A systematic literature review of digital coaching: Insights for learning and development in the workplace

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Abstract

Purpose
This study examined the methods, processes, and outcomes of digital coaching by undertaking a systematic review of peer-reviewed published papers.

Design
Eight databases were searched using the Systematic Literature Review (SLR) method for articles published between 1st January 1990 and 1st September 2024. Two researchers and a third arbiter conducted a quality assessment using the ROBINS-I tool to evaluate the quality of the papers and the risk of bias in the included studies. They conducted the reviews independently and simultaneously. Following a search identified n = 355 possible papers and screening of duplicate and excluded studies, a narrative synthesis of 27 quantitative, qualitative or mixed-methods studies was completed.

Findings
The SLR identified four key themes: defining digital coaching, its growth, impact, and ethical considerations.

Research limitations
The study reflects the coaching field, which remains relatively immature as a research area.

Practical Implications
The evidence suggests that digital coaching delivers positive results and comparable outcomes to face-to-face coaching for organisations and leaders, managers and individual contributors.

Originality
This paper represents the first SLR of digital coaching. It employs clinical research standards such as the use of Quality Assessment and Risk of Bias evaluations, which have yet to be widely embraced in SLR management research.

***Keywords*:** Systematic literature review, Digital coaching, Coaching outcomes, Technology coaching, Digital coach effectiveness, Coach education.

Introduction

Coaching is a developmental process where a coach collaborates with a client to unlock potential, enhance strengths and foster personal or professional growth. Traditionally, workplace coaching occurred face-to-face; however, the COVID-19 pandemic significantly accelerated the shift to digital coaching via communication platforms such as Zoom and Microsoft Teams and contributed to the accelerated growth of digital coaching platforms like EZRA Coaching and BetterUp. This transition was propelled by physical restrictions, hybrid work demands and the increasing digitalisation of the workplace, aligning with broader corporate learning and development trends. By 2021, digital coaching had emerged as the predominant mode of coaching delivery, yet research into its effectiveness remains fragmented and inconsistent. Meta-analysis research supports the efficacy of video conference mental and behavioural health services, demonstrating that such interventions produce outcomes broadly equivalent to in-person services across clinical settings and populations. Notably, female clients and those coaching in medical or structured facilities responded more favourably to digital methods than traditional in-person interactions (Batastini et al., 2021). These findings suggest that digital coaching modalities may offer viable and effective alternatives to conventional face-to-face approaches, highlighting the potential for broader acceptance and implementation of digital coaching practices. While some studies indicate that digital coaching (that is, a coach and a client in two different physical locations) is as effective as in-person coaching (that is, two people in the same physical location), others point out potential barriers such as the challenge of in building rapport, cognitive strain, as well as ethical considerations (Berry et al., 2011; Michalik & Schermuly, 2023). The absence of standardised definitions and evaluation frameworks further complicates research, rendering it challenging to assess how digital coaching influences organisational learning and development.

The rapid adoption of digital coaching has led to terminological inconsistencies in research and practice (Diller & Passmore, 2023) with terms including ‘distance coaching’, ‘remote coaching’, ‘e-coaching’, ‘online coaching’ and ‘digital coaching’ being used interchangeably. To clarify for this article, we use the following terms and definitions:

- ‘Digital coaching’ refers to synchronous, human-to-human interactions conducted via video or audio platforms.
- ‘Telephone coaching’ refers to audio-only communication.
- ‘Digital coaching platforms’ refers to tools that integrate video conferencing, record-keeping, scheduling, and learning.
- ‘AI Coachbot’ refers to computer-driven conversation using scripted responses or machine learning (Passmore & Tee, 2023).

Digital coaching differs from asynchronous interventions, such as text-based coaching, mobile applications, or self-paced e-learning platforms, which are often embedded within broader coaching programs (Diller & Passmore, 2023). This distinction is essential because digital coaching requires real-time interaction, setting it apart from

self-guided coaching tools (Passmore et al., 2025). While digital coaching is often viewed as a direct translation of face-to-face coaching into a digital medium, scholars argue that it represents a distinct coaching practice with unique engagement patterns and session structures (Diller & Passmore, 2023). For example, digital coaching sessions are shorter than in-person sessions, likely due to cognitive fatigue and the absence of nonverbal cues. This raises an important research question: Does this shift in session structure affect coaching depth and long-term effectiveness?

Despite the growing prevalence of digital coaching, prior systematic reviews have focused mainly on coaching outcomes rather than coaching delivery mode (Bozer et al., 2018). Exploratory Delphi studies forecast that digital coaching methods will become increasingly prevalent by 2030, suggesting broader acceptance and integration into organisational practices (Schermuly et al., 2022). Given this trajectory, digital coaching modalities may offer viable and effective alternatives to traditional face-to-face approaches, highlighting their potential for broader acceptance and implementation in organisational contexts. This paper presents the first systematic literature review to evaluate digital coaching as a delivery method.

This study compares the effectiveness of digital coaching versus face-to-face coaching, focusing on coaching success rates, engagement, and accessibility. It examines how digital coaching impacts the coach-client working alliance, particularly regarding rapport-building, trust, and engagement strategies. It analyses key metrics to measure digital coaching effectiveness, identifying assessment tool and methodology inconsistencies. It explores coaches' and clients' perspectives on digital coaching, including adoption challenges, technological barriers and ethical concerns. This review synthesises existing research by addressing these objectives and identifying best practices, unresolved issues and future research directions in digital coaching. The following key research questions are addressed:

a. How does digital coaching compare to face-to-face coaching in terms of effectiveness, engagement, and scalability?
b. How does digital coaching influence rapport-building, trust and the coach-client working alliance?
c. What primary metrics evaluate digital coaching, and how do methodological inconsistencies impact research comparability?
d. What are the key adoption challenges and perceptions of digital coaching among coaches and clients?

These research questions guide the systematic review and critical analysis of existing studies. This review synthesises research from various methodological perspectives, offering insights into how digital coaching transforms workplace learning and development. As organisations increasingly integrate digital coaching into HR, leadership development and employee training programs, it is critical to identify best practices and future research directions.

Method

This systematic review (SR) followed the 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses' (PRISMA) guidelines (Moher et al., 2009). One of the reasons why SRs are placed highly upon hierarchies of evidence is their systematic, rigorous investigation of extant research, which reduces the risk of researcher bias distorting the results. This is why creating and publishing a protocol in advance is argued to be an essential component of an effective SR (Bettany-Saltikov and McSherry, 2016). For this present SR, a protocol was created, submitted for inclusion in online protocol databases, and circulated amongst the researchers to increase the objectivity and consistency of the judgements each researcher reached and to guide the data gathering and analysis stages.

Eligibility criteria

Given the breadth of practice labelled as 'coaching' and the number of inconsistent terms related or adjacent to digital coaching, it was essential to establish clear eligibility criteria before interrogating research databases. The studies considered for the SR were restricted to those that met each of the following criteria: (a) The article needed to be written in English, (b) The article needed to be published in a peer-reviewed journal, (c) The intervention being researched needed to be labelled as 'coaching', (d) The coach should not have been required to have technical knowledge of the client's role or desired outcome (to differentiate coaching from mentoring, instructing or consultancy) (e) The terms 'digital,' 'online,' 'remote,' 'phone,' or 'technology' appeared in the title, abstract, text or method statement, (f) The research either produced primary data or was a systematic review/meta-analysis, (g) The study focused on workplace coaching, so excluded students, non-professional sports athletes and patients, (h) Coaching was provided to individual clients, rather than to groups or teams, (i) The study was published between 1st January 1990 (an arbitrary date assumed to precede all digital coaching research) and 1st September 2024.

Various techniques and approaches are employed in coaching, typically grounded in psychological principles. This systematic review did not limit itself to any specific approach or domain. Consequently, coaching could have been conducted by internal or external coaches, but it did exclude coaching as a leadership style adopted by line managers with their direct reports. Similarly, as this SR aimed to identify all published research involving digital coaching comprehensively, it included covering studies using either qualitative or quantitative data. It did not exclude any specific research design or any particular outcome variable.

Search strategy and information source

An initial search of the PROSPERO database was conducted to ensure no registered systematic reviews of digital coaching were already being undertaken. A manual scoping search of specialist coaching research journals was conducted to ensure that some research studies met the eligibility criteria and that the SR was worthwhile conducting. An electronic search was conducted in September 2024 using the search term coach* + digital to identify peer-reviewed qualitative, quantitative and mixed methods studies. The following databases were interrogated: Academic Search

Premier, EBSCO, ERIC, JSTOR, ProQuest, PsycAbstract, PsycArticles, Psychology and Behavioural Sciences Collection, PsycINFO, PubMed, ScienceDirect, Scopus, Teacher Reference Center and Web of Science.

Selection process

After duplications from the searches across the databases had been removed, the titles and abstracts of the remaining studies were imported into a specialist screening software platform. Two reviewers independently screened the titles and abstracts of each article against the eligibility criteria, with full texts then obtained for all remaining studies. These were once more independently screened in parallel by two reviewers. During both screening stages, any disagreements regarding eligibility were resolved by escalating the matter to a third researcher. A forward and backward search based on the included full texts was subsequently conducted. In addition, the researchers checked specialist coaching publication websites for recently accepted but unpublished articles. Finally, coaching researchers with published digital coaching studies were contacted to ensure that any 'in press' studies could be considered.

Data Extraction

A data extraction form was devised to ensure key information from each included study was collated. This included methods, participants, interventions, and outcomes. Two researchers conducted data extraction in parallel using 10% of the included studies. They then checked for consistency and accuracy of results, after which one reviewer completed the data extraction from the remaining papers.

Risk of bias and quality assessment

The 'Quality Assessment Tool for Studies with Diverse Designs' (QATSDD) (Sirriyeh et al., 2012) was employed to assess the quality of the studies included, as it allows for qualitative, quantitative or mixed methods research to be analysed. QATSDD features 16 quality assessment criteria, such as 'Explicit theoretical framework', 'Detailed recruitment data' and 'Strengths and limitations critically discussed'. Each is scored on a four-point scale (0 = Not at all, 3 = Complete). Using QATSDD, each paper is given an overall quality score. The sum of these scores, expressed as a percentage of the maximum available score, indicates the quality of the included studies within the SR. Two researchers conducted independent parallel assessments of the included studies. Any disagreements were resolved through discussion or escalated to a third researcher, ensuring that all researchers reached a sound judgment.

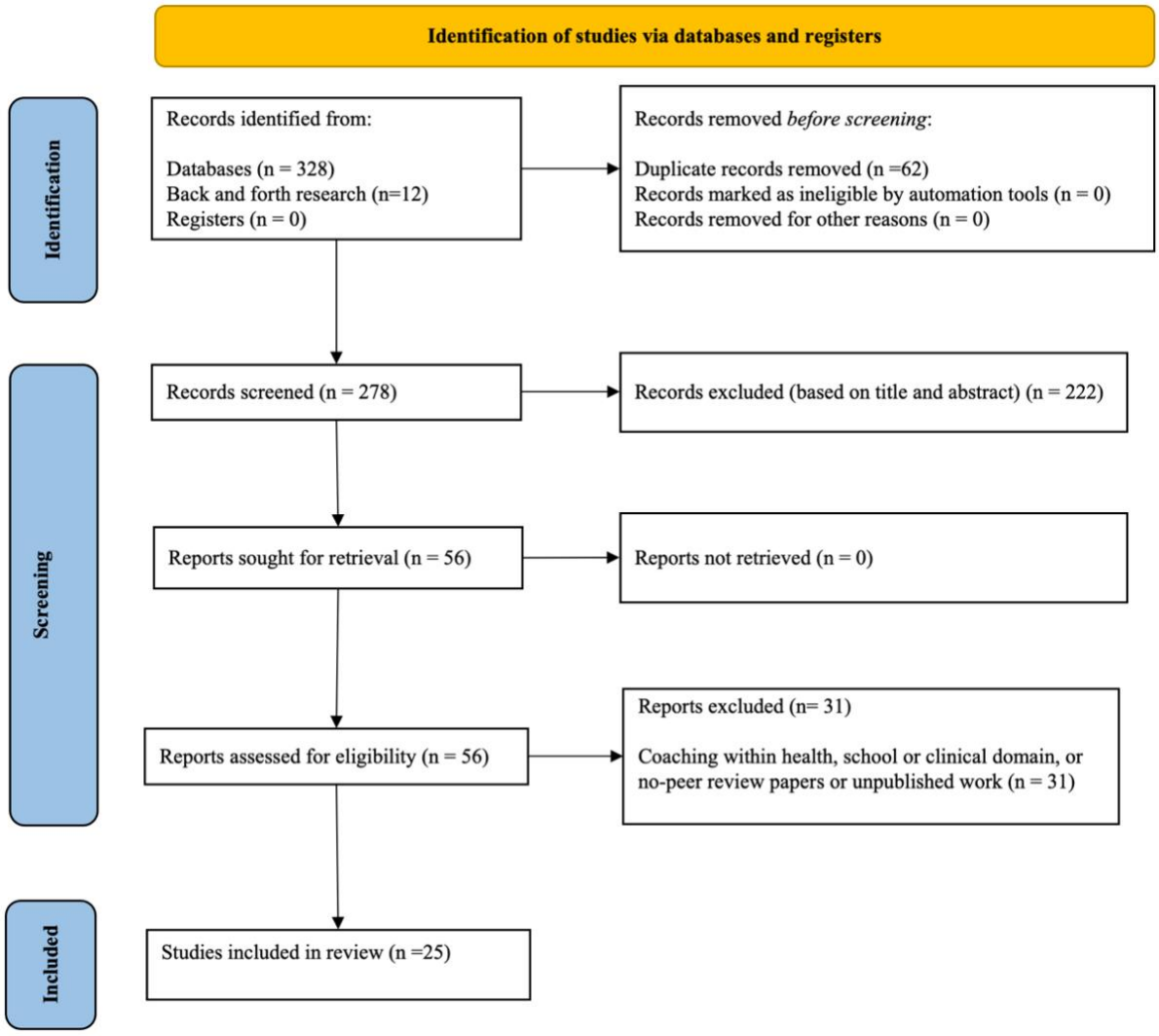
Results

Preliminary synthesis

The initial database search yielded 328 articles. After removing duplicates, 278 texts underwent title and abstract screening, resulting in 56 texts selected for full-text review. The PRISMA flow diagram (Figure 1) summarises this screening and selection process. During full-text review, 31 articles were excluded based on eligibility criteria. Common reasons for exclusion included: articles were not peer-reviewed (e.g. dissertations), the

intervention described was not explicitly 'coaching', studies lacked primary data, or the populations studied fell outside workplace contexts (e.g. students, patients, amateur athletes). After this process, 25 articles were identified for inclusion in this systematic review, consisting of 10 quantitative, 11 qualitative, and four mixed-methods studies (see Table 1 for a complete summary of included studies).

Figure 1. ***PRISMA flow diagram of the screening process*** (from Page et al., 2021)



Source: figure created by authors

Quality assessment results

The methodological quality of the included studies was assessed using the Quality Assessment Tool for Studies with Diverse Designs (QATSDD) (Sirriyeh et al., 2012). The QATSDD tool assesses each paper across multiple criteria, including the clarity of theoretical frameworks, research objectives, sampling adequacy, data collection and analysis methods appropriateness, reliability and validity assessments, and the extent to which study strengths and limitations were critically discussed. A summary of the descriptive statistics (mean, standard deviation, median, and range) of each criterion of the QATSDD is available at OSF. Overall, QATSDD quality scores varied by study type. Quantitative studies (n = 10) had the highest average quality scores (M = 34.70, SD = 5.19), with scores ranging across 18 points out of a maximum possible score of 42, representing an average percentage score of 82.62%. Qualitative studies (n = 11) demonstrated slightly lower quality, with an average score of 30.45 (SD = 2.07), a narrower range of eight points, a maximum possible score of 39, and an average percentage of 78.09%. Mixed-method studies (n = 4) had the lowest quality scores (M = 29.25, SD = 5.74), with a 13-point range and an average percentage score of 60.94% out of a maximum possible score of 48. Individual quality scores ranged from 50% to 95%, indicating variability in methodological rigor across studies. The average overall quality score across all studies was 74.84%, indicating generally good methodological quality but highlighting room for improvement, especially in mixed-methods studies. Inter-rater reliability for the quality assessment was excellent, achieving a Cohen's Kappa (κ) of 87%, indicating almost perfect agreement between reviewers. Agreement on individual QATSDD items ranged from substantial (63%) to perfect (100%), demonstrating strong consistency in quality evaluations.

Findings Synthesis

Findings were synthesised into four thematic areas to systematically address the research questions guiding this review.

Effectiveness of Digital Coaching vs. Face-to-Face Coaching

Comparative studies consistently suggest that digital coaching can achieve outcomes comparable to face-to-face coaching, though digital environments pose distinct challenges. For instance, rapport-building has been identified as being slower due to reduced non-verbal cues and increased cognitive load (Berry et al., 2011; Weinberg & Hausfeld, 2024). However, once rapport is established, effectiveness and client satisfaction levels become similar between digital and face-to-face contexts (Lynden & Avery, 2016). Blended formats, combining digital and face-to-face sessions, might be promising in addressing these limitations, but in practice bring their own limitations (Michalik & Schermuly, 2023).

Impact on the Coach-Client Working Alliance

Establishing rapport and trust digitally is achievable but requires intentional strategies. Verbal affirmations, structured check-ins, active listening, and mirroring techniques help compensate for the absence of physical presence (van Coller-Peter & Manzini, 2020). Clients often experience performative pressure due to camera use, suggesting a need for adaptive coaching styles to mitigate discomfort (Deniers, 2019; Lynden & Avery, 2016). Interestingly, some studies found that audio-only (telephone coaching) enhanced deep listening, highlighting varied preferences regarding digital modalities (McLaughlin, 2013).

Key Metrics Used to Evaluate Digital Coaching Effectiveness

The systematic review identified inconsistencies in evaluation metrics, making direct comparisons across studies difficult. Most studies relied heavily on self-report measures evaluating outcomes like well-being, productivity, stress reduction, resilience, and emotional regulation (Auer et al., 2022; Mann et al., 2022; Weinberg & Hausfeld, 2024). In response we advocate for the creation of a standardised evaluation framework to improve comparability and practical utility for organisations.

Challenges and Adoption Barriers

Key barriers identified include technological disruptions, confidentiality and data security concerns, and the cognitive strain of prolonged virtual interactions. Coaches with higher digital self-efficacy had better outcomes, highlighting the importance of digital training and support (Otte et al., 2014). Ethical considerations around confidentiality and AI-driven platforms emerged consistently (Passmore & Tee, 2023).

Table 1. Studies Included – with study design & sample size

Authors	Study design	Sample size
Auer et al. (2022)	Mixed quasi-experimental	Coached group (n=545) Control group (n=460)
Bajpai (2024)	Qualitative	Executive coaches (n=25)
Berry et al. (2011)	Quantitative	Coaches (n=102)
Deniers (2019)	Qualitative	Professionals (n=11)
Diller & Passmore (2023)	Qualitative	Coaches (n=260)
Fainstad et al. (2022)	Randomised controlled trial	Intervention group (n=50) Control group (n=51)
Geissler et al. (2014)	Mix methods	Professionals (n=14)
Giusino et al. (2022)	Quantitative: longitudinal	Healthcare workers (n=62)
Hunt et al. (2019)	Mix methods: longitudinal study with a control group	Intervention Group (n=24) Control Group (n=16)
Innegraeve & Passmore (2024)	Qualitative	Executive coaches (n=9)
Jackson & Bourne (2020)	Mix methods	Professionals (n=12)
Jeannotte et al. (2021)	Quantitative: longitudinal	Professionals (n=391)
L'Engle et al. (2024)	Quantitative	Healthcare professionals (n=34)

Lynden & Avery (2016)	Qualitative	Seven workplace coaches Two coachees (Workplace employees)	
Mann et al. (2022)	Qualitative	Medical trainees (n=17)	
McLaughlin (2013)	Qualitative	Executive coaches (n=6)	
Meyer (2023)	Qualitative	Coaches (n=7)	Coachees (n=6)
Michalik & Schermuly (2023)	Quantitative	Coaches (n=117)	Clients (n=104)
O'Donovan et al. (2024)	Qualitative	Healthcare workers (n=11)	
Otte et al. (2014)	Quantitative	Coaches (n=161)	
Schermuly et al. (2022)	Mix methods	Experts (n=16)	Participants (822)
Steketee et al. (2021)	Mix methods	Health researchers (n=16)	
van Coller-Peter & Manzini (2020)	Qualitative	Coaches (n=6)	Clients (n=6)
van Nieuwerburgh et al. (2021)	Qualitative	Coachees (n=6)	
Weinberg & Hausfeld (2024)	Quantitative: longitudinal	Professionals (n=196)	

Source: Table created by authors

Discussion

This systematic review into digital coaching in the workplace, has highlighted the fragmented nature and the lack of standardised definitions and assessment tools. While digitalisation is reshaping coaching practices, the absence of standardised definitions, even as to what digital coaching is and a lack of measurement tools complicates cross-study comparisons, limiting definitive conclusions about digital coaching's effectiveness. This section systematically addresses how digital coaching compares to in-person coaching, its influence on the coach-client working alliance, measurable outcomes and assessment methods, how coaches and clients have adapted to digital coaching and their perceptions of its strengths and limitations.

Digital Coaching and In-Person Coaching experience

(i) *Coaches' perspective*
Scholars have explored both coaches' and clients' experiences with digital coaching environments, shedding light on their attitudes, challenges, and the evolving role of technology in professional coaching. The literature presents mixed perspectives: some coaches and clients embrace digital coaching for its accessibility and flexibility, while others highlight its limitations, such as reduced nonverbal cues and heightened cognitive demands.
Coaches' responses to digital coaching have been mixed, depending on technological confidence, coaching style and professional context.

Innegraeve and Passmore (2024) identify a divide between coaches who fully embrace digital technologies and those who adopt them reluctantly due to external pressures,

such as client preferences or logistical constraints. Otte et al. (2014) noted this divide, showing that coaches with higher digital self-efficacy perceive technology positively, whereas those with limited experience remain sceptical. This highlights the need for training programs that enhance digital proficiency and help coaches leverage technology more effectively. While some studies suggest strong coach-client relationships can form in digital coaching, others have questioned these findings. Berry et al. (2011) report no significant differences in working alliances and problem resolution outcomes between face-to-face and digital coaching, challenging the assumption that physical presence is essential for effective coaching. However, the study relies on self-reports from coaches, with a risk of bias, as coaches might overestimate the strength of their working alliance with their client. Moreover, client perspectives were not included, raising questions about client views.

Otte et al. (2014) further investigate coaches' attitudes toward digital tools, revealing that while many value technology for administrative and analytical tasks, they remain ambivalent about its role in client interactions. This suggests a gap between digital potential and digital proficiency. One key challenge in digital coaching is maintaining rapport without physical presence. Lynden and Avery (2016) analyse workplace telephone coaching, showing that verbal techniques, such as tone modulation and silence management, can play a central to maintaining engagement in audio-only formats. While these findings offer valuable insights, the study relies on role-play scenarios rather than real-world coaching conversations, limiting its generalisability to real-world coaching interactions.

(ii) Clients' Perspective

While coaches often evaluate digital coaching based on efficiency and effectiveness, client evaluations have focused on engagement, self-presentation and relational depth. Studies indicate contrasting client experiences, some appreciate the autonomy and accessibility of digital coaching, while others struggle with self-consciousness and emotional distance in digital settings. Dieners (2019) examines Skype-based career coaching, finding that video technology can foster connection and induce self-consciousness. While clients appreciate the ability to control their coaching environment, they also report feeling "watched". This raises questions about the power dynamics in digital coaching: Does controlling one's virtual presence empower clients or does it introduce new forms of performative pressure? Although Dieners' study suggests that digital coaching should be tailored to individual client preferences, it does not provide concrete techniques for mitigating these effects, an area future research should explore. Similarly, O'Donovan et al. (2024) find that text-based coaching enhances accessibility but lacks emotional depth, highlighting the need for comparative studies on text-based vs. video coaching.

Meanwhile, McLaughlin (2013) argues that telephone coaching enhances deep listening and engagement by removing visual distractions, aligning with previous research on auditory processing in counselling contexts. However, while some clients perceive telephone coaching as liberating, others struggle with the absence of physical presence,

particularly in emotionally intense moments. This suggests that digital coaching effectiveness highly depends on individual communication preferences.

Coach-Client Working Alliance: The Role of Rapport and Communication Strategies

A recurring theme in digital coaching research is the challenge of rapport-building. While some studies suggest strong relationships can form in digital coaching, others highlight barriers such as reduced nonverbal cues, technological disruptions, and increased cognitive strain. Establishing trust and engagement remains a crucial determinant of coaching effectiveness, yet digitalisation introduces unique communication dynamics that require adaptation.

Van Coller-Peter and Manzini (2020) argue that rapport in e-coaching requires intentional effort rather than developing naturally. Their study identifies key strategies, including active listening, mirroring speech patterns, and using verbal affirmations to compensate for the absence of physical presence. They emphasise that psychological safety, built through explicit trust-building measures, is even more critical in digital coaching than face-to-face interactions. However, an open question remains: To what extent can these strategies replicate the relational depth of traditional coaching? Similarly, Weinberg & Hausfeld (2024) highlight that client trust in the coach is a key predictor of coaching success in digital settings, reinforcing the need for intentional trust-building strategies.

Giusino et al. (2022) found that the usability of digital coaching platforms directly influences coaching effectiveness, underscoring the importance of user experiences (UX) in fostering engagement. These findings suggest that technical factors, such as platform design and communication interfaces, significantly shape the quality of digital coaching relationships.

Studies present mixed findings on how digitalisation affects the coaching alliance. On one hand, as noted above, Berry et al. (2011) found that coaches noted no significant differences in working alliance scores, but as we noted, care must be taken with coach perception data. McLaughlin (2013) supports this, arguing that telephone coaching enhances deep listening and engagement, compensating for the lack of visual cues. Conversely, Deniers (2019) raises concerns about video coaching, suggesting that clients may experience self-consciousness and a ‘performative’ coaching dynamic, potentially hindering openness and authenticity. These findings indicate that individual client preferences influence digital coaching’s effectiveness, as some may find digital interactions freeing, while others struggle with the absence of in-person cues. The logistical advantages may be clear, but digital coaching also introduces cognitive and emotional challenges. Meyer (2023) highlights that screen fatigue, cognitive load and emotional labour are significant stressors for digital coaches, potentially counteracting the benefits. This study highlights the importance of self-care strategies for coaches and clear contracting between coaches and clients to establish expectations around platform use, privacy and engagement strategies.

Michalik and Schermuly (2023) present a novel contribution by examining the side effects of digital coaching. While coaching success rates remain consistent across digital and in-person formats, technology-related stress, reduced engagement, occur more frequently in digital settings. A key implication is the need for greater awareness of possible side effects within the coaching profession and for actions to mitigate these. Further they also note the difficulties experienced by clients in blended delivery in switching between formats. If blended coaching formats (mixing digital and in-person coaching) create adjustment difficulties, should coaches highlight this to clients and encouraged them to commit to a single delivery mode?

Few studies however have been conducted based on digital coaching platforms, specifically designed for coaching. If digital coaching induces technological stress, how have coaching platforms sought to minimise disruptions and cognitive strain, and to what effect? These questions warrant further research.

The literature highlights both the potential and complexities of digital coaching. While strong working alliances can form in digital settings and clients appreciate the flexibility digital coaching offers, challenges related to rapport-building, cognitive load and communication dynamics which need to be managed

The Impact of Digital Coaching

Understanding the impact of digital coaching interventions necessitates thoroughly examining the key outcomes evaluated in empirical studies. This review seeks to identify the primary metrics used to assess coaching effectiveness and how researchers have operationalised different facets of well-being, work-related behaviours, and coaching success.

The literature indicates that digital coaching significantly impacts well-being, work performance and skill development, but variations in assessment methods complicate comparability. Eleven reviewed studies employed a quantitative design, utilising validated measures to assess coaching effects across multiple domains. A dominant theme emerging from these studies is the emphasis on well-being and mental health outcomes, with frequent assessment of factors such as optimism, life satisfaction, resilience, stress management, emotional regulation, and burnout reduction (Auer et al., 2022; Fainstad et al, 2022.; Jeannotte et al. 2021; L'Engle et al., 2024). Digital coaching mitigates burnout and fostered self-compassion among professionals in high-stress environments, such as medical trainees (Mann et al., 2022) and healthcare workers (O'Donovan et al., 2024). Additionally, work-related outcomes, including work engagement, productivity, and workplace effectiveness, were positive (Auer et al.; Weinberg & Hausfeld, 2024; Fainstad et al., 2022).

Beyond individual performance, some studies explored behavioural and relational outcomes, such as social connection, authenticity, trust in the coach, and entrepreneurial self-efficacy, highlighting the broader personal and professional impact of coaching (Hunt et al., 2019; Jackson & Bourne, 2020; Weinberg & Hausfeld, 2024). The role of community and connection in coaching interventions is particularly

significant, with research emphasising the benefits of peer support, shared experiences, and group-based coaching models (Mann et al., 2022). Many participants reported strong relational bonds with their coaches including in digital formats (O'Donovan et al., 2024).

In addition to individual-level improvements, researchers also explored coaching-specific measures, such as participants' satisfaction with the coaching process, the usability of digital coaching platforms, and the potential side effects of different coaching formats (Geissler et al., 2014; Giusino et al., 2023; Michalik & Schermuly, 2024). Studies examining Positive Psychology Coaching (PPC) have further underscored its value in creating a safe space for reflection, increasing self-awareness, alleviating negative emotions, and enhancing motivation (van Nieuwerburgh et al., 2021). These studies illustrate how digital coaching fosters psychological well-being while facilitating professional growth and behaviour change.

However, variations in research design, coaching formats, and intervention type and lengths emphasise the need for standardised coaching delivery protocols and evaluation frameworks to deepen our understanding of specific impacts. While some studies employed longitudinal designs to track sustained benefits (e.g. Jeannotte et al. 2021; Giusino et al., 2023), many only assessed short-term effects, making it challenging to ascertain the long-term impact of digital coaching.

Additionally, methodological differences affect the strength of causal inferences. While randomised controlled trials (RCTs) (e.g., Fainstad et al, 2022.) and quasi-experimental designs (e.g. Auer et al., 2022) provided more substantial evidence, other studies lacked comparison groups, making it difficult to isolate the actual effect of coaching from confounding factors. Further, the diversity in coaching formats (e.g., online, telephone, blended), communication modes (e.g., verbal vs. text-based), intervention lengths (one session, six sessions), session length (30 minutes, 1-hour, 2-hours), and coaching models (solution focused, cognitive behavioural, positive psychology coaching) complicates direct comparisons (Geissler et al., 2014; Michalik & Schermuly, 2024; O'Donovan et al., 2024). Participants' preferences for different interaction styles, such as synchronous video coaching versus asynchronous text-based support, highlight the need for flexible, customisable coaching approaches (Mann et al., 2022; O'Donovan et al., 2024). As a result, we advocate for standardised methodologies and published intervention protocols to enhance comparability across studies, strengthening the understanding of digital coaching effectiveness.

Targeted Populations and Methodological Limitations

Digital coaching interventions have been applied across various target populations, including healthcare workers, female professionals, STEM employees, business leaders, researchers, and general employees seeking to enhance well-being, manage stress, and improve performance. These diverse applications highlight the adaptability of digital coaching across different professional and demographic contexts. However, while some studies included large-scale samples exceeding 1,000 participants (Auer et al., 2022), many relied on qualitative investigations with as few as six participants (van

Nieuwerburgh et al., 2021). Such small-scale studies raise questions about the generalisability of findings.

Coaches' expertise was noted as a key factor in a small number of the studies. Auer et al. (2022) using certified external coaches contributed to confidentiality and trust. Similarly, Jeannotte et al. (2021) noted the importance of algorithm-based matching using accredited coaches. However, no studies included in this study compared the outcomes from accredited and non-accredited coach, leaving this area open for further research.

However, not all studies provide transparency regarding coach qualifications and expertise, highlighting the importance of future studies providing greater clarity on the experience, training, qualification and backgrounds of those providing the coaching. Another key consideration is the variation in coaching specialisations, with some studies led by ‘business coaches’ and others by ‘physician coaches’.

In some settings, specialised coaching was credited with have a positive impact. Fainstad et al. (2022) and Mann et al. (2022) recruited physician coaches to address burnout and stress among female physicians, leveraging medical and coaching expertise. L’Engle et al. (2024) and Giusino et al. (2022) focused on stress management and team communication, employing trained health and team coaching professionals. In entrepreneurship, Hunt et al. (2019) found that female entrepreneurs benefited from gender-specific coaching, receiving tailored business development support. These examples highlight the perception of specialised coaches’ expertise in some settings, but without a direct comparison, it is impossible to conclude the impact of this additional knowledge or expertise.

Moreover, in reviewing efficacy, numerous studies lack empirical rigour, failing to benchmark digital coaching against alternative interventions, which makes it difficult to isolate the true impact of digital coaching. The variability in coaches’ backgrounds and the absence of standardised reporting on qualifications underscore the need for more robust processes in coaching research. It is critical to ensure that all studies document the process of coach selection, coach accreditation, gender and race, and previous or additional areas of relevant expertise, as well as more detail on the intervention (session length, frequency, and coaching approach used, such as CBC, solution focused, positive psychology)

Implications for the Future of learning and development at work

The continued growth of digital coaching will likely drive broader change in learning and development across organisation learning over the coming decade. Firstly, we anticipate a desire for integration, with a desire to embed digital coaching platforms within broader learning ecosystems. Secondly, the quality and volume of data derived from digital coaching platforms will likely increase organisations' desire for more and better learning data from other interventions, leading to increased learning digitisation. Thirdly, the personalisation and just-in-time features of digital coaching are expected to create demand for greater flexibility in developing and deploying learning programmes,

with greater utilisation of learning platforms for delivery. Finally, the success of digital coaching providers may see a broadening of their role into other areas of workforce learning through the continued development and deployment of AI.

Future Research

Given the rise in research on digital coaching during the period 2020-2025, much remains to explore. The general lack of empirical research in the field means more research is needed to explore topics such as group variability: Do students and C-suite leaders benefit equally from the digital mode of delivery? Secondly, clients with emotional topics, such as exploring sensitive life coaching issues, benefit as much as clients exploring work-based challenges, such as improving their presentation skills. In many areas of coaching and learning research there is a need for more robust, large sample, random control trials (RCT designs), with comparative interventions and longitudinal measurement of the effects. We believe digital coaching platforms have an important role to play and should aim to make an active contribution to knowledge creation, and in doing so contribute to the wider development of the field, helping clients and organisations by doing so.

A further area of exploration not currently reflected in the literature is how AI and Digital might be integrated to amplify the outcomes of human coaching. This is an emerging field, and while separate studies exist on AI coaching and learning (see Passmore et al., 2025), how these aspects can be integrated, and to what benefit, requires further exploration.

Limitations to the study

This study has several limitations. First, while a research protocol was developed, it was impossible to publish it due to a lack of available outputs for workplace research protocols. The result is reduced transparency and that some publications may have been missed. Secondly coaching is a relatively immature sub-discipline within management, studies and thus the number of studies is small, and often based on small samples and overly focused on qualitative studies.

Conclusions

In conclusion, by the 2030's, we believe the world of learning at work will be significantly impacted by technology. The growing ubiquity of online communication platforms, from WhatsApp to ZOOM, and changes to working patterns, such as hybrid working, along with a desire for greater agility and personalisation in learning, have seen the growth of digital coaching to deliver workplace learning, at scale. While coaching has extended across organisations, it predominantly remains the preserve of highly valued employees; its growth reflects the evidence that digital coaching achieves similar outcomes to face-to-face. However, more research is needed to determine whether these findings are valid for all groups and all presenting problems. Specifically, some issues are better explored face-to-face, while others benefit from the cost, convenience or physical distance of digital delivery. The coming decade is likely to see the integration

of AI and digital technologies, as well as human and machine solutions, as organisations seek to optimise cost-effectiveness and user preferences.

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