



Coaching the Machine: Exploring ChatGPT as Coachee and Feedback Partner in Coaching Education

Journal:	<i>International Journal of Mentoring and Coaching in Education</i>
Manuscript ID	IJMCE-07-2025-0096.R3
Manuscript Type:	Research Paper
Keywords:	AI-enabled learning, AI coachee, coaching education, coaching competence, reflective practice, experiential learning, digital transformation, Experiential Learning Theory, Social Cognitive Theory

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Abstract

Purpose:

This study explores how postgraduate coaching students experience generative AI (specifically ChatGPT) as a simulated coachee and feedback provider. It examines how such interactions support or hinder the development of coaching competence and reflective practice, drawing on Kolb's experiential learning theory (ELT) and Bandura's social cognitive theory (SCT).

Design/methodology/approach:

Twelve postgraduate students each conducted a simulated coaching session with ChatGPT in the coachee role, received AI-generated feedback, and submitted written reflections. A follow-up focus group facilitated collective sense-making. Data were analysed using reflexive thematic analysis, informed by ELT's learning cycle and SCT's emphasis on self-efficacy, feedback, and personal agency in learning.

Findings:

Five themes were developed: (1) Authenticity and Engagement, (2) Cognitive Load and Processing Challenges, (3) Perceptions of Feedback and Learning, (4) Ethical Concerns, and (5) AI's Role in Coaching Education. Students appreciated the low-stakes practice space and affirming feedback but noted limitations in emotional realism and relational depth. These gaps, along with cognitive strain, ethical concerns, and uncertainty about feedback credibility, shaped how students engaged with the tool. ELT and SCT offered a dual lens to understand how AI mediates reflection and skill development.

Originality:

This study offers theoretically grounded insights into how AI can scaffold reflective learning, self-efficacy, and experimentation, while also surfacing relational, cognitive, and ethical tensions. The findings support a critically informed integration of AI into coaching curricula, underpinned by AI literacy, digital trust, and reflective judgement.

Keywords: AI-enabled learning; AI coachee; coaching education; coaching competence; reflective practice; experiential learning; ChatGPT; digital transformation; experiential learning theory; social cognitive theory

Introduction

According to the International Coaching Federation (ICF, 2025), the global coaching market exceeds USD 5.340 billion, with 89% of organisations planning to expand their coaching provision to address priorities such as hybrid working, digitalisation, and continuous professional development (McKenzie *et al.*, 2022). A key development is the integration of artificial intelligence (AI) into coaching (Passmore and Woodward, 2023). AI-powered coaching tools are gaining traction for their scalability, accessibility, and cost-effectiveness (Passmore *et al.*, 2025b). For instance, in a controlled trial, Terblanche *et al.* (2022) found that chatbot coach *Vici* facilitated goal setting and provided 24/7 support but did not improve participants' resilience and psychological wellbeing, or perceived stress. Most notably, a recent study by Passmore and colleagues (2025a) found that the AI coaching agent *Alpina* demonstrated ICF Associate Certified Coach (ACC) level competencies, as assessed by qualified ICF assessors. These findings highlight the increasing sophistication of AI agents, with some approaching competencies comparable to those demonstrated by human practitioners.

The rise of AI in coaching has elicited mixed responses within the profession. Passmore *et al.* (2025b) capture this spectrum with "AI Zoomers/Doomers/Bloomers". "Zoomers" warn that AI may replace early-career coaches (Bruning and Boak, 2025; Passmore and Tee, 2023) and raise ethical-relational concerns about delegating aspects of human development to machines (Bachkirova and Kemp, 2024; Diller *et al.*, 2024). "Doomers" highlight that while AI may support goal clarification, it lacks the mutual attunement and embodied responsiveness needed for coaching (Bachkirova and Kemp, 2024; Graßmann and Schermuly, 2021). "Bloomers" view AI as a complementary tool that broadens access to high-quality feedback, supports reflective practice, and reduces administrative burden (Bruning and Boak, 2025; Movsumova *et al.*, 2020; Passmore *et al.*, 2025b).

Yet, while much of the existing literature on AI in coaching has focused on its application in client-facing roles, its potential as a pedagogical tool within coach education remains underexplored. This matters because international competency frameworks define core

domains for emerging coaches, such as presence, ethical awareness, effective communication, reflective capacity, and the facilitation of client growth, towards which programmes must deliberately scaffold development (e.g., Association for Coaching [AC], 2012; British Psychological Society [BPS], 2021; European Mentoring and Coaching Council, 2020; ICF, 2024b). As students work towards accreditation, coach educators must support not only technical skill development but also the cultivation of self-aware, values-driven practitioner identities. In this vein, Carden *et al.* (2022) emphasise the role of both tools and self-awareness in behavioural change, while Jarosz and Cartor's (2025) Coaching Effectiveness Framework conceptualises coaching expertise as an integration of behavioural skill, emotional regulation, reflective ability, and contextual awareness. Across higher education more broadly, emerging research suggests that generative AI can promote dialogic learning, simulate practice environments, and serve as a reflective partner (Bae *et al.*, 2024; Luckin *et al.*, 2016). Health profession education shows benefits when fidelity, debrief, and feedback are strong but cautions about constrained language flow, absent non-verbal cues, autonomy, bias, privacy, and integration cost (Fernández-Alcántara *et al.*, 2025; Salvetti *et al.*, 2025). From a human-machine interaction lens, learning depends on "intercultural coordination" of meaning based on linguistic alignment, social presence, and trust (Branigan *et al.*, 2010; Clark *et al.*, 2019; Schuetzler *et al.*, 2018; Stein and Uebach, 2025), with non-Western evidence similarly highlighting AI self-efficacy and trust (Aliño *et al.*, 2024; Wang and Zhou, 2025).

Despite these promising developments in AI-mediated education, research explicitly examining the role of generative AI in coaching education remains notably limited. A recent exception is Bridgeman and Giraldez-Hayes (2024), who explored the use of the AI-supported video feedback platform *Ovida* (Haitoglou, 2025). Their findings demonstrated how AI-generated performance metrics (e.g., question frequency and share of voice), combined with video playback, could enhance early-stage coaches' self-awareness, confidence, and targeted skill refinement. However, they also highlighted limitations, including discomfort with self-observation, using new technology, and concerns about the software's inability to interpret relational nuance.

Building on this nascent evidence base, we focus on a complementary pedagogical affordance: the use of generative AI as coachee to practice coaching conversations and function as a reflective learning partner within training contexts. This study addresses that

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3 gap by examining postgraduate coaching students' experiences of engaging with ChatGPT as
4 both a simulated coaching client and a feedback partner. Unlike proprietary AI platforms,
5 ChatGPT (GPT-4) offers a general-purpose, flexible interface capable of simulating a range
6 of roles. Its open access and ease of use make it particularly suitable for integration into
7 coach training programmes seeking scalable and low-cost innovation in practice-based
8 learning. We used ChatGPT (GPT-4) because students could view transcripts, use
9 configurable prompts, and run scenarios without uploading sensitive material, features that
10 support oversight and align with privacy-by-design principles (Nguyen *et al.*, 2023).
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13 **Theoretical lenses for understanding learning in AI-assisted coaching education**

14 Building on the literature above, the educational value of AI-mediated coaching appears to
15 rest on two linked layers: the learning process (i.e., observing, reflecting, and trying out
16 alternatives in context) and the psychological mechanisms that sustain it (i.e., alignment,
17 social presence, trust, and affect) as supports for self-efficacy and engagement. Accordingly,
18 we frame the study with two complementary theoretical lenses: Kolb's experiential learning
19 theory (ELT; Kolb, 1984) and Bandura's social cognitive theory (SCT; Bandura, 1986,
20 1997). ELT provides a process-oriented lens through which to understand how students
21 engage with new learning environments. It describes learning as a four-stage cycle: (1)
22 concrete experience, (2) reflective observation, (3) abstract conceptualisation, and (4) active
23 experimentation. Learners make sense of new experiences by reflecting on them, integrating
24 insights into existing knowledge, and testing these in future scenarios.
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27 SCT emphasises personal agency, self-efficacy, and observational learning in shaping
28 behaviour and development. Individuals are seen as active participants in their own learning,
29 influenced by their-beliefs about their capabilities and by available feedback and models.
30 Coaching an AI can thus function as a mastery experience, reinforcing self-efficacy through
31 structured practice and feedback. The theory also highlights the role of peer learning and
32 affective responses (e.g., uncertainty, curiosity, confidence) in shaping engagement with AI-
33 supported simulations.
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36 **The present study**

37 Informed by ELT and SCT, this qualitative study explores how postgraduate coaching
38 students experience and interpret their learning through an AI-led coaching simulation with
39 ChatGPT feedback. It identifies the opportunities and limitations of generative AI as a
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3 reflective learning tool in coaching education, contributing to debates on innovation,
4 professional formation, and reflective practice.
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8 **Methodology**

9 **Research design**

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12 Framed within a pragmatic paradigm and contextualist epistemology, which prioritises
13 practical usefulness for coach education and views knowledge as local, provisional, and
14 situation-dependent (Madill *et al.*, 2000), we adopted a qualitative design to explore students'
15 experiences of AI-led coaching simulations. Data were generated through written reflections
16 and a semi-structured focus group following an AI-based coaching simulation. Analysis used
17 reflexive thematic analysis to develop themes as patterns of shared meaning (Braun and
18 Clarke, 2021a), an approach congruent with our stance, emphasising constructed meanings,
19 researcher reflexivity, and judgements of usefulness and coherence.
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27 **Ethical approval**

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30 Ethical approval was granted by a UK university ethics committee (Ref: 2425_36). All
31 participants gave informed consent, were briefed on the voluntary nature of their
32 participation, and were assured of confidentiality and the right to withdraw their data.
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36 **Participants**

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39 Twelve postgraduate students (10 women, two men; $M = 43.2$ years, $SD = 11.6$) enrolled in a
40 postgraduate coaching programme participated in the study. All participants were six months
41 into their training, having covered core competencies and completed, on average, 20 to 32
42 hours of coaching practice. Using purposive sampling, the full cohort of the MSc module was
43 invited during a scheduled class, with inclusion criteria of current enrolment and informed
44 consent. All participants had an undergraduate degree in psychology and prior experience
45 using ChatGPT for non-coaching-related tasks (e.g., study support, writing assistance), but
46 none had used it within a coaching simulation. Pre-task discussions suggested a moderate
47 level of digital literacy and comfort with technology. Seven participants provided pre-course
48 background data: public/third sector ($n=3$), education/academia ($n=2$), and
49 business/management ($n=2$). Two reported <2 years' informal coaching experience (e.g., ad-
50 hoc peer coaching with colleagues or practice within study groups). No participant reported a
51 prior coaching qualification; two held a counselling qualification. No other demographic
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3 information was collected at recruitment. One participant did not complete the written
4 reflection but did contribute to the focus group. All others completed both data components.
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8 **Procedure**

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10 Students took part in a structured 30-minute coaching simulation with an AI tool (ChatGPT)
11 during class time. While coaching is typically coachee-led in topic selection, students were
12 allowed to choose a work-related scenario (e.g., career transition, leadership, skills
13 development) they might find challenging if raised by a real coachee, in line with simulation
14 pedagogy (Bartlett *et al.*, 2022; Dai and Ke, 2022; Jeong *et al.*, 2025; Salminen-Tuomaala,
15 2020). Students were instructed to avoid personal or third-party identifiers and to keep topics
16 non-sensitive. After the session, students submitted the full dialogue to ChatGPT for a
17 detailed evaluation. ChatGPT responded in the role of the coachee presenting that scenario.
18 Following the simulation, each participant completed a written self-reflection in response to
19 guided questions. The self-reflection invited students to consider the relevance of AI in
20 coaching practice, the perceived value and accuracy of the AI-generated feedback, and key
21 insights gained from the experience. Anonymised reflections were submitted to researchers
22 after class for qualitative analysis. Students then took part in a 75-minute focus group to gain
23 deeper insights into the collective experiences of participants. The semi-structured discussion
24 encouraged exploration of emotional, cognitive, and developmental responses to the
25 simulation, with prompts addressing realism, engagement, ethical considerations, and
26 implications for future practice. The session was audio-recorded with participants' consent
27 and subsequently transcribed using Microsoft Stream's auto-transcription feature, then
28 checked manually for accuracy.
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44 **Data analysis**

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46 All data (written reflections and focus group transcripts) were pseudonymised. Participant
47 quotes are reported using pseudonyms followed by the suffix "P" (e.g., P1). Data were
48 analysed using Microsoft Word and Excel, following Braun and Clarke's (2021a) six
49 reflective thematic analysis (RTA) phases (Table I). Consistent with our pragmatic,
50 contextualist stance, prioritising usefulness-in-context and viewing meanings as situated,
51 coding was predominantly inductive, with sensitising concepts from ELT and SCT used
52 during theme review to appraise relevance and coherence without pre-structuring the analysis
53 (Byrne, 2022). To support credibility, we used multi-source data (individual reflections and a
54 focus group) and iterative analytic meetings (first and third authors), treating triangulation as
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3 complementarity/resonance rather than convergence (Madill *et al.*, 2000). Dependability and
4 confirmability were addressed through an audit trail and author debriefing. We sought
5 transferability as resonance via thick description of context, participant characteristics, and
6 procedures, alongside evocative presentation of findings and theoretical linking of themes to
7 ELT, SCT, and AI-learning concepts (Stalmeijer *et al.*, 2024). Consistent with RTA, we did
8 not aim for saturation but rather worked according to the principle of pragmatism (Braun and
9 Clarke, 2021b) and “conceptual depth” (Nelson, 2016), ensuring that each theme was well-
10 supported and meaningful within the study’s scope and purpose.
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18 **Reflexivity**

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20 All authors are coaching psychologists and educators. The first and third authors conducted
21 the data analysis, drawing on their combined expertise in coaching psychology and
22 qualitative methodology. The second author facilitated the focus group and was also the
23 module tutor for the participating students, a dual role managed through anonymisation and
24 clear communication that participation would not affect assessment. Our analysis was shaped
25 by a broadly interpretivist stance and informed by our professional backgrounds. We
26 maintained reflexive awareness throughout, acknowledging how our theoretical positions and
27 pedagogical values influenced theme development and interpretation.
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35 **Findings**

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37 Through RTA, we identified five overarching themes capturing students’ experiences of
38 coaching a generative AI: (1) Authenticity and Engagement, (2) Cognitive Load and
39 Processing Challenges, (3) Perceptions of Feedback and Learning, (4) Ethical Concerns, and
40 (5) AI’s Role in Coaching Education. The thematic map is in Figure 1.
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46 **Theme 1: Authenticity and Engagement**

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48 Participants offered mixed views on the realism and engagement of coaching an AI coachee.
49 A recurring concern was the AI’s tendency to generate pre-emptive, overly structured
50 responses, disrupting the natural ebb and flow of coaching dialogue. Prior knowledge of
51 coaching a chatbot, coupled with lack of non-verbal cues and contextual awareness, further
52 limited realism.
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Sub-theme 1.1: AI as an “ideal” coachee

While some welcomed the AI’s responsiveness and information-rich replies, others saw it as “overperforming”, delivering extensive detail unprompted and even advancing its own action plans, thereby constraining open inquiry and co-constructed meaning:

It gave loads of information which would have normally taken much further exploration ... It was probably the most informed coachee I’ve ever coached. (P4, reflection)

It wasn’t very realistic ... it had best practice answers for everything. Very textbook. (P11, focus group)

Sub-theme 1.2: Difficulty suspending disbelief

For most students, the awareness that they were interacting with a non-human system remained cognitively present, undermining their ability to engage with presence and authenticity:

Even though I engaged in it with curiosity, I don’t think I could forget that it was not real. (P1, reflection)

I did not feel like I could give the coaching conversation as much value, or coach to my full potential, as I felt biased knowing it was AI as opposed to human. (P6, reflection)

Sub-theme 1.3: Interpretation limitations and emotional disconnect

Students perceived limits in the AI’s ability to read tone, context, and affect, eroding a sense of alliance and investment in the process: “It didn’t explore emotions or feelings; it was quite awkward” (P4, focus group).

Theme 2: Cognitive Load and Processing Challenges

Participants described both cognitive and emotional challenges when coaching the AI. While some valued the novelty and opportunity to experiment, many experienced difficulties linked to the AI’s response style, pacing, and the text-based format of interaction.

Sub-theme 2.1: Information overload and pacing

Participants frequently reported feeling overwhelmed by the density and immediacy of AI responses. The rapid pace impeded sense-making and limited opportunities for deeper exploration: “It felt like coaching on speed ... there was loads of stuff that could have been probed just from the first question, but I felt like it was moving at pace and I was struggling to keep up” (P4, focus group).

Sub-theme 2.2: Barriers and benefits of text-based interaction

Text-based interaction created accessibility challenges, particularly for those with dyslexia or physical discomfort. These challenges, self-reported in written reflections, reduced ease of participation, limited engagement, and in some cases discouraged deeper exploration:

I have dyslexia and so found it harder to read the extensive outputs quickly enough. This was also exacerbated by being in a lot of physical discomfort during typing today. (P1, reflection)

Typing coaching conversations is long-winded and time-consuming, which prevented me from wanting to explore things further. (P6, reflection)

However, some participants appreciated the asynchronous processing time that written exchanges offered, noting the opportunity to reflect more deliberately between prompts: “This was helpful to me as the coach in terms of additional thinking space, as one wouldn’t get in a human-to-human verbal interaction in quite the same way” (P8, reflection).

Two participants suggested that repeated exposure or voice-based AI might reduce the cognitive burden and enhance coaching presence over time:

Doing this activity a few times with it and getting used to it would allow me to engage more meaningfully. (P1, reflection)

I wonder if you can use voice communication with it and if the experience would then be different ... more likely to use deep listening skills that we usually use in coaching practice. (P8, reflection)

Theme 3: Perceptions of Feedback and Learning

Participants reflected on the feedback provided by the AI, identifying both affirming and limiting aspects. While some found the feedback encouraging and useful for self-awareness, others questioned its depth, relevance, and contextual accuracy.

Sub-theme 3.1: Recognition of strengths and areas for growth

Many found the feedback affirming, particularly when it echoed previous observations from supervisors or peer reviews. This validation enhanced self-awareness and provided reassurance about their coaching development:

It reinforced that I am good at asking questions and creating a space supporting reflection and exploration ... getting that perspective helped me appreciate what I am doing well. (P10, focus group)

It picked up on things that I do naturally and, therefore, would overlook as strengths. (P8, reflection)

When it said “I asked a powerful question” ... I thought “nice, I have been practising and reflecting on that” from prior feedback. (P7, reflection)

Sub-theme 3.2: Limitations of feedback accuracy and personalisation

Several participants experienced the feedback as generic, uniformly positive, or insufficiently sensitive to context, which at times provoked defensiveness: “I had quite a visceral reaction to the feedback ... I felt more defensive because it didn’t feel as authentic or fair.” (P5, reflection).

They also noted that the AI missed non-verbal cues and subtle conversational dynamics that informed their choices: “ChatGPT flagged a ‘bias’ in my coaching ... I was actually mirroring my coachee’s language to show deep listening” (P4, reflection).

Volume compounded these issues, with long, dense outputs reducing practical value: “I found reading the reams of information quite time-consuming ... I’m pretty sure I just scanned most of it rather than deep reading” (P8, reflection).

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3 Nonetheless, some found that prompting for specificity improved relevance and utility: “If
4 you continue to ask for feedback, it will give you specific wording for questioning and
5 frameworks to use as well” (P3, reflection).
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9 **Theme 4: Ethical Concerns**

10 Ethical concerns were identified around data use, credibility, and the impersonality of the AI
11 coaching experience.
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14 *Sub-theme 4.1: Data use and transparency*

15 Participants questioned how data might be used or stored by the system, expressing concerns
16 about privacy and the source of the AI’s knowledge:
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19 Does anyone think that it might be using data from their previous activities to inform
20 its responses? (P7, reflection)
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23 I wondered if ... the program is storing cookies and data ... which might have
24 influenced the direction of the coaching. (P8, reflection)
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28 Lack of transparency around data use reduced trust in the feedback’s validity and raised
29 questions about whether the AI had an appropriate understanding of coaching intentions: “It
30 suggested I could have explored the client’s motivations and values ... but that wasn’t the
31 direction chosen by the client” (P9, reflection).
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35 *Sub-theme 4.2: Lack of relational continuity and accountability*

36 Participants observed that the AI, unlike a human coachee, could not revisit previous
37 sessions, reflect on progress, or build relational continuity over time. This absence of follow-
38 through reduced the sense of mutual accountability and growth: “It is lacking that follow-up
39 afterwards when they’ve actually gone away and done the work that they set themselves”
40 (P6, focus group).
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43 **Theme 5: AI’s Role in Coaching Education**

44 Despite its limitations, most participants recognised the potential value of generative AI as a
45 supplementary tool in coaching education.
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Sub-theme 5.1: Practising skills and experimentation

Several participants described the AI as a safe environment to rehearse techniques, experiment with new approaches, and apply theoretical models:

I used it for a scenario that was totally outside my comfort zone, coaching a CEO, and it gave me insight into how that could go. (P10, focus group)

It gave me some ideas on how to improve questions ... for example, how to avoid leading questions. (P3, reflection)

For some, the simulation enhanced their sense of competence and reaffirmed their professional identity: "It is reassuring that I am doing something right with my real-life coachees" (P8, reflection).

Others were more cautious, noting limited direct impact on confidence but recognising educational value with repeated use: "I don't think one use of it would really change anything. It could be really useful and would definitely increase my confidence and competence going forward" (P5, focus group).

Sub-theme 5.2: A tool to enhance reflection

Participants identified reflective opportunities, both during and after sessions, enabled by the AI's consistent responses and feedback: "I might use it again to reflect on my questioning" (P9, focus group).

However, some cautioned that overreliance on AI might reduce flexibility in human interactions: "There's a risk of becoming too used to AI and then struggling with human clients" (P8, reflection).

Overall, students recommended that its use in coaching programmes be optional and accompanied by critical reflection.

Discussion

This study explored how postgraduate coaching students experienced and made sense of their learning through AI-led coaching simulations using ChatGPT as a coachee and feedback partner. Drawing on Kolb's ELT and Bandura's SCT, the discussion examines learning

opportunities for practice, reflection, and professional growth, alongside key limitations relating to authenticity, feedback credibility, cognitive load, and ethics, and implications for coaching pedagogy and curriculum design.

AI as a catalyst for practice, reflection, and confidence

The AI simulation provided participants with a novel, low-stakes environment in which to practise coaching techniques and explore challenging scenarios. In line with Kolb's (1984) ELT, students engaged in "active experimentation" by testing strategies, applying theoretical models, and working through unfamiliar coaching topics. For many, the AI functioned as a "sandbox" where experimentation felt possible without fear of failure. This echoes findings by Bridgeman and Giraldez-Hayes (2024), who observed that AI-enhanced tools such as *Ovida*, which records coaching conversations and provides automated feedback, allow novice coaches to rehearse and reflect in a self-paced, low-pressure setting. These results also align with broader literature on the role of AI simulation in higher education and professional training ((Dai and Ke, 2022; Fazlollahi *et al.*, 2022; Fernández-Alcántara *et al.*, 2025; Salvetti *et al.*, 2025), supporting calls for its integration into pedagogical experimentation (Holmes and Tuomi, 2022; Passmore and Woodward, 2023).

Bandura's concept of self-efficacy provides a useful lens for understanding how these simulations influenced students' confidence. The AI offered structured mastery experiences, enabling students to practise in a controlled setting and receive immediate feedback. This was particularly well received when the feedback highlighted their strengths, with many participants appreciating the recognition of capabilities they might otherwise have overlooked. Such affirming feedback served a social persuasion function, strengthening beliefs in their ability to succeed (Bandura, 1994), which can support motivation and self-efficacy (Gradito Dubord *et al.*, 2022; Mumm and Mutlu, 2011). These experiences are especially important during the formative stages of coach development, where confidence-building and the reinforcement of effective behaviours contribute to emerging professional identity (Viera and Palmer, 2018) and can be scaffolded by generative AI to support learning and bolster confidence, particularly among less experienced coaches (Canonigo, 2024).

The limits of authenticity and emotional engagement

Despite these benefits, tensions emerged in Kolb's (1984) "concrete experience" and "reflective observation" stages, centred on AI's limited realism and emotional depth.

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3 Participants described the AI coachee as overly structured, pre-emptive, and emotionally flat,
4 disrupting the natural rhythm of dialogue and constraining real-time attunement. Consistent
5 with human–machine interaction research, such constrained exchanges may limit linguistic
6 alignment, thereby degrading communicative efficacy (Branigan *et al.*, 2010) and
7 diminishing social presence (particularly intimacy and immediacy), weakening emotional
8 engagement and perceived authenticity (Oh *et al.*, 2018). Many struggled to fully “suspend
9 disbelief”: heightened awareness of the system’s artificiality blunted presence and emotional
10 investment, while the lack of spontaneity and relational nuance undermined the authenticity
11 that is critical to coaching presence. As others note, coaching extends beyond problem-
12 solving to expand clients’ capacity for meaning-making through emotionally attuned,
13 context-sensitive inquiry (Bachkirova and Borrington, 2019; Cox, 2016). A recent systematic
14 literature review further highlights that deep, long-term coaching relationships, characterised
15 by a strong working alliance and a personalised approach, remain beyond current AI
16 capability (Plotkina and Sri Ramalu, 2024). Such depth depends on shared context, mutual
17 responsiveness, and culturally and emotionally informed understanding that AI lacks
18 (Bachkirova and Kemp, 2024).

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32 Our findings also echo Bridgeman and Giraldez-Hayes (2024) on AI’s failure to register
33 emotional or contextual subtleties. From an SCT perspective, self-efficacy is shaped not only
34 by cognitive appraisals of one’s ability but also by emotional experiences during learning
35 (Bandura, 1997). Positive emotions can enhance perceived control and expectations of
36 success, thereby strengthening self-efficacy and persistence, whereas negative emotions
37 reduce engagement and confidence (Linnenbrink, 2007; Pekrun and Perry, 2014). Here, the
38 scripted, emotionally neutral exchange with ChatGPT likely disrupted the affective feedback
39 loops that typically support deeper learning, engagement, and belief in one’s capabilities
40 (Arguedas *et al.*, 2016; Wang and Zhou, 2025).

41 42 43 44 45 46 47 48 **Feedback, learning, and the role of AI literacy**

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51 Students experienced ChatGPT’s feedback as both helpful and limited. Many appreciated its
52 immediacy and affirming tone, which echoed prior supervisory feedback and helped reinforce
53 their existing strengths. Such continuous, immediate feedback can accelerate students’
54 learning via faster error correction and often feels more accessible than feedback from human
55 educators (Hattie and Timperley, 2007). Strength-affirming feedback can also enhance
56 reflective observation and build self-efficacy, particularly among novice or self-doubting
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3 learners (Canessa-Pollard, 2025; Schunk, 2023). Parallel reports in counselling education
4 similarly note benefits from supportive, ChatGPT-mediated feedback after simulated sessions
5 (Jeong *et al.*, 2025).
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10 However, students questioned the credibility, specificity, and contextual sensitivity of the
11 AI's responses. Several described the feedback as overly general or "textbook-like", lacking
12 the nuance of human supervision. This limitation appeared to hinder students' progression
13 from "reflective observation" to "abstract conceptualisation" in ELT, where learners
14 transform experience into deeper understanding, frameworks, or guiding principles for future
15 practice. In coaching education, personalised, context-rich feedback is essential to the
16 development of reflective judgement and professional identity (Bachkirova *et al.*, 2020).
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23 Because effective feedback should be dialogic and relational (Carless and Winstone, 2023),
24 misreads (e.g., labelling mirroring as bias) left some participants frustrated or sceptical,
25 undermining trust. The absence of relational dynamics may explain why AI-generated
26 feedback was sometimes perceived as less impactful, as trust and rapport support
27 psychological safety, self-reflection, and a growth mindset in learning environments (Boud
28 and Molloy, 2013; Steen-Utheim and Wittek, 2017). Notably, several students improved the
29 quality of the feedback by refining their prompts or asking better questions, pointing to the
30 importance of AI literacy (e.g., Aliño *et al.*, 2024), interacting critically and strategically with
31 AI systems through adaptive problem-solving (Long and Magerko, 2020). Thus, developing
32 this literacy within coaching education is essential to help students engage proactively, rather
33 than passively, with emerging technologies.
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43 **Cognitive load and learning conditions**

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45 Participants in our study identified both cognitive and physical strain associated with
46 ChatGPT's text-based interface. Long, immediate responses disrupted dialogue pacing,
47 making it difficult to pause, reflect, and formulate follow-ups. While ELT presumes time and
48 space for observation and meaning-making (Kolb, 1984), the volume and speed of exchanges
49 may hinder "abstract conceptualisation".
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55 From an SCT perspective, interface demands (e.g., typing and reading lengthy outputs) acted
56 as environmental constraints (Bandura, 1986) that some found demotivating. This aligns with
57 research on extraneous cognitive load, where text responses and limited pacing control can
58 overload working memory (DeLeeuw *et al.*, 2008; Hoeffler and Schwartz, 2011; Sweller and
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Chandler, 1994). These effects are particularly pronounced in simulation-based and exploratory learning contexts, where learners are prone to frustration or confusion and affect-sensitive supports help sustain engagement (De Jong and Van Joolingen, 1998). When students were able to regulate the interaction, by adjusting pacing, pausing, or revisiting AI feedback, they reported increased engagement, reflecting SCT constructs of self-regulation and perceived agency linked to better learning outcomes and task-related motivation (Chou *et al.*, 2024; Martin, 2004). Evidence from AI-supported settings similarly shows that adaptive and personalised interfaces can foster exploratory and self-regulatory learning (Dai and Ke, 2022).

Ethical sensitivities and trust in the learning environment

Participants' ethical concerns suggest that trust in both the relational and technological infrastructure of AI is pivotal for meaningful learning. Students questioned whether ChatGPT's responses drew on their prior digital activity, raising privacy and opacity issues that undermined confidence and echoed calls for ethical AI governance in education (Nguyen *et al.*, 2023). Research shows that AI self-efficacy (the belief in one's ability to interact effectively with AI) strongly predicts trust in AI systems among students (Aliño *et al.*, 2024). While participants in this study had prior experience using AI, their unfamiliarity with AI in the role of coachee may have contributed to hesitancy and scepticism.

Mayer *et al.*'s (1995) model of trust identifies three antecedents (competence, benevolence, and integrity), which, when applied to technology, translate into perceptions of its functionality, helpfulness, and reliability (McKnight *et al.*, 2011). In this study, uncertainty about how ChatGPT generated responses appeared to challenge these perceptions, weakening trust and, consequently, reducing students' engagement and sense of self-efficacy.

The relational discontinuity of coaching an AI coachee was also flagged as a key limitation. Without the possibility of follow-up or mutual accountability, students struggled to engage in sustained inquiry or feel a sense of mutual investment. From an ELT perspective, this lack of consequence/closure disrupts movement from conceptualisation to active experimentation. These concerns support critiques that generative AI may replicate the surface structure of dialogue but lacks the relational depth needed for transformative learning (Bachkirova and Kemp, 2024). However, work by Terblanche *et al.* (2024) suggests that under certain

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3 conditions, clients can experience psychological safety and working alliance with AI coaches,
4 indicating that relational engagement with AI may be possible over time or in different roles.
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8 **Practical implications for coaching education**

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10 Taken together, these findings point to concrete design choices for integrating AI simulations
11 into coaching curricula. Practical implications include positioning AI as a low-stakes practice
12 sandbox for “active experimentation” aligned to module outcomes (Kolb, 1984); scaffolding
13 authenticity and presence with brief human pre-briefs/debriefs and rapport prompts;
14 structuring feedback to build self-efficacy by requiring students to critique AI feedback and
15 turn it into action plans, consistent with dialogic feedback principles and SCT (Hattie and
16 Timperley, 2007); ensuring inclusion and access by monitoring differential experiences and
17 managing load through pacing, alternatives to written text, and accessibility supports
18 (DeLeeuw *et al.*, 2008; Sweller and Chandler, 1994); and building AI literacy for accuracy,
19 specificity, contextual fit, and ethics (Dai and Ke, 2022; Long and Magerko, 2020; Nguyen *et*
20 *al.*, 2023). An additional concern, absent from participant reflections but increasingly
21 relevant, is the environmental impact of large-scale AI deployment. Adoption should also
22 account for environmental costs (e.g., energy, water use for data-centre cooling), extending
23 ethics to sustainability (George *et al.*, 2023).
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35 **Limitations and future directions**

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37 This study offers an initial exploration of generative AI (ChatGPT-4) as a learning tool in
38 postgraduate coaching education through simulation and acting as a feedback partner.
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42 Several limitations apply. First, ChatGPT is a general-purpose, text-based model not designed
43 for coaching and lacks pedagogical and ethical frameworks aligned with professional
44 standards. While previous studies have examined AI in the roles of coach (e.g., Passmore *et*
45 *al.*, 2025b) and supervisor (e.g., Bridgeman and Giraldez-Hayes, 2024), future research
46 should explore AI as coachee using coaching-specific, multi-sensory systems grounded in
47 individualised instruction. Second, as a one-off simulation, responses were likely influenced
48 by novelty, initial discomfort, and unfamiliarity with AI in the coachee role. Longitudinal
49 designs should track how trust, attunement, competence, and self-efficacy evolve with
50 repeated exposure (Hardini *et al.*, 2025). Third, our sample (i.e., postgraduate students six
51 months into their programme) limits transferability. We do not yet know how novices or
52 experienced practitioners would engage with similar simulations, nor how engagement varies
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3 by characteristics associated with algorithmic bias (e.g., gender, ethnicity, cultural
4 dimensions; Gupta *et al.*, 2022; Kordzadeh and Ghasemaghahi, 2022). Future work should
5 use larger, globally diverse samples and include standardised measures (AI literacy, AI
6 trust/self-efficacy, human–machine interaction dispositions) alongside demographic data to
7 test whether, and how, learner stage, AI know-how, and sociodemographic factors moderate
8 or mediate interaction quality and learning outcomes in coaching education.
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15 Finally, the study did not address potential risks of cognitive offloading, whereby users defer
16 reflective or critical thinking to AI systems (Gerlich, 2025). In coaching education,
17 overreliance on AI-generated feedback may undermine the development of professional
18 judgement and reflective capacity, concerns echoed in wider discussions on algorithmic
19 influence in supervision and education (Hansen *et al.*, 2025). Future studies should explore
20 how to integrate AI-supported reflection with human-led developmental dialogue to ensure
21 learners remain active meaning-makers rather than passive consumers.
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28 **Conclusions**

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30 Through the combined lenses of ELT and SCT, this study offers a theoretically grounded
31 understanding of how generative AI can support, but not replace, learning in coaching
32 education. Our findings suggest that AI simulations can provide valuable opportunities for
33 active experimentation, structured feedback, and confidence-building, particularly in the early
34 stages of coach development. These outcomes align with emerging scholarship suggesting
35 that AI may serve as a scaffold for reflective practice, offering low-stakes opportunities to
36 test new skills and build self-efficacy (Bridgeman and Giraldez-Hayes, 2024; Dai and Ke,
37 2022). Future research should investigate how these intelligent systems could be integrated
38 into coach development to enhance cognitive efficiency, self-regulation, and the transfer of
39 learning (Feng, 2025). To harness AI effectively in coaching education, learning
40 environments must be critically scaffolded, not only to support technical skill development
41 but also to foster AI literacy, ethical awareness, and reflective judgement.
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Coaching the machine: exploring ChatGPT as coachee and feedback partner in coaching education

Abstract

Purpose:

This study explores how postgraduate coaching students experience generative AI (specifically ChatGPT) as a simulated coachee and feedback provider. It examines how such interactions support or hinder the development of coaching competence and reflective practice, drawing on Kolb's experiential learning theory (ELT) and Bandura's social cognitive theory (SCT).

Design/methodology/approach:

Twelve postgraduate students each conducted a simulated coaching session with ChatGPT in the coachee role, received AI-generated feedback, and submitted written reflections. A follow-up focus group facilitated collective sense-making. Data were analysed using reflexive thematic analysis, informed by ELT's learning cycle and SCT's emphasis on self-efficacy, feedback, and personal agency in learning.

Findings:

Five themes were developed: (1) Authenticity and Engagement, (2) Cognitive Load and Processing Challenges, (3) Perceptions of Feedback and Learning, (4) Ethical Concerns, and (5) AI's Role in Coaching Education. Students appreciated the low-stakes practice space and affirming feedback but noted limitations in emotional realism and relational depth. These gaps, along with cognitive strain, ethical concerns, and uncertainty about feedback credibility, shaped how students engaged with the tool. ELT and SCT offered a dual lens to understand how AI mediates reflection and skill development.

Originality:

This study offers theoretically grounded insights into how AI can scaffold reflective learning, self-efficacy, and experimentation, while also surfacing relational, cognitive, and ethical tensions. The findings support a critically informed integration of AI into coaching curricula, underpinned by AI literacy, digital trust, and reflective judgement.

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I've applied basic Word styles to your headings for ease of navigation (Headings 1-3 styles), and set line spacing to 1.5 for ease of editing.

Any edits to in-text citations are in accordance with Emerald/JMCE/Harvard guidelines. See Author Guidelines > Manuscript Requirements > References: <https://www.emeraldgrouppublishing.com/journal/ijmce?id=ijmce>

Keywords: AI-enabled learning; AI coachee; coaching education; coaching competence; reflective practice; experiential learning; ChatGPT; digital transformation; experiential learning theory; social cognitive theory

Introduction

According to the International Coaching Federation (ICF, 2025), the global coaching market exceeds USD 5.340 billion, with 89% of organisations planning to expand their coaching provision to address priorities such as hybrid working, digitalisation, and continuous professional development (McKenzie *et al.*, 2022). A key development is the integration of artificial intelligence (AI) into coaching (Passmore and Woodward, 2023). AI-powered coaching tools are gaining traction for their scalability, accessibility, and cost-effectiveness (Passmore *et al.*, 2025b). For instance, in a controlled trial, Terblanche *et al.* (2022) found that chatbot coach *Vici* facilitated goal setting and provided 24/7 support but did not improve participants' resilience and psychological wellbeing, or perceived stress. Most notably, a recent study by Passmore and colleagues (2025a) found that the AI coaching agent *Alpina* demonstrated ICF Associate Certified Coach (ACC) level competencies, as assessed by qualified ICF assessors. These findings highlight the increasing sophistication of AI agents, with some approaching competencies comparable to those demonstrated by human practitioners.

The rise of AI in coaching has elicited mixed responses within the profession. Passmore *et al.* (2025b) capture this spectrum with "AI Zoomers/Doomers/Bloomers". "Zoomers" warn that AI may replace early-career coaches (Bruning and Boak, 2025; Passmore and Tee, 2023) and raise ethical-relational concerns about delegating aspects of human development to machines (Bachkirova and Kemp, 2024; Diller *et al.*, 2024). "Doomers" highlight that while AI may support goal clarification, it lacks the mutual attunement and embodied responsiveness needed for coaching (Bachkirova and Kemp, 2024; Graßmann and Schermuly, 2021). "Bloomers" view AI as a complementary tool that broadens access to high-quality feedback, supports reflective practice, and reduces administrative burden (Bruning and Boak, 2025; Movsumova *et al.*, 2020; Passmore *et al.*, 2025b).

Yet, while much of the existing literature on AI in coaching has focused on its application in client-facing roles, its potential as a pedagogical tool within coach education remains underexplored. This matters because international competency frameworks define core

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10 domains for emerging coaches, such as presence, ethical awareness, effective
11 communication, reflective capacity, and the facilitation of client growth, towards which
12 programmes must deliberately scaffold development (e.g., Association for Coaching [AC],
13 2012; British Psychological Society [BPS], 2021; [European Mentoring and Coaching](#)
14 [Council](#), 2020; ICF, [2024b](#)). As students work towards accreditation, coach educators must
15 support not only technical skill development but also the cultivation of self-aware, values-
16 driven practitioner identities. In this vein, Carden *et al.* (2022) emphasise the role of both
17 tools and self-awareness in behavioural change, while Jarosz and Cartor's (2025) Coaching
18 Effectiveness Framework conceptualises coaching expertise as an integration of behavioural
19 skill, emotional regulation, reflective ability, and contextual awareness. Across higher
20 education more broadly, emerging research suggests that generative AI can promote dialogic
21 learning, simulate practice environments, and serve as a reflective partner (Bae *et al.*, 2024;
22 [Luckin et al.](#), 2016). Health profession education shows benefits when fidelity, debrief, and
23 feedback are strong but cautions about constrained language flow, absent non-verbal cues,
24 autonomy, bias, privacy, and integration cost ([Fernández-Alcántara et al.](#), 2025; [Salveti et](#)
25 [al.](#), 2025). From a human-machine interaction lens, learning depends on "intercultural
26 coordination" of meaning based on linguistic alignment, social presence, and trust (Branigan
27 *et al.*, 2010; Clark *et al.*, 2019; Schuetzler *et al.*, 2018; Stein and Uebach, 2025), with non-
28 Western evidence similarly highlighting AI self-efficacy and trust ([Aliño et al.](#), 2024; Wang
29 and Zhou, 2025).

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37 Despite these promising developments in AI-mediated education, research explicitly
38 examining the role of generative AI in coaching education remains notably limited. A recent
39 exception is Bridgeman and Giraldez-Hayes (2024), who explored the use of the AI-
40 supported video feedback platform *Ovida* (Haitoglou, 2025). Their findings demonstrated
41 how AI-generated performance metrics (e.g., question frequency and share of voice),
42 combined with video playback, could enhance early-stage coaches' self-awareness,
43 confidence, and targeted skill refinement. However, they also highlighted limitations,
44 including discomfort with self-observation, using new technology, and concerns about the
45 software's inability to interpret relational nuance.

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49 Building on this nascent evidence base, we focus on a complementary pedagogical
50 affordance: the use of generative AI as coachee to practice coaching conversations and
51 function as a reflective learning partner within training contexts. This study addresses that
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10 gap by examining postgraduate coaching students' experiences of engaging with ChatGPT as
11 both a simulated coaching client and a feedback partner. Unlike proprietary AI platforms,
12 ChatGPT (GPT-4) offers a general-purpose, flexible interface capable of simulating a range
13 of roles. Its open access and ease of use make it particularly suitable for integration into
14 coach training programmes seeking scalable and low-cost innovation in practice-based
15 learning. We used ChatGPT (GPT-4) because students could view transcripts, use
16 configurable prompts, and run scenarios without uploading sensitive material, features that
17 support oversight and align with privacy-by-design principles (Nguyen *et al.*, 2023).
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21 **Theoretical lenses for understanding learning in AI-assisted coaching education**

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23 Building on the literature above, the educational value of AI-mediated coaching appears to
24 rest on two linked layers: the learning process (i.e., observing, reflecting, and trying out
25 alternatives in context) and the psychological mechanisms that sustain it (i.e., alignment,
26 social presence, trust, and affect) as supports for self-efficacy and engagement. Accordingly,
27 we frame the study with two complementary theoretical lenses: Kolb's experiential learning
28 theory (ELT; Kolb, 1984) and Bandura's social cognitive theory (SCT; Bandura, 1986,
29 1997). ELT provides a process-oriented lens through which to understand how students
30 engage with new learning environments. It describes learning as a four-stage cycle: (1)
31 concrete experience, (2) reflective observation, (3) abstract conceptualisation, and (4) active
32 experimentation. Learners make sense of new experiences by reflecting on them, integrating
33 insights into existing knowledge, and testing these in future scenarios.
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38 SCT emphasises personal agency, self-efficacy, and observational learning in shaping
39 behaviour and development. Individuals are seen as active participants in their own learning,
40 influenced by their-beliefs about their capabilities and by available feedback and models.
41 Coaching an AI can thus function as a mastery experience, reinforcing self-efficacy through
42 structured practice and feedback. The theory also highlights the role of peer learning and
43 affective responses (e.g., uncertainty, curiosity, confidence) in shaping engagement with AI-
44 supported simulations.
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48 **The present study**

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50 Informed by ELT and SCT, this qualitative study explores how postgraduate coaching
51 students experience and interpret their learning through an AI-led coaching simulation with
52 ChatGPT feedback. It identifies the opportunities and limitations of generative AI as a
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10 reflective learning tool in coaching education, contributing to debates on innovation,
11 professional formation, and reflective practice.
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13 **Methodology**

14 **Research design**

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16 Framed within a pragmatic paradigm and contextualist epistemology, which prioritises
17 practical usefulness for coach education and views knowledge as local, provisional, and
18 situation-dependent (Madill *et al.*, 2000), we adopted a qualitative design to explore students'
19 experiences of AI-led coaching simulations. Data were generated through written reflections
20 and a semi-structured focus group following an AI-based coaching simulation. Analysis used
21 reflexive thematic analysis to develop themes as patterns of shared meaning (Braun and
22 Clarke, 2021a), an approach congruent with our stance, emphasising constructed meanings,
23 researcher reflexivity, and judgements of usefulness and coherence.
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28 **Ethical approval**

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30 Ethical approval was granted by a UK university ethics committee (Ref: 2425_36). All
31 participants gave informed consent, were briefed on the voluntary nature of their
32 participation, and were assured of confidentiality and the right to withdraw their data.
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35 **Participants**

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37 Twelve postgraduate students (10 women, two men; M = 43.2 years, SD = 11.6) enrolled in a
38 postgraduate coaching programme participated in the study. All participants were six months
39 into their training, having covered core competencies and completed, on average, 20 to 32
40 hours of coaching practice. Using purposive sampling, the full cohort of the MSc module was
41 invited during a scheduled class, with inclusion criteria of current enrolment and informed
42 consent. All participants had an undergraduate degree in psychology and prior experience
43 using ChatGPT for non-coaching-related tasks (e.g., study support, writing assistance), but
44 none had used it within a coaching simulation. Pre-task discussions suggested a moderate
45 level of digital literacy and comfort with technology. Seven participants provided pre-course
46 background data: public/third sector (n=3), education/academia (n=2), and
47 business/management (n=2). Two reported <2 years' informal coaching experience (e.g., ad-
48 hoc peer coaching with colleagues or practice within study groups). No participant reported a
49 prior coaching qualification; two held a counselling qualification. No other demographic
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10 information was collected at recruitment. One participant did not complete the written
11 reflection but did contribute to the focus group. All others completed both data components.

12 13 14 **Procedure**

15 Students took part in a structured 30-minute coaching simulation with an AI tool (ChatGPT)
16 during class time. While coaching is typically coachee-led in topic selection, students were
17 allowed to choose a work-related scenario (e.g., career transition, leadership, skills
18 development) they might find challenging if raised by a real coachee, in line with simulation
19 pedagogy (Bartlett *et al.*, 2022; Dai and Ke, 2022; Jeong *et al.*, 2025; Salminen-Tuomaala,
20 2020). Students were instructed to avoid personal or third-party identifiers and to keep topics
21 non-sensitive. After the session, students submitted the full dialogue to ChatGPT for a
22 detailed evaluation. ChatGPT responded in the role of the coachee presenting that scenario.
23 Following the simulation, each participant completed a written self-reflection in response to
24 guided questions. The self-reflection invited students to consider the relevance of AI in
25 coaching practice, the perceived value and accuracy of the AI-generated feedback, and key
26 insights gained from the experience. Anonymised reflections were submitted to researchers
27 after class for qualitative analysis. Students then took part in a 75-minute focus group to gain
28 deeper insights into the collective experiences of participants. The semi-structured discussion
29 encouraged exploration of emotional, cognitive, and developmental responses to the
30 simulation, with prompts addressing realism, engagement, ethical considerations, and
31 implications for future practice. The session was audio-recorded with participants' consent
32 and subsequently transcribed using Microsoft Stream's auto-transcription feature, then
33 checked manually for accuracy.

34 35 36 37 38 39 40 41 **Data analysis**

42 All data (written reflections and focus group transcripts) were pseudonymised. Participant
43 quotes are reported using pseudonyms followed by the suffix "P" (e.g., P1). Data were
44 analysed using Microsoft Word and Excel, following Braun and Clarke's (2021a) six
45 reflective thematic analysis (RTA) phases (Table I). Consistent with our pragmatic,
46 contextualist stance, prioritising usefulness-in-context and viewing meanings as situated,
47 coding was predominantly inductive, with sensitising concepts from ELT and SCT used
48 during theme review to appraise relevance and coherence without pre-structuring the analysis
49 (Byrne, 2022). To support credibility, we used multi-source data (individual reflections and a
50 focus group) and iterative analytic meetings (first and third authors), treating triangulation as
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10 complementarity/resonance rather than convergence (Madill *et al.*, 2000). Dependability and
11 confirmability were addressed through an audit trail and author debriefing. We sought
12 transferability as resonance via thick description of context, participant characteristics, and
13 procedures, alongside evocative presentation of findings and theoretical linking of themes to
14 ELT, SCT, and AI-learning concepts (Stalmeijer *et al.*, 2024). Consistent with RTA, we did
15 not aim for saturation but rather worked according to the principle of pragmatism (Braun and
16 Clarke, 2021b) and “conceptual depth” (Nelson, 2016), ensuring that each theme was well-
17 supported and meaningful within the study’s scope and purpose.
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21 **Reflexivity**

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23 All authors are coaching psychologists and educators. The first and third authors conducted
24 the data analysis, drawing on their combined expertise in coaching psychology and
25 qualitative methodology. The second author facilitated the focus group and was also the
26 module tutor for the participating students, a dual role managed through anonymisation and
27 clear communication that participation would not affect assessment. Our analysis was shaped
28 by a broadly interpretivist stance and informed by our professional backgrounds. We
29 maintained reflexive awareness throughout, acknowledging how our theoretical positions and
30 pedagogical values influenced theme development and interpretation.
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34 **Findings**

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36 Through RTA, we identified five overarching themes capturing students’ experiences of
37 coaching a generative AI: (1) Authenticity and Engagement, (2) Cognitive Load and
38 Processing Challenges, (3) Perceptions of Feedback and Learning, (4) Ethical Concerns, and
39 (5) AI’s Role in Coaching Education. The thematic map is in Figure 1.
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42 **Theme 1: Authenticity and Engagement**

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44 Participants offered mixed views on the realism and engagement of coaching an AI coachee.
45 A recurring concern was the AI’s tendency to generate pre-emptive, overly structured
46 responses, disrupting the natural ebb and flow of coaching dialogue. Prior knowledge of
47 coaching a chatbot, coupled with lack of non-verbal cues and contextual awareness, further
48 limited realism.
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Sub-theme 1.1: AI as an “ideal” coachee

While some welcomed the AI’s responsiveness and information-rich replies, others saw it as “overperforming”, delivering extensive detail unprompted and even advancing its own action plans, thereby constraining open inquiry and co-constructed meaning:

It gave loads of information which would have normally taken much further exploration ... It was probably the most informed coachee I’ve ever coached. (P4, reflection)

It wasn’t very realistic ... it had best practice answers for everything. Very textbook. (P11, focus group)

Sub-theme 1.2: Difficulty suspending disbelief

For most students, the awareness that they were interacting with a non-human system remained cognitively present, undermining their ability to engage with presence and authenticity:

Even though I engaged in it with curiosity, I don’t think I could forget that it was not real. (P1, reflection)

I did not feel like I could give the coaching conversation as much value, or coach to my full potential, as I felt biased knowing it was AI as opposed to human. (P6, reflection)

Sub-theme 1.3: Interpretation limitations and emotional disconnect

Students perceived limits in the AI’s ability to read tone, context, and affect, eroding a sense of alliance and investment in the process: “It didn’t explore emotions or feelings; it was quite awkward” (P4, focus group).

Theme 2: Cognitive Load and Processing Challenges

Participants described both cognitive and emotional challenges when coaching the AI. While some valued the novelty and opportunity to experiment, many experienced difficulties linked to the AI’s response style, pacing, and the text-based format of interaction.

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10 ***Sub-theme 2.1: Information overload and pacing***

11 Participants frequently reported feeling overwhelmed by the density and immediacy of AI
12 responses. The rapid pace impeded sense-making and limited opportunities for deeper
13 exploration: “It felt like coaching on speed ... there was loads of stuff that could have been
14 probed just from the first question, but I felt like it was moving at pace and I was struggling
15 to keep up” (P4, focus group).
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19 ***Sub-theme 2.2: Barriers and benefits of text-based interaction***

20 Text-based interaction created accessibility challenges, particularly for those with dyslexia or
21 physical discomfort. These challenges, self-reported in written reflections, reduced ease of
22 participation, limited engagement, and in some cases discouraged deeper exploration:
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26 I have dyslexia and so found it harder to read the extensive outputs quickly enough.
27 This was also exacerbated by being in a lot of physical discomfort during typing
28 today. (P1, reflection)
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30 Typing coaching conversations is long-winded and time-consuming, which prevented
31 me from wanting to explore things further. (P6, reflection)
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34 However, some participants appreciated the asynchronous processing time that written
35 exchanges offered, noting the opportunity to reflect more deliberately between prompts:
36 “This was helpful to me as the coach in terms of additional thinking space, as one wouldn’t
37 get in a human-to-human verbal interaction in quite the same way” (P8, reflection).
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40 Two participants suggested that repeated exposure or voice-based AI might reduce the
41 cognitive burden and enhance coaching presence over time:
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44 Doing this activity a few times with it and getting used to it would allow me to engage
45 more meaningfully. (P1, reflection)
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47 I wonder if you can use voice communication with it and if the experience would then
48 be different ... more likely to use deep listening skills that we usually use in coaching
49 practice. (P8, reflection)
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Theme 3: Perceptions of Feedback and Learning

Participants reflected on the feedback provided by the AI, identifying both affirming and limiting aspects. While some found the feedback encouraging and useful for self-awareness, others questioned its depth, relevance, and contextual accuracy.

Sub-theme 3.1: Recognition of strengths and areas for growth

Many found the feedback affirming, particularly when it echoed previous observations from supervisors or peer reviews. This validation enhanced self-awareness and provided reassurance about their coaching development:

It reinforced that I am good at asking questions and creating a space supporting reflection and exploration ... getting that perspective helped me appreciate what I am doing well. (P10, focus group)

It picked up on things that I do naturally and, therefore, would overlook as strengths. (P8, reflection)

When it said "I asked a powerful question" ... I thought "nice, I have been practising and reflecting on that" from prior feedback. (P7, reflection)

Sub-theme 3.2: Limitations of feedback accuracy and personalisation

Several participants experienced the feedback as generic, uniformly positive, or insufficiently sensitive to context, which at times provoked defensiveness: "I had quite a visceral reaction to the feedback ... I felt more defensive because it didn't feel as authentic or fair." (P5, reflection).

They also noted that the AI missed non-verbal cues and subtle conversational dynamics that informed their choices: "ChatGPT flagged a 'bias' in my coaching ... I was actually mirroring my coachee's language to show deep listening" (P4, reflection).

Volume compounded these issues, with long, dense outputs reducing practical value: "I found reading the reams of information quite time-consuming ... I'm pretty sure I just scanned most of it rather than deep reading" (P8, reflection).

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Nonetheless, some found that prompting for specificity improved relevance and utility: “If you continue to ask for feedback, it will give you specific wording for questioning and frameworks to use as well” (P3, reflection).

Theme 4: Ethical Concerns

Ethical concerns were identified around data use, credibility, and the impersonality of the AI coaching experience.

Sub-theme 4.1: Data use and transparency

Participants questioned how data might be used or stored by the system, expressing concerns about privacy and the source of the AI’s knowledge:

Does anyone think that it might be using data from their previous activities to inform its responses? (P7, reflection)

I wondered if ... the program is storing cookies and data ... which might have influenced the direction of the coaching. (P8, reflection)

Lack of transparency around data use reduced trust in the feedback’s validity and raised questions about whether the AI had an appropriate understanding of coaching intentions: “It suggested I could have explored the client’s motivations and values ... but that wasn’t the direction chosen by the client” (P9, reflection).

Sub-theme 4.2: Lack of relational continuity and accountability

Participants observed that the AI, unlike a human coachee, could not revisit previous sessions, reflect on progress, or build relational continuity over time. This absence of follow-through reduced the sense of mutual accountability and growth: “It is lacking that follow-up afterwards when they’ve actually gone away and done the work that they set themselves” (P6, focus group).

Theme 5: AI’s Role in Coaching Education

Despite its limitations, most participants recognised the potential value of generative AI as a supplementary tool in coaching education.

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10 ***Sub-theme 5.1: Practising skills and experimentation***

11 Several participants described the AI as a safe environment to rehearse techniques,
12 experiment with new approaches, and apply theoretical models:

13 I used it for a scenario that was totally outside my comfort zone, coaching a CEO, and
14 it gave me insight into how that could go. (P10, focus group)

15 It gave me some ideas on how to improve questions ... for example, how to avoid
16 leading questions. (P3, reflection)

17 For some, the simulation enhanced their sense of competence and reaffirmed their
18 professional identity: "It is reassuring that I am doing something right with my real-life
19 coachees" (P8, reflection).

20 Others were more cautious, noting limited direct impact on confidence but recognising
21 educational value with repeated use: "I don't think one use of it would really change
22 anything. It could be really useful and would definitely increase my confidence and
23 competence going forward" (P5, focus group).

24 ***Sub-theme 5.2: A tool to enhance reflection***

25 Participants identified reflective opportunities, both during and after sessions, enabled by the
26 AI's consistent responses and feedback: "I might use it again to reflect on my questioning"
27 (P9, focus group).

28 However, some cautioned that overreliance on AI might reduce flexibility in human
29 interactions: "There's a risk of becoming too used to AI and then struggling with human
30 clients" (P8, reflection).

31 Overall, students recommended that its use in coaching programmes be optional and
32 accompanied by critical reflection.

33 **Discussion**

34 This study explored how postgraduate coaching students experienced and made sense of their
35 learning through AI-led coaching simulations using ChatGPT as a coachee and feedback
36 partner. Drawing on Kolb's ELT and Bandura's SCT, the discussion examines learning
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opportunities for practice, reflection, and professional growth, alongside key limitations relating to authenticity, feedback credibility, cognitive load, and ethics, and implications for coaching pedagogy and curriculum design.

AI as a catalyst for practice, reflection, and confidence

The AI simulation provided participants with a novel, low-stakes environment in which to practise coaching techniques and explore challenging scenarios. In line with Kolb's (1984) ELT, students engaged in "active experimentation" by testing strategies, applying theoretical models, and working through unfamiliar coaching topics. For many, the AI functioned as a "sandbox" where experimentation felt possible without fear of failure. This echoes findings by Bridgeman and Giraldez-Hayes (2024), who observed that AI-enhanced tools such as *Ovida*, which records coaching conversations and provides automated feedback, allow novice coaches to rehearse and reflect in a self-paced, low-pressure setting. These results also align with broader literature on the role of AI simulation in higher education and professional training ((Dai and Ke, 2022; Fazlollahi *et al.*, 2022; Fernández-Alcántara *et al.*, 2025; Salvetti *et al.*, 2025), supporting calls for its integration into pedagogical experimentation (Holmes and Tuomi, 2022; Passmore and Woodward, 2023).

Bandura's concept of self-efficacy provides a useful lens for understanding how these simulations influenced students' confidence. The AI offered structured mastery experiences, enabling students to practise in a controlled setting and receive immediate feedback. This was particularly well received when the feedback highlighted their strengths, with many participants appreciating the recognition of capabilities they might otherwise have overlooked. Such affirming feedback served a social persuasion function, strengthening beliefs in their ability to succeed (Bandura, 1994), which can support motivation and self-efficacy (Gradito Dubord *et al.*, 2022; Mumm and Mutlu, 2011). These experiences are especially important during the formative stages of coach development, where confidence-building and the reinforcement of effective behaviours contribute to emerging professional identity (Viera and Palmer, 2018) and can be scaffolded by generative AI to support learning and bolster confidence, particularly among less experienced coaches (Canonigo, 2024).

The limits of authenticity and emotional engagement

Despite these benefits, tensions emerged in Kolb's (1984) "concrete experience" and "reflective observation" stages, centred on AI's limited realism and emotional depth.

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10 Participants described the AI coachee as overly structured, pre-emptive, and emotionally flat,
11 disrupting the natural rhythm of dialogue and constraining real-time attunement. Consistent
12 with human-machine interaction research, such constrained exchanges may limit linguistic
13 alignment, thereby degrading communicative efficacy (Branigan *et al.*, 2010) and
14 diminishing social presence (particularly intimacy and immediacy), weakening emotional
15 engagement and perceived authenticity (Oh *et al.*, 2018). Many struggled to fully “suspend
16 disbelief”: heightened awareness of the system’s artificiality blunted presence and emotional
17 investment, while the lack of spontaneity and relational nuance undermined the authenticity
18 that is critical to coaching presence. As others note, coaching extends beyond problem-
19 solving to expand clients’ capacity for meaning-making through emotionally attuned,
20 context-sensitive inquiry (Bachkirova and Borrington, 2019; Cox, 2016). A recent systematic
21 literature review further highlights that deep, long-term coaching relationships, characterised
22 by a strong working alliance and a personalised approach, remain beyond current AI
23 capability (Plotkina and Sri Ramalu, 2024). Such depth depends on shared context, mutual
24 responsiveness, and culturally and emotionally informed understanding that AI lacks
25 (Bachkirova and Kemp, 2024).
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32 Our findings also echo Bridgeman and Giraldez-Hayes (2024) on AI’s failure to register
33 emotional or contextual subtleties. From an SCT perspective, self-efficacy is shaped not only
34 by cognitive appraisals of one’s ability but also by emotional experiences during learning
35 (Bandura, 1997). Positive emotions can enhance perceived control and expectations of
36 success, thereby strengthening self-efficacy and persistence, whereas negative emotions
37 reduce engagement and confidence (Linnenbrink, 2007; Pekrun and Perry, 2014). Here, the
38 scripted, emotionally neutral exchange with ChatGPT likely disrupted the affective feedback
39 loops that typically support deeper learning, engagement, and belief in one’s capabilities
40 (Arguedas *et al.*, 2016; Wang and Zhou, 2025).
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44 **Feedback, learning, and the role of AI literacy**

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46 Students experienced ChatGPT’s feedback as both helpful and limited. Many appreciated its
47 immediacy and affirming tone, which echoed prior supervisory feedback and helped reinforce
48 their existing strengths. Such continuous, immediate feedback can accelerate students’
49 learning via faster error correction and often feels more accessible than feedback from human
50 educators (Hattie and Timperley, 2007). Strength-affirming feedback can also enhance
51 reflective observation and build self-efficacy, particularly among novice or self-doubting
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10 learners (Canessa-Pollard, 2025; Schunk, 2023). Parallel reports in counselling education
11 similarly note benefits from supportive, ChatGPT-mediated feedback after simulated sessions
12 (Jeong *et al.*, 2025).

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15 However, students questioned the credibility, specificity, and contextual sensitivity of the
16 AI's responses. Several described the feedback as overly general or "textbook-like", lacking
17 the nuance of human supervision. This limitation appeared to hinder students' progression
18 from "reflective observation" to "abstract conceptualisation" in ELT, where learners
19 transform experience into deeper understanding, frameworks, or guiding principles for future
20 practice. In coaching education, personalised, context-rich feedback is essential to the
21 development of reflective judgement and professional identity (Bachkirova *et al.*, 2020).

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25 Because effective feedback should be dialogic and relational (Carless and Winstone, 2023),
26 misreads (e.g., labelling mirroring as bias) left some participants frustrated or sceptical,
27 undermining trust. The absence of relational dynamics may explain why AI-generated
28 feedback was sometimes perceived as less impactful, as trust and rapport support
29 psychological safety, self-reflection, and a growth mindset in learning environments (Boud
30 and Molloy, 2013; Steen-Utheim and Wittek, 2017). Notably, several students improved the
31 quality of the feedback by refining their prompts or asking better questions, pointing to the
32 importance of AI literacy (e.g., Aliño *et al.*, 2024), interacting critically and strategically with
33 AI systems through adaptive problem-solving (Long and Magerko, 2020). Thus, developing
34 this literacy within coaching education is essential to help students engage proactively, rather
35 than passively, with emerging technologies.

36 37 38 39 40 **Cognitive load and learning conditions**

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42 Participants in our study identified both cognitive and physical strain associated with
43 ChatGPT's text-based interface. Long, immediate responses disrupted dialogue pacing,
44 making it difficult to pause, reflect, and formulate follow-ups. While ELT presumes time and
45 space for observation and meaning-making (Kolb, 1984), the volume and speed of exchanges
46 may hinder "abstract conceptualisation".

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49 From an SCT perspective, interface demands (e.g., typing and reading lengthy outputs) acted
50 as environmental constraints (Bandura, 1986) that some found demotivating. This aligns with
51 research on extraneous cognitive load, where text responses and limited pacing control can
52 overload working memory (DeLeeuw *et al.*, 2008; Hoeffler and Schwartz, 2011; Sweller and

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Chandler, 1994). These effects are particularly pronounced in simulation-based and exploratory learning contexts, where learners are prone to frustration or confusion and affect-sensitive supports help sustain engagement (De Jong and Van Joolingen, 1998). When students were able to regulate the interaction, by adjusting pacing, pausing, or revisiting AI feedback, they reported increased engagement, reflecting SCT constructs of self-regulation and perceived agency linked to better learning outcomes and task-related motivation (Chou *et al.*, 2024; Martin, 2004). Evidence from AI-supported settings similarly shows that adaptive and personalised interfaces can **foster exploratory and self-regulatory learning** (Dai and Ke, 2022).

Ethical sensitivities and trust in the learning environment

Participants' ethical concerns suggest that trust in both the relational and technological infrastructure of AI is pivotal for meaningful learning. Students questioned whether ChatGPT's responses drew on their prior digital activity, raising privacy and opacity issues that undermined confidence and echoed calls for ethical AI governance in education (Nguyen *et al.*, 2023). Research shows that AI self-efficacy (the belief in one's ability to interact effectively with AI) strongly predicts trust in AI systems among students (Aliño *et al.*, 2024). While participants in this study had prior experience using AI, their unfamiliarity with AI in the role of coachee may have contributed to hesitancy and scepticism.

Mayer *et al.*'s (1995) model of trust identifies three antecedents (competence, benevolence, and integrity), which, when applied to technology, translate into perceptions of its functionality, helpfulness, and reliability (McKnight *et al.*, 2011). In this study, uncertainty about how ChatGPT generated responses appeared to challenge these perceptions, weakening trust and, consequently, reducing students' engagement and sense of self-efficacy.

The relational discontinuity of coaching an AI coachee was also flagged as a key limitation. Without the possibility of follow-up or mutual accountability, students struggled to engage in sustained inquiry or feel a sense of mutual investment. From an ELT perspective, this lack of consequence/closure disrupts movement from conceptualisation to active experimentation. These concerns support critiques that generative AI may replicate the surface structure of dialogue but lacks the relational depth needed for transformative learning (Bachkirova and Kemp, 2024). However, work by Terblanche *et al.* (2024) suggests that under certain

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10 conditions, clients can experience psychological safety and working alliance with AI coaches,
11 indicating that relational engagement with AI may be possible over time or in different roles.
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13 **Practical implications for coaching education**

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15 Taken together, these findings point to concrete design choices for integrating AI simulations
16 into coaching curricula. Practical implications include positioning AI as a low-stakes practice
17 sandbox for “active experimentation” aligned to module outcomes (Kolb, 1984); scaffolding
18 authenticity and presence with brief human pre-briefs/debriefs and rapport prompts;
19 structuring feedback to build self-efficacy by requiring students to critique AI feedback and
20 turn it into action plans, consistent with dialogic feedback principles and SCT (Hattie and
21 Timperley, 2007); ensuring inclusion and access by monitoring differential experiences and
22 managing load through pacing, alternatives to written text, and accessibility supports
23 (DeLeeuw *et al.*, 2008; Sweller and Chandler, 1994); and building AI literacy for accuracy,
24 specificity, contextual fit, and ethics (Dai and Ke, 2022; Long and Magerko, 2020; Nguyen *et*
25 *al.*, 2023). An additional concern, absent from participant reflections but increasingly
26 relevant, is the environmental impact of large-scale AI deployment. Adoption should also
27 account for environmental costs (e.g., energy, water use for data-centre cooling), extending
28 ethics to sustainability (George *et al.*, 2023).
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34 **Limitations and future directions**

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36 This study offers an initial exploration of generative AI (ChatGPT-4) as a learning tool in
37 postgraduate coaching education through simulation and acting as a feedback partner.
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40 Several limitations apply. First, ChatGPT is a general-purpose, text-based model not designed
41 for coaching and lacks pedagogical and ethical frameworks aligned with professional
42 standards. While previous studies have examined AI in the roles of coach (e.g., Passmore *et*
43 *al.*, 2025b) and supervisor (e.g., Bridgeman and Giraldez-Hayes, 2024), future research
44 should explore AI as coachee using coaching-specific, multi-sensory systems grounded in
45 individualised instruction. Second, as a one-off simulation, responses were likely influenced
46 by novelty, initial discomfort, and unfamiliarity with AI in the coachee role. Longitudinal
47 designs should track how trust, attunement, competence, and self-efficacy evolve with
48 repeated exposure (Hardini *et al.*, 2025). Third, our sample (i.e., postgraduate students six
49 months into their programme) limits transferability. We do not yet know how novices or
50 experienced practitioners would engage with similar simulations, nor how engagement varies
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10 by characteristics associated with algorithmic bias (e.g., gender, ethnicity, cultural
11 dimensions; Gupta *et al.*, 2022; Kordzadeh and Ghasemaghahi, 2022). Future work should
12 use larger, globally diverse samples and include standardised measures (AI literacy, AI
13 trust/self-efficacy, human-machine interaction dispositions) alongside demographic data to
14 test whether, and how, learner stage, AI know-how, and sociodemographic factors moderate
15 or mediate interaction quality and learning outcomes in coaching education.
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19 Finally, the study did not address potential risks of cognitive offloading, whereby users defer
20 reflective or critical thinking to AI systems (Gerlich, 2025). In coaching education,
21 overreliance on AI-generated feedback may undermine the development of professional
22 judgement and reflective capacity, concerns echoed in wider discussions on algorithmic
23 influence in supervision and education (Hansen *et al.*, 2025). Future studies should explore
24 how to integrate AI-supported reflection with human-led developmental dialogue to ensure
25 learners remain active meaning-makers rather than passive consumers.
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28 29 **Conclusions**

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31 Through the combined lenses of ELT and SCT, this study offers a theoretically grounded
32 understanding of how generative AI can support, but not replace, learning in coaching
33 education. Our findings suggest that AI simulations can provide valuable opportunities for
34 active experimentation, structured feedback, and confidence-building, particularly in the early
35 stages of coach development. These outcomes align with emerging scholarship suggesting
36 that AI may serve as a scaffold for reflective practice, offering low-stakes opportunities to
37 test new skills and build self-efficacy (Bridgeman and Giraldez-Hayes, 2024; Dai and Ke,
38 2022). Future research should investigate how these intelligent systems could be integrated
39 into coach development to enhance cognitive efficiency, self-regulation, and the transfer of
40 learning (Feng, 2025). To harness AI effectively in coaching education, learning
41 environments must be critically scaffolded, not only to support technical skill development
42 but also to foster AI literacy, ethical awareness, and reflective judgement.
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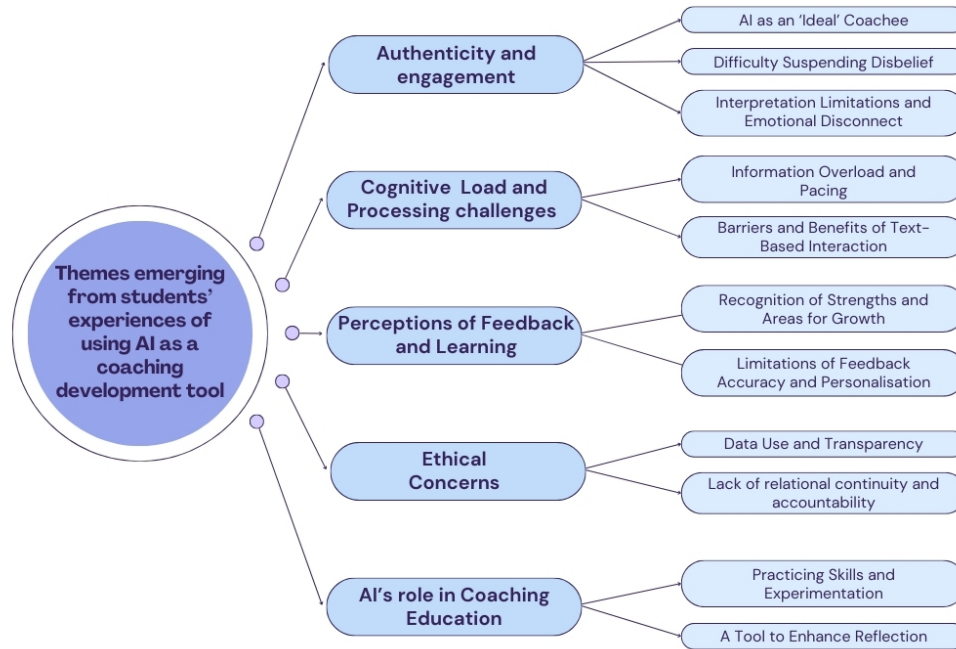


Figure 1. Thematic map, showing themes and sub-themes. Source: Authors' own work.

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Phase	Description of activity
1. Data familiarisation	The first and third authors read and re-read all reflections and the focus group transcript to immerse themselves in the data. Early impressions and analytic curiosities were noted in reflective memos.
2. Systematic data coding	Coding was conducted manually using Microsoft Word and Excel. A flexible, iterative process was used. Codes were derived inductively.
3. Generating initial themes	Codes were grouped into preliminary themes through collaborative discussion. Coders engaged in dialogic reflexivity to explore diverse interpretations and deepen analytic insight.
4. Developing and reviewing potential themes	Candidate themes were collaboratively reviewed by the first and third authors through reflective discussion, ensuring internal coherence and distinctiveness. Each theme was assessed for how meaningfully it represented students' developmental experiences.
5. Refining, defining, and naming themes	Themes and subthemes were refined and named to reflect their conceptual essence, situated in relation to ELT and SCT while avoiding rigid categorisation.
6. Writing up the report	Themes were presented with illustrative extracts to ensure transparency and interpretative depth.

Table I. Overview of the reflexive thematic analysis process, following Braun and Clarke's (2021a) six phases. Source: Authors' own creation.