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Artificial intelligence coach bots: coaches' perceptions of potential future impacts on professional coaching, a qualitative study

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Abstract

Purpose – This research aimed to understand perceptions of experienced coaches of the potential changes and impacts artificial intelligence (AI) coach bots pose to the coaching industry in the imminent future.

Design/methodology/approach – This was an exploratory qualitative study in which semi-structured interviews were carried out with nine credentialed professional coaches with a range of experience with AI coach bots. The data were analysed using thematic analysis.

Findings – Four themes were developed from the data: (1) The limited coaching capabilities of AI coach bots; (2) the greater accessibility of AI coaching services; (3) possible AI-human hybrid service delivery and (4) ethical issues in using AI coach bots. The interviewees emphasised the importance of the human presence, human qualities and human characteristics in the coaching context.

Research limitations/implications – The study was limited by the small sample size, so the findings cannot be statistically generalised to the coaching industry.

Practical implications – Alignment with earlier studies indicates that practical implications of the study are that coaches might usefully explore hybrid delivery of services and that professional bodies should establish clear guidelines for the ethical use of AI coach bots.

Originality/value – This is one of the first studies exploring the impact of AI coach bots on professional coaching and the coaching industry.

Keywords Coaching, Artificial intelligence, AI coaching, Ethical coaching, Coaching chatbots

Paper type Research paper

Introduction

Recent speculation about the future impact of artificial intelligence (AI) on humanity has raised issues of the opportunities or threats it may present to certain professions (e.g. Maslej *et al.*, 2023; Anderson and Rainie, 2023). Many advantages and benefits of AI have been reported, such as financial benefits to organisations, increased productivity, technical automation and cybernation (Chui *et al.*, 2023; PricewaterhouseCoopers, 2023). Additionally, there have been many advancements in the field of medicine because of AI (Rajpurkar *et al.*, 2022). However, concerns have also been raised: job losses, where humans are replaced by AI technologies, are a major worry for many (Buttazzo, 2023; Hunt *et al.*, 2022; Passmore and Woodward, 2023). Other issues include security, safety and reliability (Liu *et al.*, 2022; Stover, 2023), discrimination (Amnesty International, 2023), and questions regarding ethics (Coeckelbergh, 2019; Franzke, 2022; Kritikos, 2019). Other pertinent challenges presented by Maslej *et al.* (2023 p. 3), are “industry races ahead of academia” and the misuse of AI and limited or lack of regulation (Passmore and Tee, 2024; Coeckelbergh, 2019).



According to [Chui et al. \(2023\)](#) and [Passmore and Tee \(2024\)](#), knowledge work occupations, especially those that include cognitive processes and synergy, which up until now were least likely to be computerised, are expected to be most affected by generative AI. [Accenture \(2023, p. 61\)](#) predicts that by 2030 “75% of knowledge workers” worldwide will engage with AI tools every day.

Professional coaching is not immune to these potential threats and opportunities, but there is limited research on the implications of generative AI for the coaching industry. This study aims to explore perceptions of how generative AI, specifically the use of AI coach bots (AICBs), may impact and change human coaching. AICBs, which provide machine-to-human coaching, are dedicated to coaching and supporting coachees in determining goals and action plans and putting them into effect ([Terblanche and Kidd, 2022 p. 2](#)). Certain coaching providers are already offering hybrid solutions consisting of a combination of human and AI solutions (e.g. [Fingerprint for Success, 2023](#)); however, there is little research into how AICBs are currently perceived by people and organisations offering coaching services.

This study explores the perceptions of experienced coaches regarding the impacts of these new technologies on the coaching profession and industry. The research question addressed in this paper is: what are the perceived emerging changes and impacts AICBs are posing to human coaches, currently and in the imminent future?

Literature review

During and after the COVID-19 pandemic, the world observed many changes in the use of technology, especially concerning working online or remotely ([Kronblad and Envall Pregmark, 2021](#)). The coaching industry has made a more frequent use of video communication technology for interactions between coach and coachee, known as digital coaching ([Diller and Passmore, 2023](#)). There is a distinct difference between digital coaching and AICB coaching: digital coaching leverages online communication technologies to facilitate “human-to-human coaching” exchanges, whereas AI coaching is a structured machine-to-human coaching intervention ([Graßmann and Schermuly, 2021](#); [Diller and Passmore, 2023](#)), where the AICB is the coach and a human is the coachee ([Terblanche et al., 2022a](#)). Currently, the majority of AICB interventions take place in the form of text, with the coachee using a keyboard to communicate with the AICB ([Passmore and Tee, 2023](#)).

Chatbots have been in existence since 1966, when Joseph Weizenbaum at the Massachusetts Institute of Technology AI Laboratory developed a computer program called ELIZA ([Stover, 2023](#)). They have subsequently improved and evolved and are being used by numerous businesses and organisations today ([IBM, 2024](#)). The majority of AI technologies are large language models (LLMs) currently using Generative AI, which utilise machine learning (ML), meaning computers learn from data, thus gradually improving performance, as well as using natural language processing; ChatGPT is one of the chatbots using this AI technology ([Aydin and Karaarslan, 2023](#)). Generative AI chatbots are able to “actively participate in the conversation and to demonstrate awareness of the topic discussed, the evolving conversational context, and the flow of the dialogue” ([Chaves and Gerosa, 2021 p. 731](#)).

Coaching is defined as a cooperative relationship between a coach and coachee, where the aim is for the coachee to implement lasting change by either achieving a goal, overcoming obstacles, making aligned choices and/or improving performance or development ([Cox et al., 2024](#); [Ives, 2008](#)). Coaching often reveals new possibilities for creativity, performance and leadership previously not evident ([ICF, 2024a](#)). Coaching processes are designed to help coachees in matters of performance and development; these processes are often structured around a specific framework or model ([Cox et al., 2024](#)).

The relationship between the coach and coachee is claimed to be one of the crucial factors in achieving a positive coaching outcome ([Cox et al., 2024](#); [Grant and O’Connor, 2019](#); [O’Broin and Palmer, 2010](#)). Coaching usually involves activities by the coach such as

contracting, building rapport, active listening, asking thought-provoking questions, paraphrasing, being self-aware, showing empathy (Cox *et al.*, 2024), adjusting to the coachee (O'Broin and Palmer, 2010; O'Connell *et al.*, 2012) and encouraging the coachee to openly share information and set goals (Cox *et al.*, 2024). In addition, coaching often involves creative processes, such as the use of metaphors (Thompson, 2021), delving deeper, using intuition and establishing what is known as a coaching presence (Abravanel and Gavin, 2021; Cox *et al.*, 2024). A coach's communication skills, self-awareness and adaptability have been found to be among the qualities required in a successful coaching relationship (O'Broin and Palmer, 2010).

The capacity of an AICB to engage in interactions that require humans to use self-awareness, empathy and intuition is a matter of debate. Blyler and Seligman (2024) state that, despite ChatGPT-4 being an advanced LLM with sophisticated algorithms, it still has limitations and struggles to express the full range of human emotions, the specific context of situations and the unique characteristics shaping individual stories. An AICB's ability to provide emotional support was found to be lacking in a study by Passmore and Tee (2024, p. 6), which assessed the ability of an AICB to "act as a coach". The AICB did not enquire about emotions or values or take the human element into consideration; it was found to only partly deliver in terms of summarising and expressing empathy. Other researchers agree that AICBs lack empathy and emotional intelligence (Terblanche *et al.*, 2022a; Diller *et al.*, 2024). Bachkirova and Kemp (2024) go so far as to argue that an AICB cannot be a genuine partner in the kind of joint inquiry that is an essential characteristic of coaching because it lacks subjective experience and understanding of human situations, and therefore it is inappropriate to consider interaction with an AICB as "coaching".

However, a longitudinal experimental study by Terblanche *et al.* (2022a, b) found that an AICB programmed to use the Goals, Reality, Options, Will (GROW) coaching model was comparably as effective as a human coach at helping coachees attain their goals. Terblanche *et al.* (2022a) claim that AICB coaching, which demonstrated its effectiveness in this experiment in a narrow sphere of coaching, does not pose a threat to human coaches, but it has the capacity to upgrade proficiency and cut costs of the coaching process and thus may make coaching more accessible to the general public worldwide. Terblanche *et al.* (2023, 2024) argue that there is a shortage of coaches in developing countries and that AICB coaching may mitigate this, creating potential for it to complement coaching services. As a counter-argument, Passmore and Woodward (2023) predict a surplus of skilled, qualified coaches within this decade, resulting in fewer coaches being able to financially sustain themselves.

Bachkirova and Kemp (2024) suggest that an AICB working alongside a human coach can enhance a coachee's preparation and reflexivity. Terblanche *et al.* (2024) conducted a study using an AICB designed to assist coachees with inter-session deliberations, goal tracking as agreed with their human coach and session scheduling. The overall recommendations of the study indicated that AICBs can streamline the coaching process by frequently prompting coachees and making reflective enquiries while simultaneously reducing the coach's volume of work through task automations, guiding coachees in reflective and intention-setting techniques and collecting coachee feedback for future sessions. Terblanche *et al.* (2024) also suggest that the advantages of human coaching may be lengthened by an AICB long after the human-to-human coaching relationship has ended by offering support, prompting self-reflection activities and regular goal tracking and follow-up. In another study, Blyler and Seligman (2024) used AI technology to determine client dynamics so it may recommend which specific human coaching strategies should be used on particular coachees. Following a large-scale survey of coaches that was designed to assess the extent to which respondents felt threatened by AICBs, Diller *et al.* (2024) suggested that a practical way forward was to design ways in which AICBs can complement human coaching.

Risks of AICBs

Risks relating to the use of AICBs have been identified as inaccuracies and errors, potential bias, inability to recognise the boundaries of coaching, anthropomorphism by coachees, issues of confidentiality and security and the danger of dependency.

[Passmore and Tee \(2023\)](#) highlight studies that have found inaccuracies and errors made by AICBs as well as their own study, which found it to falsify information. [Terblanche \(2020\)](#) cites Schmid Mast *et al.* (2015), stating that biases can occur as AI using ML attains its data from various sources; therefore, the training process for AICBs must be designed to mitigate the transfer of inherent biases; should this transference be unavoidable, full disclosure regarding potential bias must be made to AICB users.

The study by [Passmore and Tee \(2023\)](#) raised concerns about the ability of AICBs to demonstrate ethical competence in recognising the boundaries of coaching, to recognise danger and to recommend suitable alternative professionals, such as therapists. There are distinct differences between coaching and therapy, and coaches' awareness of the boundaries is important for the mental well-being of coachees ([Maxwell, 2009](#); [Nemecek, 2023](#)); coaching organisations such as the ICF ([2024a](#)) advocate referring coachees to mental health specialists when appropriate.

Certain anthropomorphic dangers exist where people conceive computers or AI technologies to be on the same level as humans, potentially forming unnatural emotional attachments and relationships with them ([Alabed et al., 2022](#)), which is known as the "Eliza effect" ([Dillon, 2020](#)). Some AICBs have been given names—for example, Vici ([Terblanche and Kidd, 2022](#)). [CoachHub's \(2025\)](#) AIMY™ has a human appearance and responds using audio and/or video technology. Some coaches subscribe to software which enables them to train their own coach bots, which are avatars of themselves ([Coachvox Limited, 2023](#)). Potential misconceptions may be sparked by anthropomorphism; for example, humans treat non-human entities as if they are human, especially if they have the physical appearance of human beings ([Lee and Lee, 2023](#)).

Confidentiality within the coaching relationship is an important issue ([Cox et al., 2024](#)). AICB technology is based on ML and LLM, utilising the users' data input to learn and improve ([Aydin and Karaarslan, 2023](#)). [Diller et al. \(2024\)](#) express concerns that this may present a risk concerning confidentiality, as sensitive data may be disclosed when the AICB is coaching a different coachee; additionally, data security is not guaranteed and could potentially be leaked or hacked.

The risk of dependency has been raised as an issue: AICBs could be available to humans 24/7, as was the case with AICB Vici in [Terblanche and Kidd's \(2022\)](#) study. This could clash with a broadly practised and advocated aim of coaching, which is to enable coachees to become self-sufficient and autonomous ([Cox et al., 2024](#)). Human coaching relationships are usually not open-ended; in other words, the relationship has a "specified, contracted timeframe" ([O'Connell et al., 2012](#) p. 3).

Given the risks associated with AI, the question of whether, how and the degree to which AI regulation is required is pertinent ([de Almeida et al., 2021](#); [Kritikos, 2019](#)). The European Union and several governments including the USA, China, India and the UK have issued guidelines and are currently working on, or have passed, legislation or regulations on AI ([IAPP, 2024](#)). Currently, there are limited controls on AICB usage within the coaching industry. Researchers are recommending coaching authorities such as the International Coaching Federation (ICF), the European Mentoring and Coaching Council (EMCC) and the Association of Coaching develop and implement necessary codes of practice ([Passmore and Tee, 2024](#); [Terblanche et al., 2022a](#); [Innegraeve and Passmore, 2024](#)); at the time of writing, the ICF and EMCC are making some progress in developing guidelines ([EMCC, 2024](#); [ICF, 2024b](#)).

Despite these risks, AICBs may serve as assets enhancing or augmenting coaching interventions ([Terblanche et al., 2024](#)), and it is clear they are here to stay, whether they are openly accepted or not ([Graßmann and Schermuly, 2021](#)).

Methodology

The research design was cross-sectional, qualitative, exploratory and inductive (Creswell and Creswell, 2017), using semi-structured interviews with a small sample of nine professional coaches with AI experience in a coaching context to explore the diverse perspectives of knowledgeable interviewees. The authors are practising coaches; the lead author has experimented with AICBs, and the second author has some experience of using ChatGPT but not in a coaching context. We approached this study in order to explore this developing area, with open minds about how AICBs may impact coaching.

The research adopted an ontology of relativism, accepting that experiences differ for people depending on their exposure and context to the subject matter and an epistemology of social constructionism (Easterby-Smith *et al.*, 2021).

In total, 13 invitations were sent out to potential interviewees either via LinkedIn or email. Eight of the potential interviewees were known to the lead researcher, another four were part of her professional network and one was introduced to the study by another respondent. Nine of the thirteen invitees responded positively and semi-structured interviews were conducted with them: eight interviews used Zoom video conferencing and one was interviewed in person. The length of the interviews ranged from 36 to 71 min, with an average duration of 53 min. The core questions asked were:

What is your understanding of AI coach bots?

What is your perspective on AI coach bots vs human coaches, especially in terms of skills and competencies?

What is your opinion of AI coach bots in terms of whether they pose opportunities or threats to human coaches?

What is your opinion about AI coach bot regulation?

How do you envisage the future of coaching and AI coach bot usage?

As these were semi-structured interviews, each main question was followed by additional questions that varied depending on how the respondent answered the main question.

Criteria for the sample were defined in advance as advised by Flick (2022). All respondents were experienced professional coaches, possessing either a postgraduate qualification or a credential from a recognised coaching authority. Years of experience working as a coach ranged from one year to 30, with a median of seven years. See Table 1 for the credentials, experience and age ranges of the respondents. Three were females and six were males. Four were based in Europe, one between the USA and Europe, two in the UK, one in Asia and one in South Africa. All had some knowledge of AI coach bots (AICBs). Early in the interview, respondents were asked to self-identify their knowledge and/or experience level of AI coach bots, with the options offered being none, beginner, intermediate, advanced or expert. Two self-identified as experts – they had each created coach bots: one as advanced, one as intermediate and five as beginners. Of the beginners, two had used AICBs, while three had seen them in use, two of whom had clients who had used them.

All interviews were recorded and transcribed prior to using thematic analysis (Braun and Clarke, 2022). Codes and themes representing key perceived changes and impacts AICBs may pose within the coaching industry were developed manually. This was an iterative process: at an intermediate stage in the analysis of coding and theming, there were 99 codes grouped into seven themes. These themes were then reconfigured into four main themes, with six sub-themes and finally reshaped into the four (slightly different) themes discussed in the next section. Codes and themes were checked between the authors, and themes were revised after discussion.

Table 1. Accreditation, coaching experience and age of respondents

Coach credential	Years working as a coach	Age range
ICF Master Certified Coach (MCC), Master Neuro-Linguistic Programming (NLP), ICF-accredited Educator	13	45–54
ICF Master Certified Coach (MCC)/ICF-educator and Mentor/Internal ICF-assessor	16	35–44
Institute of Leadership and Management (ILM) Level 5 Coaching and Mentoring	5	45–54
ICAgile ICP-ACC (Professional Agile Coaching Certification)/En route to ICF-PCC (Professional Certified Coach), ICAgile Systems Coaching	1*	45–54
ICF Professional Certified Coach (PCC), Gestalt Practitioner in Organisations (GPO) awarded by European Association of Gestalt Therapy (EAGT)	7	35–44
ICF-ACC (Associate Certified Coach)	3.5*	55+
Master-level practitioner EMCC	15	45–54
ICF Associate Certified Coach (ACC)	5	45–54
Professional Certificate in Executive Coaching at a university business school/ICF	30	55+
Member/Neuro-Linguistic Programming (NLP) Practitioner		
Note(s): Were both involved in a coaching environment for several years before working as a coach		
Source(s): Table created by authors		

Ethical principles are an important component of qualitative research (Flick, 2022), and all interviewees gave their informed consent to take part in the research. Written permission was received to record and transcribe all the interviews. Confidentiality was guaranteed, and pseudonyms were used in place of names of people and organisations; respondents were coded as RS1–RS9. The data collected were securely saved. Ethical approval for the study was received from the university with which the authors are associated.

Findings and discussion

Four main themes were identified from the interviews.

- (1) Coaching capabilities of AICBs;
- (2) Greater accessibility of AI coaching services;
- (3) Possible AI-human hybrid service delivery and
- (4) Ethical issues in using AI coach bots.

Theme 1 coaching capabilities of AICBs

The most prominent theme, emphasised by all nine respondents, concerned the coaching capabilities of AICBs and, in particular, the importance of humans in the coaching context. RS7 said, “The human element is crucial in coaching”.

Interviewees described human characteristics and traits and stated how these may be lacking in AICB, for example:

RS9: I’ve been busy writing all about compassion actually today and its importance in coaching and how AI doesn’t quite cut it when it comes to that.

RS5: What it can’t do, is look at those nuanced meanings. It takes everything literally . . . It doesn’t have empathy. It doesn’t understand the irony . . .

All nine interviewees placed an emphasis on the importance of the human presence and the use of human qualities and traits in the coaching context. Interviewees stated humans are more spontaneous and adaptable and can make connections through past experiences, which they believe is of great value in a coaching relationship. RS6 detailed how he is impacted by his clients and his “ability to share that with the client [...] that can support the client to much deeper awareness of what’s going on for them” and as an AICB can’t feel or “think for itself”, it only “tries to find the best fit or the best answer”. Four interviewees said they often shared experiences with coachees, and this “building on the relationship” (RS2) often added depth to the coaching conversations and strengthened the relationship.

Five interviewees said they did not think AICBs would replace human coaches completely or take their jobs. One said that AICBs may be effective at performance or transactional coaching but would not be able to undertake more advanced assignments: “the developmental higher level psychological stuff” (RS7). However, five interviewees stated that AICBs may pose a threat to underperforming or inexperienced coaches:

I suspect really bad coaches really are at risk. It’s because they’re easily replaced. It’s like the value that the customer or the client receives, if they perceive that value to be greater from the AI robot than the real coach (RS5).

... not every human coach is a great coach and ... I think it’s part of what might drive the technological solution (RS6).

Seven interviewees spoke of the potential ability of AICBs to outperform human coaches in relation to certain coaching activities. For example:

... there’s all these kinds of technical ways of how do you formulate a question and I think that the bots can be trained to ask coaching questions really correctly (RS3).

[On the level of] the fundamentals of coaching, time management, the process, asking open questions” [an AICB may be able to manage this] even better than a human (RS6).

Interviewees discussed how human coaches have been trained to interpret body language and non-verbal cues, but said they believed AI technology has the potential to become better than humans in picking up physical and physiological changes such as temperature, heart rates, noticing clients’ movements and changes in stance.

... truly recognising the changes ... in the client’s body and being able to make sense or make connections and be able to inquire about those changes, ... AI would be able to recognise, graph those changes, ... for an example, the temperature change ... so it may be able to at a micro level really understand human beings (RS4).

... all the non-verbal communication ... so small twitch of the eye, something that you as a human or me as a human will just [overlook] a really good system will pick up on [in the future] (RS1).

Literature on AICBs has identified the limited capability of AI to relate to human emotions (e.g. [Blyler and Seligman, 2024](#); [Passmore and Tee, 2024](#); [Bachkirova and Kemp, 2024](#)), as did the interviewees in this study. The interviewees who opined that AICBs may pose a threat to underperforming or inexperienced coaches would agree with [Terblanche et al. \(2022a\)](#), who argue that “human coaches who operate at a low level of complexity may be rivalled by AI coaching” (p. 5).

There has been little research on whether AICBs will outperform human coaches in terms of certain skills and competencies in the future, although the study by [Terblanche et al. \(2022b\)](#) found that an AICB successfully helped coachees set and achieve goals comparably as well as a human coach.

The idea that AI technology has the potential to outperform humans in noticing changes in body language, non-verbal cues and physiological changes in a coaching context has not been researched at the time of writing.

Theme 2 greater accessibility of AI coaching services

Six participants mentioned AICB availability. RS8 said, “You could get an answer 24 h a day (whereas) you know you don’t have access to your (human) coach 24 h a day”. They viewed the non-stop availability as a potential threat and as a potential opportunity for human coaching: on the one hand, it could be a threat as the human coach is not available all the time, and on the other hand, it could be an opportunity to supplement the human coach’s service offering.

Two respondents suggested it could extend the reach of coaching if AICBs were available 24/7, making them more accessible to people, particularly those who have never experienced coaching, and this could create opportunities for human coaches as people would become familiar with coaching.

Two coaches expressed concern regarding AICBs’ constant availability, suggesting there is a risk users may form a dependency. One said: “Is that truly helping clients to be self-sufficient or every time they have a challenge do they use the coach bot because they aren’t able to build their own resilience, their own resourcefulness? Does it become almost like an addiction?” (RS6). However, another said, “The advantages of availability probably outweigh the negative side” (RS7).

Six interviewees spoke about costs: the cost of providing an AICB coaching session would be less than the cost of the time of a human coach, and therefore, the fees charged could be lower. This could challenge human coaches. One interviewee said: “[. . .] some large IT sector organisations dissolve their coaching departments after recent developments with the AI bots; the reason how I know this [. . .] my contracts were ended” (RS4). On the other hand, RS6 said, “There might be a premium for the human coach” and that “there are some economies where they prioritise quality over price”. One coach said that the lower cost could expose more people to coaching and they may “realise that this is really something I want to explore further, and they might then look for a human coach”, thus expanding “the market for human coaching” (RS7).

Three respondents said that AICBs could enable a small number of organisations to provide coaching on a large scale and dominate the market: “[. . .] because there’s a way to Hoover up all the clients because you have this piece of software that is just so good that people just say, well, that’s good enough, and it’s always available and it’s a good price” (RS6).

The easy availability of AICBs, discussed by the interviewees, has been highlighted in some publications (e.g. [Terblanche and Kidd, 2022](#); [Terblanche et al., 2022a](#); [Diller et al., 2024](#); [Diller and Passmore, 2023](#)). [Terblanche et al. \(2024\)](#) claim that clients are drawn to the AICB’s accessibility. Cost is also mentioned by [Diller et al. \(2024\)](#) and by [Passmore and Tee \(2024\)](#). [Passmore and Woodward \(2023\)](#) outline the huge revenues generated by large coaching providers; however, the risks of potential market domination by providers of AICBs, as raised by the interviewees, are not discussed.

Theme 3 possible AI-human hybrid service delivery

All nine interviewees discussed the potential of using AICBs and human coaches together: it “can be something which complements your human coaching” (RS6). Four mentioned the potential of having an AICB avatar to be available to clients between coaching sessions, giving the client 24/7 access to ask questions and for straightforward surface-level coaching. However, the human coach would be consulted for in-depth personalised coaching during human-to-human sessions.

Five participants discussed the potential benefits of augmenting human coaching with sophisticated systems which could possibly detect physical and physiological changes in coachees. RS1 expressed that it would be helpful to have “a camera in the background” with the AI coach bot reading physiological changes.

Augmentation of the first kind has been suggested in a number of papers (e.g. [Bachkirova and Kemp, 2024](#); [Diller et al., 2024](#); [Terblanche et al., 2024](#)), but the idea of using an AICB as a

partner during coaching sessions potentially assisting the coach by picking up non-verbal cues and physiological changes in the client has not yet been raised in the literature.

Theme 4 ethical issues in using AI coach bots

Three main ethical issues were raised by the interviewees: privacy and confidentiality, ethical boundaries and regulation and competence assurance.

Six respondents elaborated on their concerns in relation to assured privacy and confidentiality concerning AICBs. For example:

Obviously they need the information to also learn but where does this information sit? (RS2).

Would [the data] ever be deleted? (RS4).

So, how do you really ensure confidentiality . . . you have the same problem with humans *per se* but the level of risk I would consider to be quite different (RS1).

The topic of how AICBs deal with ethical boundaries was raised by five coaches. For example, RS6 asked, "How would an AI bot deal with an ethical dilemma? Or what is an ethical dilemma for an AI bot? What if it strays into the world of therapy? [. . .] How does an AI bot manage that?"

Seven coaches discussed whether AICBs, like human coaches, should be certified or accredited, thereby attempting to ensure certain ethical and competence standards are maintained, consequently protecting AI coach bot users. For example:

RS9: . . . none of the governing bodies have any competencies related to the use of AI within the context of a coaching situation . . . Similar developments need to take place in people teaching coaching and credentialing certifications to ensure those coaches [are assessed on] how well they utilise AI within their coaching . . .

RS4 [If] the coaching bots are not regulated, then that could easily lead to manipulation . . . So, we would have to ask how are these ethical guidelines applied when it comes to bots coaching . . .

Ethical issues are important in all coaching practice. In relation to AICB coaching, the interviewees raised questions and expressed concerns and were of the view that professional bodies should find some way of regulating the use of AICBs in coaching.

Papers have been published on privacy and security of AI technology (e.g. [Franzke, 2022](#)), but limited research is available specifically on AICBs in the coaching industry. [Passmore and Tee \(2023\)](#), [Terblanche \(2020\)](#) and [Innegraev and Passmore \(2024\)](#) suggested that new sets of guidelines and credentialing criteria should be implemented for AICBs as well as for coaches using them in their practice and the ICF AI Coaching Standard includes elements on privacy and security ([ICF, 2024b](#)).

Summary

As can be seen, there are degrees of congruence between the perceptions of the interviewees and published material. However, the points listed below, which were raised by the respondents, are not evident in published work, or literature on these points is scarce:

- (1) AICBs' potential to outperform human coaches regarding certain skills and competencies, such as evaluating clients' body language or physiological changes;
- (2) AICBs' potential threat to inexperienced and underperforming human coaches or those who offer coaching at a low level of complexity and might be at risk from competition from AICBs;
- (3) AICBs could potentially democratise coaching and spark an interest in coaching from people who have never experienced it, thereby potentially creating opportunities for human coaches;

- (4) Introduction of AICBs may enable market domination by a few large organisations in the coaching industry, which could scale up their offering to clients;
- (5) Privacy and security measures regarding AICBs in the coaching industry and
- (6) AICBs’ ability to judge situations concerning ethical dilemmas and coaching boundaries.

Limitations

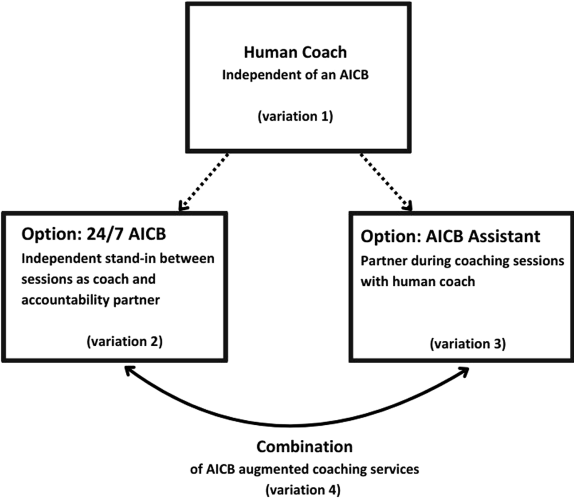
This was an exploratory study with a small sample of coaches, and the findings cannot be statistically generalised. However, some of the findings align with previous research in this area, while others indicate aspects of the use of AI in coaching that might usefully be explored further in larger-scale studies.

Conclusions

All the interviewees expressed the view that the human essence is essential in coaching interventions. Furthermore, they regarded the human presence as currently inimitable, despite AICBs having the potential to outperform humans regarding some technical skills such as the quality of coaching questions. Additionally, the AICBs’ advantage of accessibility was highlighted by respondents.

A practical implication is that the coach or coaching service provider can decide what packages to offer. The coach can work independently without an AICB (Variation 1 in Figure 1) or with an AICB as a 24/7 accountability partner between human coaching sessions (Variation 2) or with an AICB as an assistant during coaching sessions (Variation 3) or working with an AICB as a 24/7 assistant and as an AICB partner (Variation 4).

Ethical considerations are regarded as important, including full transparency and disclosure by coaches and coaching service providers using AICBs on how data are collected and stored and giving the client the option to decline the use of AICBs.



Source(s): Figure created by the authors

Figure 1. Variations of human coaching service offering

Lastly, as coaching is an unregulated industry, coaching organisations and bodies such as ICF and EMCC should develop and test guidelines to give clients and organisations hiring coaches some peace of mind that appropriate standards and criteria are being met.

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Recommendations for further research

Further research into the perceptions of clients who have experienced coaching by AICBs would be interesting, as would an exploration of coach and client experience where an AICB is used as an assistant during coaching sessions.

References

- Abравanel, M. and Gavin, J. (2021), "An integral quadrants perspective of coaching presence: a qualitative study of professional coaches", *International Journal of Evidence Based Coaching and Mentoring*, Vol. 19 No. 2, pp. 38-53, doi: [10.24384/mmhg-f721](https://doi.org/10.24384/mmhg-f721).
- Accenture (2023), *When Atoms Meet Bits. The Foundations of Our New Reality*, Accenture, available at: <https://www.accenture.com/content/dam/accenture/final/accenture-com/a-com-custom-component/iconic/document/Accenture-Technology-Vision-2023-Executive-Summary.pdf> (accessed 6 November 2023).
- Alabed, A., Javornik, A. and Gregory-Smith, D. (2022), "AI anthropomorphism and its effect on users' self-congruence and self-AI integration: a theoretical framework and research agenda", *Technological Forecasting and Social Change*, Vol. 182, 121786, doi: [10.1016/j.techfore.2022.121786](https://doi.org/10.1016/j.techfore.2022.121786).
- Amnesty International (2023), "The Toronto Declaration: protecting the right to equality and non-discrimination in machine learning systems", available at: <https://www.torontodeclaration.org/> (accessed 6 November 2023).
- Anderson, J. and Rainie, L. (2023), "As AI spreads, experts predict the best and worst changes in digital life by 2035", Pew Research Center, 21 June.
- Aydin, Ö. and Karaarslan, E. (2023), "Is ChatGPT leading generative AI? What is beyond expectations?", *Academic Platform Journal of Engineering and Smart Systems*, Vol. 11 No. 3, pp. 118-134, doi: [10.21541/apjess.1293702](https://doi.org/10.21541/apjess.1293702).
- Bachkirova, T. and Kemp, R. (2024), "AI coaching': democratising coaching service or offering an ersatz?", *Coaching: An International Journal of Theory, Research and Practice*, Vol. 18 No. 1, pp. 27-45, doi: [10.1080/17521882.2024.2368598](https://doi.org/10.1080/17521882.2024.2368598).
- Blyler, A.P. and Seligman, M.E.P. (2024), "AI assistance for coaches and therapists", *The Journal of Positive Psychology*, Vol. 19 No. 4, pp. 579-591, doi: [10.1080/17439760.2023.2257642](https://doi.org/10.1080/17439760.2023.2257642).
- Braun, V. and Clarke, V. (2022), *Thematic Analysis: A Practical Guide*, Sage, London.
- Buttazzo, G. (2023), "Rise of artificial general intelligence: risks and opportunities", *Frontiers in Artificial Intelligence*, Vol. 6, 1226990, doi: [10.3389/frai.2023.1226990](https://doi.org/10.3389/frai.2023.1226990).
- Chaves, A.P. and Gerosa, M.A. (2021), "How should my chatbot interact? A survey on social characteristics in human-chatbot interaction design", *International Journal of Human-Computer Interaction*, Vol. 37 No. 8, pp. 729-758, doi: [10.1080/10447318.2020.1841438](https://doi.org/10.1080/10447318.2020.1841438).
- Chui, M., Hazan, E., Roberts, R., Singla, A., Smaje, K., Sukharevsky, A., Yee, L. and Zimmel, R. (2023), "The economic potential of generative AI: the next productivity Frontier", *McKinsey and Company*, June, available at: <https://www.mckinsey.com/~media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/the%20economic%20potential%20of%20generative%20ai%20the%20next%20productivity%20frontier/the-economic-potential-of-generative-ai-the-next-productivity-frontier.pdf?shouldIndex=false> (accessed 27 November 2024).
- CoachHub (2025), "Hello, I'm AIMY™!", *CoachHub*, available at: <https://www.coachhub.com/aimy/> (accessed 6 March 2025).
- Coachvox Limited (2023), "Create an AI version of yourself", *Coachvox Limited*, available at: <https://coachvox.ai/> (accessed 7 December 2023).

- Coeckelbergh, M. (2019), "Ethics of artificial intelligence: some ethical issues and regulatory challenges", *Technology and Regulation*, Vol. 1, pp. 31-34, doi: [10.26116/techreg.2019.003](https://doi.org/10.26116/techreg.2019.003).
- Cox, E., Bachkirova, T. and Clutterbuck, D. (2024), *The Complete Handbook of Coaching*, Sage Publications, London.
- Creswell, J.W. and Creswell, J.D. (2017), *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed., Sage Publications, Los Angeles.
- de Almeida, P.G.R., dos Santos, C.D. and Farias, J.S. (2021), "Artificial intelligence regulation: a framework for governance", *Ethics and Information Technology*, Vol. 23 No. 3, pp. 505-525, doi: [10.1007/s10676-021-09593-z](https://doi.org/10.1007/s10676-021-09593-z).
- Diller, S.J. and Passmore, J. (2023), "Defining digital coaching: a qualitative inductive approach", *Frontiers in Psychology*, Vol. 14, 1148243, doi: [10.3389/fpsyg.2023.1148243](https://doi.org/10.3389/fpsyg.2023.1148243).
- Diller, S.J., Stenzel, L.C. and Passmore, J. (2024), "The coach bots are coming: exploring global coaches' attitudes and responses to the threat of AI coaching", *Human Resource Development International*, Vol. 27 No. 4, pp. 597-621, doi: [10.1080/13678868.2024.2375934](https://doi.org/10.1080/13678868.2024.2375934).
- Dillon, S. (2020), "The Eliza effect and its dangers: from demystification to gender critique", *Journal for Cultural Research*, Vol. 24 No. 1, pp. 1-15, doi: [10.1080/14797585.2020.1754642](https://doi.org/10.1080/14797585.2020.1754642).
- Easterby-Smith, M., Jaspersen, L.J., Thorpe, R. and Valizade, D. (2021), *Management and Business Research*, 7th ed., Sage Publications, London.
- EMCC (2024), "AI & digital", available at: <https://www.emccglobal.org/leadership-development/ai-digital/> (accessed 26 November 2024).
- Fingerprint for Success (2023), "Fingerprint for success: personal coaching", *Fingerprint for Success*, available at: <https://www.fingerprintforsuccess.com/features/coaching> (accessed 19 October 2023).
- Flick, U. (2022), *An Introduction to Qualitative Research*, 7th ed., Sage Publications, London.
- Franzke, A.S. (2022), "An exploratory qualitative analysis of AI ethics guidelines", *Journal of Information, Communication and Ethics in Society*, Vol. 20 No. 4, pp. 401-423, doi: [10.1108/JICES-12-2020-0125](https://doi.org/10.1108/JICES-12-2020-0125).
- Grant, A.M. and O'Connor, S. (2019), "A brief primer for those new to coaching research and evidence-based practice", *The Coaching Psychologist*, Vol. 15 No. 1, pp. 3-10, doi: [10.53841/bpstcp.2019.15.1.3](https://doi.org/10.53841/bpstcp.2019.15.1.3).
- Graßmann, C. and Schermuly, C.C. (2021), "Coaching with artificial intelligence: concepts and capabilities", *Human Resource Development Review*, Vol. 20 No. 1, pp. 106-126, doi: [10.1177/1534484320982891](https://doi.org/10.1177/1534484320982891).
- Hunt, W., Sarkar, S. and Warhurst, C. (2022), "Measuring the impact of AI on jobs at the organization level: lessons from a survey of UK business leaders", *Research Policy*, Vol. 51 No. 2, 104425, doi: [10.1016/j.respol.2021.104425](https://doi.org/10.1016/j.respol.2021.104425).
- IAPP (2024), "Global AI legislation tracker by IAPP research and insights", available at: <https://iapp.org/resources/article/global-ai-legislation-tracker/> (accessed 26 November 2024).
- IBM (2024), "AI in action 2024", IBM available at: <https://www.ibm.com/search?lang=en&cc=uk&q=ai%20in%20action%202024%20report> (accessed 27 November 2024).
- ICF (2024a), "International coaching federation", available at: <https://coachingfederation.org/> (accessed 24 March 2024).
- ICF (2024b), "Technology and artificial intelligence in coaching", available at: <https://coachingfederation.org/research/coalition-technology-in-coaching> (accessed 26 November 2024).
- Innegraeve, M. and Passmore, J. (2024), "Flipping to digital: the coach's perspective on the limited adoption of technology in coaching", *International Journal of Evidence Based Coaching and Mentoring*, Vol. 22 No. 1, pp. 35-50, doi: [10.24384/0rs1-vz12](https://doi.org/10.24384/0rs1-vz12).
- Ives, Y. (2008), "What is 'coaching'? An exploration of conflicting paradigms", *International Journal of Evidence Based Coaching and Mentoring*, Vol. 6 No. 2, pp. 100-113.

-
- Kritikos, M. (2019), *Artificial Intelligence Ante Portas: Legal and Ethical Reflections*, European Parliamentary Research Service.
- Kronblad, C. and Envall Pregmark, J. (2021), "Responding to the COVID-19 crisis: the rapid turn toward digital business models", *Journal of Science and Technology Policy Management*, Vol. 15 No. 3, pp. 451-467, doi: [10.1108/JSTPM-10-2020-0155](https://doi.org/10.1108/JSTPM-10-2020-0155).
- Lee, J. and Lee, D. (2023), "User perception and self-disclosure towards an AI psychotherapy chatbot according to the anthropomorphism of its profile picture", *Telematics and Informatics*, Vol. 85, 102052, doi: [10.1016/j.tele.2023.102052](https://doi.org/10.1016/j.tele.2023.102052).
- Liu, H., Wang, Y., Fan, W., Liu, X., Li, Y., Jain, S., Liu, Y., Jain, A. and Tang, J. (2022), "Trustworthy AI: a computational perspective", *ACM Transactions on Intelligent Systems and Technology*, Vol. 14 No. 1, pp. 1-59, doi: [10.1145/3546872](https://doi.org/10.1145/3546872).
- Maslej, N., Fattorini, L., Brynjolfsson, E., Etchemendy, J., Ligett, K., Lynos, T., Manyika, J., Ngo, H., Niebles, J.C., Parli, V., Shoham, Y., Wald, R., Clark, J. and Perrault, R. (2023), "The AI index 2023 annual report", Institute for Human-Centered AI, Stanford University, CA, April.
- Maxwell, A. (2009), "How do business coaches experience the boundary between coaching and therapy/counselling?", *Coaching: An International Journal of Theory, Research and Practice*, Vol. 2 No. 2, pp. 149-162, doi: [10.1080/17521880902930311](https://doi.org/10.1080/17521880902930311).
- Nemecek, P. (2023), "The decision bridge: a model for coaching distressed physicians", *International Journal of Evidence Based Coaching and Mentoring*, No. S17, pp. 108-121.
- O'Broin, A. and Palmer, S. (2010), "Exploring key aspects in the formation of coaching relationships: initial indicators from the perspective of the coachee and the coach", *Coaching: An International Journal of Theory, Research and Practice*, Vol. 3 No. 2, pp. 124-143, doi: [10.1080/17521882.2010.502902](https://doi.org/10.1080/17521882.2010.502902).
- O'Connell, B., Palmer, S. and Williams, H. (2012), "What is coaching?", in *Solution Focused Coaching in Practice*, Routledge, London, pp. 1-12.
- Passmore, J. and Tee, D. (2023), "Can Chatbots replace human coaches? Issues and dilemmas for the coaching profession, coaching clients and for organisations", *The Coaching Psychologist*, Vol. 19 No. 1, pp. 47-54, doi: [10.53841/bpstcp.2023.19.1.47](https://doi.org/10.53841/bpstcp.2023.19.1.47).
- Passmore, J. and Tee, D. (2024), "The library of Babel: assessing the powers of artificial intelligence in knowledge synthesis, learning and development and coaching", *Journal of Work-Applied Management*, Vol. 16 No. 1, pp. 4-18, doi: [10.1108/JWAM-06-2023-0057](https://doi.org/10.1108/JWAM-06-2023-0057).
- Passmore, J. and Woodward, W. (2023), "Coaching education: wake up to the new digital and AI coaching revolution!", *International Coaching Psychology Review*, Vol. 18 No. 1, pp. 58-72, doi: [10.53841/bpsicpr.2023.18.1.58](https://doi.org/10.53841/bpsicpr.2023.18.1.58).
- PricewaterhouseCoopers (2023), *AI Adoption in the Business World: Current Trends and Future Predictions*, available at: https://www.pwc.com/il/en/mc/ai_adoption_study.pdf (accessed 26 November 2024).
- Rajpurkar, P., Chen, E., Banerjee, O. and Topol, E.J. (2022), "AI in health and medicine", *Nature Medicine*, Vol. 28 No. 1, pp. 31-38, doi: [10.1038/s41591-021-01614-0](https://doi.org/10.1038/s41591-021-01614-0).
- Stover, D. (2023), "Will AI make us crazy?", *Bulletin of the Atomic Scientists*, Vol. 79 No. 5, pp. 299-303, doi: [10.1080/00963402.2023.2245247](https://doi.org/10.1080/00963402.2023.2245247).
- Terblanche, N. (2020), "A design framework to create artificial intelligence coaches", *International Journal of Evidence Based Coaching and Mentoring*, Vol. 18 No. 2, pp. 152-165, doi: [10.24384/b7gs-3h05](https://doi.org/10.24384/b7gs-3h05).
- Terblanche, N. and Kidd, M. (2022), "Adoption factors and moderating effects of age and gender that influence the intention to use a non-directive reflective coaching chatbot", *Sage Open*, Vol. 12 No. 2, doi: [10.1177/21582440221096136](https://doi.org/10.1177/21582440221096136).
- Terblanche, N., Molyn, J., de Haan, E. and Nilsson, V.O. (2022a), "Comparing artificial intelligence and human coaching goal attainment efficacy", *PLoS One*, Vol. 17 No. 6 June, p. e0270255, doi: [10.1371/journal.pone.0270255](https://doi.org/10.1371/journal.pone.0270255).

Terblanche, N., Molyn, J., de Haan, E. and Nilsson, V.O. (2022b), "Coaching at scale: investigating the efficacy of artificial intelligence coaching", *International Journal of Evidence Based Coaching and Mentoring*, Vol. 20 No. 2, pp. 20-36, doi: [10.24384/5cgg-ab69](https://doi.org/10.24384/5cgg-ab69).

Terblanche, N., Molyn, J., Williams, K. and Maritz, J. (2023), "Performance matters: students' perceptions of Artificial Intelligence Coach adoption factors", *Coaching: An International Journal of Theory, Research and Practice*, Vol. 16 No. 1, pp. 100-114, doi: [10.1080/17521882.2022.2094278](https://doi.org/10.1080/17521882.2022.2094278).

Terblanche, N.H.D., van Heerden, M. and Hunt, R. (2024), "The influence of an artificial intelligence chatbot coach assistant on the human coach-client working alliance", *Coaching, Coaching: An International Journal of Theory, Research and Practice*, Vol. 17 No. 2, pp. 1-18, doi: [10.1080/17521882.2024.2304792](https://doi.org/10.1080/17521882.2024.2304792).

Thompson, R. (2021), "Coaching and mentoring with metaphor", *International Journal of Evidence Based Coaching and Mentoring*, No. SI 15, pp. 212-228, doi: [10.24384/4sve-8713](https://doi.org/10.24384/4sve-8713).

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