice and research. *Frontiers in Psychology*, *12*, 715228.

Passmore, J., & Leach, S. (2022). *Third wave cognitive behavioural coaching: contextual, behavioural and neuroscience approaches for evidence based coaches*. Pavilion Publishing and Media Ltd.

Passmore, J., Peterson, D., & Freire, T. (2012). *The Wiley-Blackwell handbook of the psychology of coaching and mentoring*. John Wiley & Sons.

Pawson, R. (2006a). Digging for nuggets: how 'bad' research can yield 'good' evidence. *International Journal of Social Research Methodology*, *9*(2), 127-142.

Pawson, R. (2006b). *Evidence-based policy: a realist perspective*. sage.

Pawson, R., Greenhalgh, T., Harvey, G., & Walshe, K. (2005). Realist review - a new method of systematic review designed for complex policy interventions. *Journal of Health Services Research & Policy*, *10*(1_suppl), 21-34. https://doi.org/10.1258/1355819054308530

Peterson, D. B. (2007). Executive coaching in a cross-cultural context. *Consulting Psychology Journal: Practice and Research*, *59*(4), 261.

Punton, M., Isabel, V., Leavy, J., Michaelis, C., & Boydell, E. (2020). Reality bites: Making realist evaluation useful in the real world.

Schermuly, C. C. (2014). Negative effects of coaching for coaches: An explorative study. *International Coaching Psychology Review*, *9*(2), 165-180. http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2014-48981-005&site=ehost-live&authtype=ip,shib&user=s1523151

Spence, G. B., Cavanagh, M. J., & Grant, A. M. (2008). The integration of mindfulness training and health coaching: An exploratory study. *Coaching: An International Journal of Theory, Research and Practice*, *1*(2), 145-163. https://doi.org/10.1080/17521880802328178

Stober, D. R., & Grant, A. M. (2006). Toward a Contextual Approach to Coaching Models. In D. R. Stober & A. M. Grant (Eds.), *Evidence based coaching handbook: Putting best practices to work for your clients*. (pp. 355-365). John Wiley & Sons Inc. http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2006-08496-012&site=ehost-live&authtype=ip,shib&user=s1523151

Theeboom, T., Beersma, B., & van Vianen, A. E. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology*, *9*(1), 1-18.

Tomoiagă, C., & David, O. (2023). Is cognitive-behavioral coaching an empirically supported approach to coaching? a meta-analysis to investigate its outcomes and moderators. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *41*(2), 489-510.

Wang, Q., Lai, Y.-L., Xu, X., & McDowall, A. (2021). The effectiveness of workplace coaching: a meta-analysis of contemporary psychologically informed coaching approaches. *Journal of Work-Applied Management*.

Wells, A. (2002). *Emotional disorders and metacognition: Innovative cognitive therapy*. John Wiley & Sons.

Willson, R. (2021). Cognitive-behavioural coaching. In J. Passmore (Ed.), *The coaches' handbook: The complete practitioner guide for professional coaches*. (pp. 208-220). Routledge/Taylor & Francis Group. https://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2020-80828-020&site=ehost-live&authtype=ip,shib&user=s1523151

Wong, G., Greenhalgh, T., Westhorp, G., & Pawson, R. (2015). Development of methodological guidance, publication standards and training materials for realist and meta-narrative reviews: the RAMESES (Realist And Meta-narrative Evidence Syntheses–Evolving Standards) project.

Wong, G., Westhorp, G., Pawson, R., & Greenhalgh, T. (2013). Realist synthesis. *RAMESES training materials*. *London: The RAMESES Project*.

Tables

Tables Caption

Table 1: *Appraisal Criteria (Data et al., 2023; Wong et al., 2015)*

Table 2: Relevance Criteria

Table 3: Review Findings: Context – Mechanism –
Outcomes Configurations

Tables

Construct	Question	Rating Scale			
Relevance	How relevant is the article to the purpose of refining, refuting, or confirming programme theory for this review?	High	Moderate	Low	N/A
Rigor	Is the article good enough? Does it generate credible, plausible, and trustworthy data?	High	Moderate	Low	N/A
Richness	Is the article adequate and coherent? Does it provide sufficient contextual details?	High	Moderate	Low	N/A

Table 1: Appraisal Criteria (Data et al., 2023; Wong et al., 2015)

	Relevance Criteria	Implications
C	This review focuses on personal organisational coaching in the workplace context.	Thus, other types of coaching were not considered. For instance, 1. Sports-related coaching, 2. Health and relationship coaching, 3. Family/parental coaching focusing on parental role enhancement. 4. Instructional coaching focusing on school improvement and teacher's instructional skills enhancement.
	Coaching for employees	Thus, coaching for unemployed adults was not considered. For instance, research focusing on children, students, adolescents, and seniors was considered irrelevant.

I	Coaching Interventions (Specifically CBC)	Thus, non-coaching interventions were considered irrelevant. Interventions that do not meet the coaching interventions definitions were excluded. Ex: Mentoring, counselling, training ... etc. Also, Self-coaching was also irrelevant as this review was looking into coaching as a dialectic process.
M	Coaching by Professional Coaches	Thus, coaching by non-coaches/professionals was not considered. Ex: managerial coaching, nurses, teachers, peers ... etc.
O	Well-being related Outcomes	All outcomes were considered during the review. Articles with focus on well-being or goal attainment were given higher score on relevance.

Table 2: Relevance Criteria

#	CMO Description	No of Documents
1	CMO 1 - When coachees, who are self-reflective (C1) and ready and motivated for change (C2), engage in CBC conversations and exercises such as keeping a thought diary for self-reflection, inference chaining and guided discovery (R1), it enhances their awareness of their internal dialog and self-talk (RM1), increasing their meta-cognitive skills (RM2). This helps employees identify psychological blocks (O1) as thinking biases, self-limiting and maladaptive beliefs, which lead to troublesome emotions and counterproductive behaviours.	40
2	CMO 2 - When coachees, who are self-reflective (C1) and ready and motivated for change (C2), practice self-directed mental techniques for emotional management (R2) in CBC coaching sessions, it helps them learn how to reduce their emotional reactivity	24

	(RM3), thus enhancing self-regulation (O2) accordingly. This allows better use of cognitive resources for goal attainment.		
3	CMO3 - When coachees who identified their thinking biases and maladaptive beliefs (O1) challenge those unhelpful beliefs through cognitive re-orientation techniques (R3) such as reframing, immersion, visualisation, gradual restructuring, checking for assumptions and dealing with inaccuracies and normalising thoughts, they can replace their limiting beliefs and negative thinking patterns (RM4) and engage in more positive thinking (RM5), and pathway and agency thinking (RM6). This leads to better decisions (O3) that are based on facts rather than rigid beliefs, positive emotional change (O4), reduced stress (O5), increased hope (O6) and goal striving (O7). Thus, the enhancement of well-being (DO2) and goal attainment (DO1) accordingly		30
4	CMO4 – During CBC, coachees are exposed to behavioural experiments (R4), gaining experience in reality testing of replaced beliefs (RM7), so they are then able to identify performance blocks and counterproductive behaviours (RM8), which allows them		28

5	to construct new strategies and productive behaviours (O8). CMO5 - During CBC, coachees are exposed to goal-setting and goal-directed action planning (R5), which creates a discrepancy between the actual and desired state (R6). This discrepancy facilitates self-regulation (RM9), leading to enhanced goal striving (O7) and goal attainment accordingly (DO2)	
6	CMO 6 - When employees engage in monitoring their progress and feedback exercises (R7) with their coach (through tools such as task assignment record homework and self-reflection within the session), it assists in identifying performance blocks (RM8), facilitating self-regulation (RM9) and developing maintenance strategies (RM10) that ensure continuity and prevent relapses (O9). This not only ensures the continuity of goal attainment but also enhances performance accordingly (DO1)	21
7	CMO 7 - When coachees engage in evaluating their progress and maintain a feedback loop (R8) with their coach, they develop solution-seeking methodologies and gain problem-solving skills (RM11),	17

| | which on one side prevent relapses (returning to unhelpful thinking patterns) (O9) and ensure continuity of goal attainment (DO1), and on the other side reduces stress (O5), and enhances well-being (DO2) | |

Table 3: Review Findings: Context – Mechanism – Outcomes Configurations

Figures

Figures Caption

Figure 1: Beck's Cognitive Model (Beck;1991)

Figure 2: Realist Review Process adapted from Wong et a;. (2005)

Figure 3: Refined CIMO Framework and key realist definitions

Figure 4: Context – Mechanism – Outcome Configurations

Figure 5: *Search Flow Chart*

Figure 1

Figure 2

| Step 1: Literature Scoping | Step 2: Progressive focused searches and IPTs | Step 3: Document Appraisal | Step 4: Data Extraction | Step 5: Data Analysis and Synthesis |

Figure 3

- Coachee and Coach's attributes
- Coaching Relationship
- Organisational Factors

- Organisational Coaching
- Cognitive Behavioral Coaching Interventions (CBC)

Context   Intervention

Outcomes   Mechanism

- Goal Attainment
- Well-being

- Goals and Action Planning
- Tackling Cognitive Distortions and Thinking

Key Realist definitions

Programme Theory: "The implicit or explicit explanatory theory that can be used to explain specific parts of programmes or interventions" (Jagosh et al. 2014,p.4; Shearn et al., 2017)

Programme Strategy/Architecture: "The descriptive elements of the intervention (or programme) being studied" (Jagosh,2023; Pawson & Manzano-Santaella, 2012). Example: conducting an awareness session.

Context: In realist methodology, it is "any condition that triggers and/or modifies the mechanisms" by which programmes operate to generate outcomes (Jagosh et al., 2014, p. 4).

Mechanisms: In realist methodology, a mechanism provides an explanation of how and why a programme generates specific outcomes. It represents "the generative force that leads to outcomes"(Jagosh et al., 2014, p. 5), and is activated within supportive conditions or contexts (Greenhalgh, Pawson, Wong, et al., 2017b).
        These are divided into,
         Resource Mechanisms: The components and underlying entities, processes and structures introduced by a programme
                in a context, i.e. the "combination of resources offered by the programme under study" (Dalkin et al., 2015, p.3).
                Example: two-way communication within awareness sessions.
         Reasoning Mechanisms: The "stakeholders' reasoning in response" to resource mechanism introduced within context
                        that result in outcomes (Dalkin et al.,2015, p.3). Example: Feeling heard.

Outcomes: In realist methodology, outcomes represent aspects that change as a result of a programme; they "are either intended or unintended and can be proximal (immediate), intermediate, or final (distal or occurring on the long run)" (Jagosh et al., 2014, p. 5)

Context, mechanism, and outcome (CMO) configurations:
"A heuristic used to generate causative explanations pertaining to outcomes."(Jagosh et al., 2014, p. 4),
" It is the basic causal explanatory framework for realist evaluation and realist reviews. Stated as a sentence, it means 'In

Figure 4

| Context | + | Program Strategy | → | Mechanism | = | Proximal Outcomes | → | Distal Outcomes |

Context

Coachee Attributes:
- C1 - Introspection
- C2 - Readiness and Motivation to Change

Organizational Factors:
- C3 - Communication
- C4 - Awareness & Training Sessions

Coach Qualification:
- C5 - Assessment & Case Conceptualization
- C6 - Building Rapport

Coaching Relationship:
- C7 - Building Coaching Alliance
- C8 - Transparency and Trust

CMO-1 — R1 - Inference chaining, guided discovery and self-reflection keeping a reflection/thought diary.

CMO-2 — R2 - Practicing self-directed mental techniques for emotional management.

CMO-3 — R3 - Challenge irrational beliefs through cognitive reorientation techniques such as, reframing, immersion, visualization, gradual restructuring, normalizing thoughts and dealing with assumptions.

CMO-4 — R4 - Behavioral experiments and exposure.

CMO-5 — R5 - SMART goal setting and goal directed action planning. / R6 – Creating discrepancy between actual and desired states

CMO-6 — R7 - Monitor progress and feedback with coach through a task assignment record framework and self-reflection sessions.

CMO-7 — R8 - Evaluate progress and maintain feedback loops

RM1 - Awareness of internal dialog (self-talk)
RM2 - Increased meta-cognitive skills
RM3 - Decrease emotional activity & self-regulation
RM4 - Replace irrational beliefs and negative thinking
RM5 - Engage in a positive thinking
RM6 - Increase in pathway and agency thinking
RM7 - Reality testing of replaced beliefs
RM8 - Identify performance blocks
RM9 – Facilitating self-regulation by giving indication on the acceptable level of performance.
RM10 – Plan for relapses & develop maintenance strategies
RM11 - Develop a solution seeking methodology and enhance problem solving skills

O1 - Enhanced self-awareness including identifying psychological blocks
- Thinking errors
- Self-limiting and irrational beliefs
- Troublesome emotions
- Counterproductive behaviors

O2 - Enhanced self-regulation, better use of cognitive resources
O3 - Better decision-making skills. Decisions made based on facts not rigid beliefs
O4 - Positive emotions change
O5 - Stress reduction
O6 - Increase hope
O7 - Increase goal stiving
O8 - Construct new productive behaviors
O2 - Enhanced self-regulation, better use of cognitive resources
O7 - Increase goal stiving
O9 - Relapse prevention
O5 - Stress reduction

DO1 - Enhanced goal attainment and performance
DO2 - Enhanced subjective well-being

Figure 5

Search 1

Records identified and screened through database search iteration 1 (n = 175)

Databases: (APA PsycArticles, APA PsycINFO, SocINDEX, ERIC, Medline, Academic Search Ultimate)

Duplicates Removed (n = 56)

Title and Abstract Screening (n = 119)

Not in Review Scope (n = 68)

Included in Synthesis (n = 37)

Full Text Screening (n = 14)

Not in Review Scope (n = 14)

Final Records included in synthesis (n = 37)

Duplicates (same article under different names) (n = -5)

Relevant literature – characteristics

Commentaries (n = 26)   Quantitative studies (n = 13)
Books (n = 7)   Qualitative studies (n = 1)
Book Chapters (n = 11)   Descriptive case study (n = 1)
Book Reviews (n = 3)   Protocols (n = 2)
Mixed Methods (n =1)
Literature Reviews and Meta-Analysis (n=3)

Total Number of articles included (n = 68)

Search 2

Records identified and screened through database search iteration 2 (n = 1,716)

Databases: (APA PsycArticles, APA PsycINFO, SocINDEX, ERIC,Medline, Academic Search Ultimate)

Duplicates Removed (n = 280)

Duplicates From iteration 1 (n = 51)

Title and Abstract Screening (n = 1,385)

Not in Review Scope (n = 1,239)

Included in Synthesis (n = 15)

Full Text Screening (n = 131)

Not in Review Scope (n = 128)

Final Records included in synthesis (n = 18)

Snowballing (n = 8)

Search 3

Update Search (2022 - 2025) (n=17)

Included from update search (n=10)