CONVERSATIONS WITH AI PART VI

AI powered moderator bots:
Enhancing empathy or eroding connection?

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At Ipsos, we champion the unique blend of Human Intelligence (HI) and Artificial Intelligence (AI) to propel innovation and deliver impactful, human-centric insights for our clients.

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> **Some see Generative AI as a blessing that can free researchers from boring tasks, whereas others fear that it could lead to the loss of the qualitative craft.**

In the rapidly evolving narrative of our age, artificial intelligence (AI) has taken centre stage, weaving its influence into every facet of conversation, from the boardroom to the water cooler. The sheer velocity of innovation in this space is unparalleled – multi-modal, voice, and beyond. As with any transformative technology, there are polarized perspectives. Qualitative research is no exception to this unfolding dialogue.

Some within our field have championed the potential benefits of generative AI. They envision it as a powerful tool that could liberate researchers from mundane tasks. Conversely, there exists a contingent that views AI's encroachment into qualitative research with apprehension, advocating for caution and, for some, resistance against its pervasive influence.

Navigating the complexities of AI in qualitative research can be difficult, and this challenge is amplified by the rapidly expanding use cases being added at breakneck speed. One such capability being explored in academic circles is Gen AI's conversational abilities. Could this

have a role in qualitative research? What if you dialled into a virtual qualitative interview moderated by a bot powered by Generative AI? Would it be able to build rapport, go beyond surface-level responses to understand motivations, emotions, and interpret non-verbal cues effectively?

Recognizing these questions and challenges, we saw the need for reliable information to separate the hype from reality and aid our clients with responsible adoption for the right use cases. Hence, we undertook this self-funded research to explore the potential of Gen AI in assuming the role of a qualitative research moderator. Our past papers have delved into Generative AI's role in qualitative analysis, but this time we aimed to answer a fundamental question: Can a Moderator Bot powered by Gen AI play a role in qualitative research. Would it foster greater empathy, or does it leave us feeling empty?
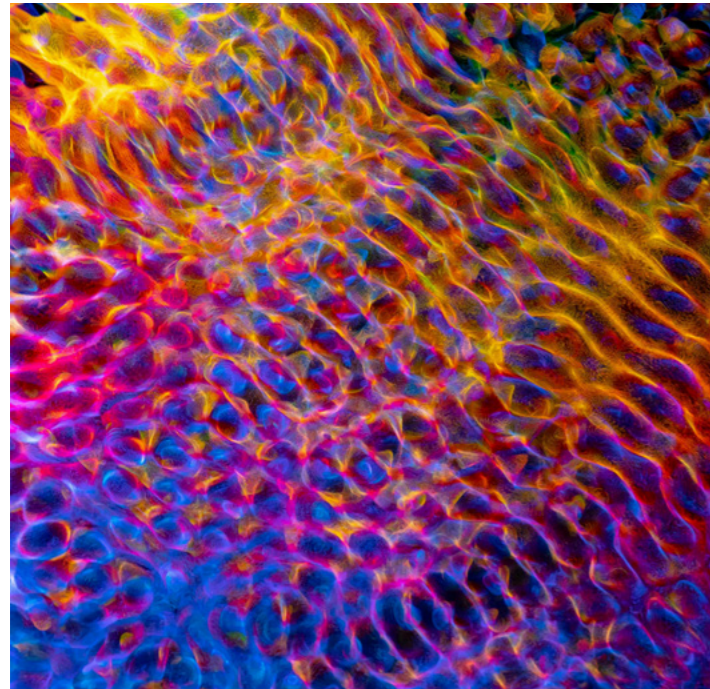
> **Empathy is the holy grail that guides moderators to reveal clear, intricate patterns of thought and emotion and in turn develop solutions that profoundly resonate with human needs.**

Defining empathy

Understanding the hearts and minds of others is not just an inherent human trait; it's the cornerstone of all our social interactions. This deep-seated drive is particularly crucial in the field of qualitative research, where moderators delve into the intricate web of people's lives, uncovering their ambitions, values and what truly matters to them. Empathy is the linchpin in this process, the quintessential element, or the holy grail, that guides moderators to reveal clear, intricate patterns of thought and emotion and in turn develop solutions that profoundly resonate with human needs.

One might contend that AI, being non-human, inherently lacks the capability to authentically connect on an emotional level. After all, AI operates by calculating responses based on given prompts, which is more about statistical prediction than genuine empathy. It's a complex mimic, not an empathetic companion. However, a more insightful question could be: how effectively can an AI moderator bot emulate the practices of accomplished human moderators as they go about the process of building empathy?

Defining empathy frequently conjures images of shoe swapping to understand another's journey. While popular, these metaphors can be quite abstract and don't offer specific steps for someone looking to delve deeper into the notion of empathy. Therefore, to evaluate the performance of an AI bot as moderator we drew inspiration from Amy Coplan's (2011) conceptualization of empathy, which hinges on a trio of essential elements that, when combined, adequately capture the essence of empathy: affective matching, other-oriented perspective-taking, and self-other differentiation.

Skilful human moderators excel by seamlessly integrating three essential tasks, which in turn allow them to connect deeply with respondents. Can an AI moderator bot rise to the challenge?

Drawing inspiration from and adapting Amy Coplan's (2011) conceptualization of empathy

01 **AFFECTIVE MATCHING** sees moderators mirroring the emotions of respondents, fostering rapport and understanding. While an AI moderator may lack genuine emotional responses, we must ask: can it effectively recognize and reflect the emotions of those it interacts with?

02 **OTHER-ORIENTED PERSPECTIVE-TAKING** is the process of putting oneself in someone else's situation to understand their thoughts and emotions from their own unique viewpoint. It involves an imaginative effort to think and feel as they would, to visualise their individual circumstances, without inserting one's own biases or experiences. Human moderators do so skilfully by probing, prodding or strategically using pauses without breaking eye contact. Could an AI moderator bot employ similar techniques to achieve deep engagement and nuanced questioning?

03 Lastly, **SELF-OTHER DIFFERENTIATION** enables moderators to empathize without compromising their own identity or the research objectives. They resonate with the respondent's emotions while keeping the client's goals in sharp focus. Can an AI moderator bot maintain this balance, directing conversations to unearth insights that align with business goals?

Exploring AI's empathetic capabilities

As we ponder the capabilities of AI as a moderator, we assessed whether a Gen AI-powered moderator bot, using voice to engage participants, could rival the empathetic finesse of human moderators.

To answer these questions, we assembled a diverse cohort of streaming platform viewers in the US and asked them about their viewing habits and preferences via a short interview, 10 to 12 minutes, moderated by an AI moderator bot. We purposefully structured the interviews to be brief, as early tests indicated the AI moderator bot operated with greater consistency and stability in a condensed format. Post interview, a human moderator engaged the research participants to share their reflections of being interviewed by an AI moderator bot.

Our study employed an iterative process – crafting prompts, conducting interviews, and refining prompts. This cyclical process is designed to perpetually refine and enhance the AI's performance, attempting to edge it closer to the empathetic understanding that characterizes a human researcher.

> **While the AI bot can mimic some emotional responses, it lacks the genuine emotional reciprocity required for effective affective matching.**
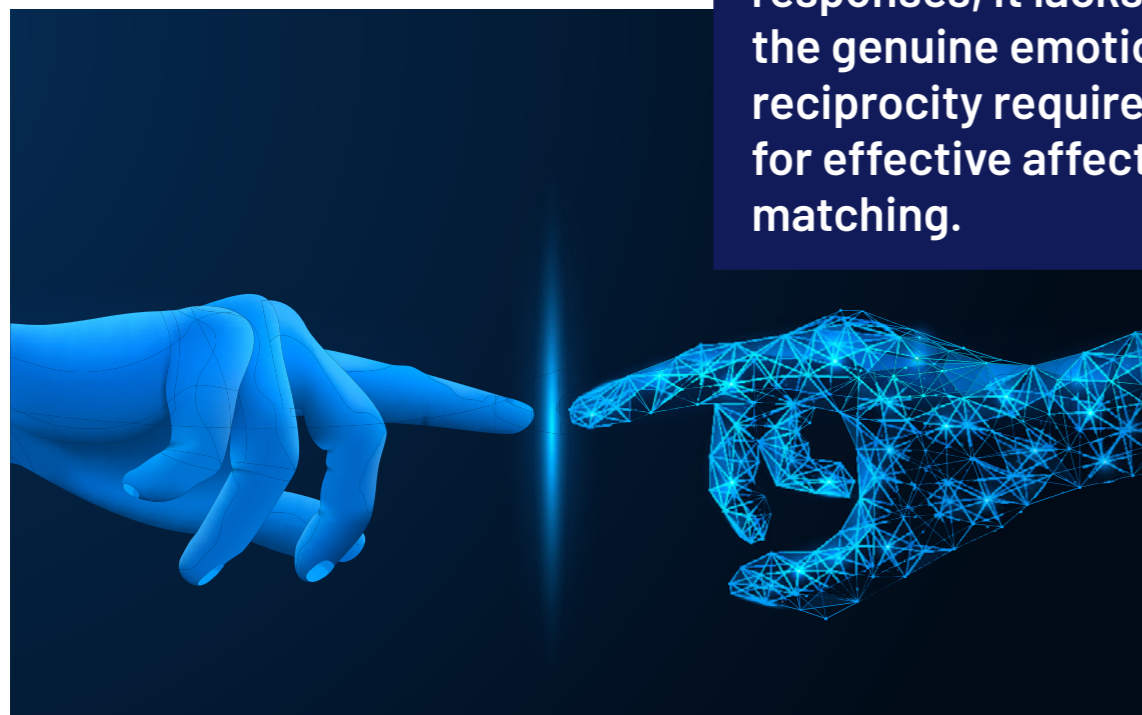
The reality check: oasis or merely a mirage

Despite initial technical difficulties, time lags and interruptions, the AI bot performed surprisingly well. It engaged in a manner that sounded natural. In English, where training data is abundant, the moderator bot was able to mimic social interaction and keep track of the conversation, understand idioms, metaphors, polysemous words based on the context of use (i.e., words that have multiple meanings). In fact, respondents believed the moderator bot would only become more conversationally competent over time as AI is evolving rapidly.

Respondent: *"Waiting for it to respond was a little frustrating... also I felt I had to talk without pausing. If I paused to think, the bot would think I am done, and it would interrupt me with the next question."*

The AI moderator bot's ability to reference specific details like television shows, episode titles, and storylines from its training data, along with its prompt to play back paraphrased summaries every few responses, helped respondents feel heard and understood. Additionally, the AI moderator bot demonstrated charm by complimenting and validating their choices, which brought a smile to the respondent's faces.

Respondent: *"The conversation felt natural, and I almost forgot I was speaking to a bot."*

Respondent: *"I told it that I like the show Arcane but didn't tell it why I liked it, it asked me why I liked it, and knew that that Arcane was from Riot games."*

So, is this an oasis or just a shimmering mirage? On closer examination the promise and allure of the AI moderator bot seemed more like a mirage than a shimmering oasis. It didn't always cover all information areas, missed out on opportunities to probe and in some cases would ask questions that had already been answered. But how did it do in terms of empathy?

Affective skim

During the course of the interview and the post-interview debrief, the AI moderator bot was able to recognize and even name some emotions displayed by the respondent. While it acknowledged them while moderating (excited, anxious), unlike a seasoned human moderator, the AI moderator bot did not delve deeper into the 'Why' behind the emotion. Nor did it tweak its line of questioning, phrasing, tone based on those specific emotions felt by the respondent. Therefore, while the AI bot can mimic some emotional responses, it lacks the genuine emotional reciprocity required for effective affective matching.

Perspective taking – novice level

Perspective taking is where experienced human moderators shine. They probe strategically, prompt occasionally, and use pauses masterfully to delve into the respondent's world. Like adept jazz musicians, they navigate the discussion guide, improvising as necessary while consistently advancing to uncover answers to strategic questions.

- **Weak improvisation and exploration:** AI bots struggle with improvisation and are unable to ask the spontaneous, probing questions that arise during conversations. We found that AI moderator bots couldn't apply human-like intuition, go off script to smell out what was insightful and helpful in achieving the research objectives. In the study, we asked respondents how they discovered new content. Many indicated that the streaming platform's content recommendation engine influenced

their viewing behaviour the most, yet they were dissatisfied with the selection and used social media platforms to discover new or trending content. The AI moderator did not delve into what they were seeking, why it mattered, or its significance, which hindered deeper understanding and insights. In research that demands extensive exploration of loosely defined questions, human moderators shine by asking insightful, non-obvious questions that lead to deeper and more meaningful insights.

- **Gap and inconsistencies:** While AI can seek answers to research objectives, currently it cannot observe unarticulated nuances and does not probe on the inconsistencies or contradictions, thus fails to provide a holistic understanding of human behaviour. This is where experienced human moderators excel once again as they can read nonverbal cues like body language and facial expressions, understand the context including cultural and social norms, and draw from this understanding to interpret behaviour.

- **Weak social contract:** In a qualitative interaction, there is an unwritten social contract where the respondent is expected to be truthful, and the moderator asks probing questions. Through nods, phatic cues (such as 'um,' 'ah,' 'uh-huh,' indicating that a listener is actively engaged and is paying attention), eye contact and silences, the moderator signals a desire for deeper responses and doesn't change topics prematurely. This dynamic creates a moral obligation for the respondent to share openly, a nuance difficult for an AI bot to replicate.

Doesn't always have its eyes on the prize

An adroit human moderator can quickly recognize when a topic, despite the respondent's interest, isn't relevant to the client's business question. They can gently steer the conversation back on track, effectively filtering useful information from the irrelevant. A human moderator has the ability to not just ask the questions, but also question the answers. Given the current technology, AI moderator bots today lack the ability to discern relevance and adapt in real-time. While moderator bots powered by Gen AI can follow scripts, they cannot grasp context or apply human intuition. As a result, AI bots struggle to keep conversations aligned with the objectives of the research. An AI moderator bot, often behaves like a novice moderator that is constantly looking down at the discussion guide and as a result, takes its eyes off the prize. It misses out on fertile opportunities to probe, to dig deeper, to deal with the novel and unexpected. However, as technology progresses, there is potential for AI to develop these capabilities in the future.

At this stage, it should also be noted that using an AI moderator bot to understand consumers in depth, could create a sense of disassociation. It would be like observing someone from a distance rather than engaging in a personal, face-to-face conversation. While this approach could help with collecting a range of opinion, they may lack depth and empathetic connection, which is crucial for uncovering profound emotional insights.

> "A human moderator has the ability to not just ask the questions, but also question the answers.

Table 1: Diffences between Human and AI moderators

HUMAN MODERATORS	AI MODERATORS
Ideal when objectives demand extensive exploration, ill-defined questions, and conversations requiring nuance.	Best for brief, simple, straightforward engagements with limited improvisation. Ideal for quick clarifications from a large sample.
Ideal for uncovering deep, nuanced insight exploration.	Ideal for collecting a broad spectrum of data quickly: Efficient for conducting numerous interviews simultaneously.
Experienced moderators pick up inconsistencies, and are skilled at asking non-obvious questions.	Tend to follow the discussion guide with limited improvisation around specific questions.
Skilled at probing, interpreting non-verbal cues, and adapting in real-time to explore complex emotions and motivations. Can engage empathetically and adjust the line of questioning based on the respondent's emotions.	While AI Moderator bots can identify emotion, they don't yet improvise to get a deeper understanding. This could change as the technology improves.
Limited to humane hours and human moderator availability.	Flexible, allowing respondents to participate at their convenience.
Can create a safe space but may not offer the same level of anonymity.	Offers anonymity and can gather candid data.

Source:
Ipsos

Where can AI Moderator Bots add value?

It's fair to say that an AI moderator bot isn't ready to replace your favourite human moderator for focus groups or in-depth interviews just yet. While it might not keep a respondent engaged for an extended period, it can certainly add value by supplementing existing research methods. Consider its potential uses:

01

Always-on Access:
One of the biggest advantages of using an AI moderator bot is that it's available 24/7, 365 days in a year. People might have thoughts or experiences they want to share at any time, day, or night. A human moderator can't be available all the time, but a bot can be there to listen and talk whenever needed. Think about someone who has diabetes and an enlarged prostate, which can make them need to visit the toilet frequently at night (a condition called nocturia). It would be hard to get a human moderator to talk to them at 3 am! But an AI bot could be there to listen to their experiences and collect insight, no matter what time it is. In the same way one could, via a digital diary, track a respondent's behaviour over an extended period of time – imagine checking in with your AI moderator bot every afternoon to have a conversation about your weight loss journey.

> **Imagine a fleet of these bots conducting numerous interviews simultaneously – the potential for gathering insights is greatly amplified.**
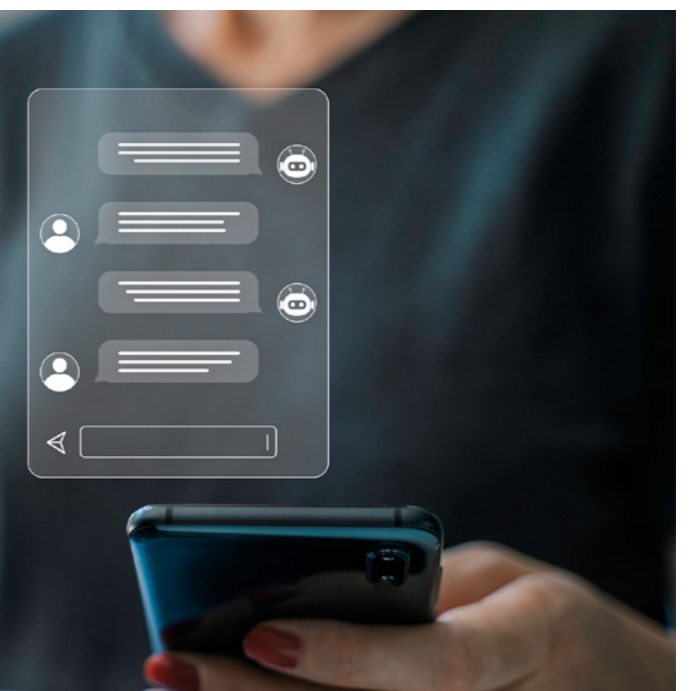
02

Scale (and Speed):
Leveraging AI moderator bots would allow for impressive scale and speed in research. Imagine a fleet of these bots conducting numerous interviews simultaneously - the potential for gathering insights is greatly amplified, and research timelines can be significantly shortened. Moreover, these bots can efficiently gather a wide range of data through concise 10 to 15 min dialogues, offering a practical middle ground between qualitative and quantitative methodologies.

03

Safe spaces beyond judgement:
Anonymity in research, particularly when discussing sensitive topics, can empower individuals to share their true feelings without fear of judgment. Speaking to an AI bot, rather than a human, could offer this enhanced level of anonymity – enabling the collection of richer, more candid insights.

04

Conversational surveys:
AI moderator bots can add value with conversational surveys by making them more engaging and insightful. Unlike traditional surveys, AI bots can probe respondents in real-time, asking follow-up questions based on their open-ended answers. This conversational approach can unearth richer insights and provide a more engaging experience for the respondent.

05

Engagement tool:
AI moderator bots can boost engagement in online communities by acknowledging participant input and maintaining a natural, engaging dialogue flow. This constant interaction keeps users involved and encourages active participation.

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> **Currently the moderator bots powered by Gen AI lack the ability to improvise, to use instinct to pick up unexpected threads, going off-piste from the guide means discovery of new, unexpected territory.**

Conclusion

While AI moderator bots demonstrate significant potential and can be a valuable addition to the research toolkit, they are not a replacement for the deep, exploratory power of human-led qualitative research. Qualitative insight comes not from the respondent answering the questions but from the moderator questioning the answers. This ability to improvise, to use instinct to pick up unexpected threads, going off-piste from the guide means discovery of new,

unexpected territory. The bot sounds like they are listening in an empathetic way: but in reality, it doesn't feed into the discussion or change the direction of dialogue in any way. It is just a response to the answer, it does not question the answer to create new questions based on the moderator's understanding of the client's business and research objectives. That is not qualitative conversation it is essentially conversational quant. AI is too polished – insight is messy.
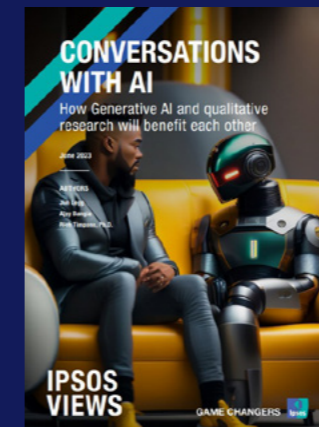
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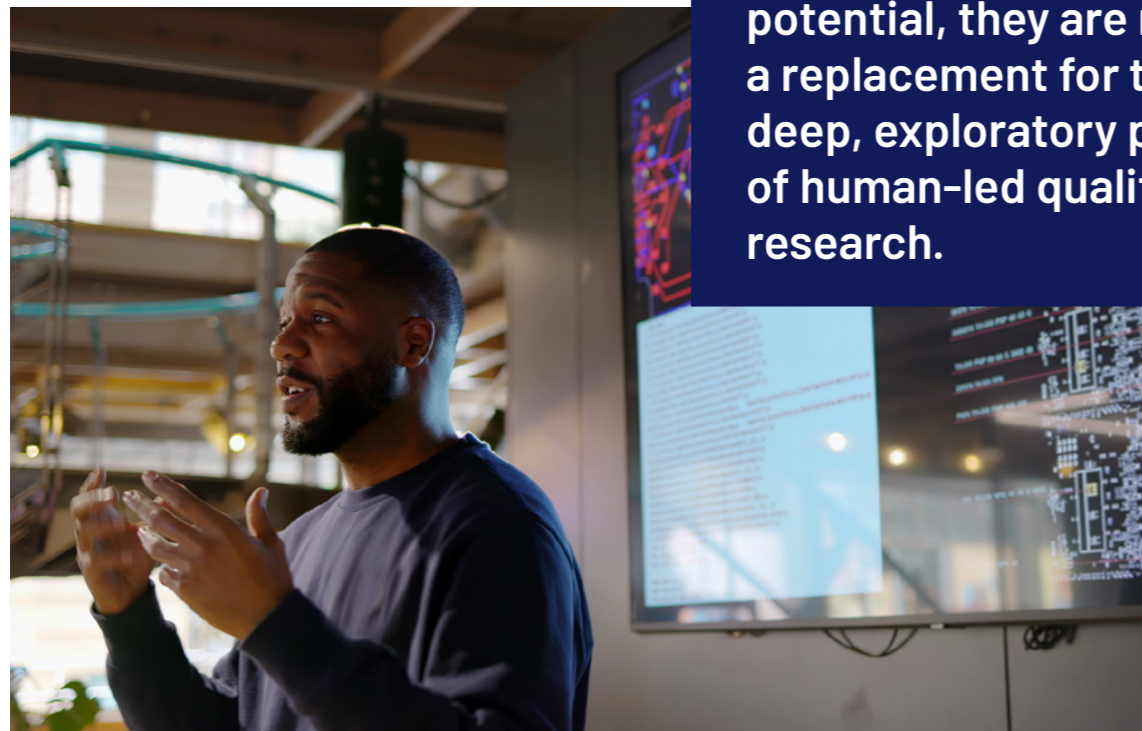
References

- Deus Ex Machina and Personas from Large Language Models: Investigating the Composition of AI-Generated Persona Descriptions Authors: Joni Salminen, Chang Liu, Wenjing Pian, Jianxing Chi, Essi Häyhänen, Bernard J Jansen

- The Illusion of Empathy? Notes on Displays of Emotion in Human-Computer Interaction - Andrea Cuadra, Maria Wang, Lynn Andrea Stein, Malte F. Jung, Nicola Dell, Deborah Estrin, James A. Landay

- AI Companions Reduce Loneliness: Julian De Freitas, Ahmet K Uguralp, Zeliha O Uguralp and Puntoni Stefano https://www.hbs.edu/faculty/Pages/item.aspx?num=66065

- AI vs. Human Empathy: Machine Learning More Empathetic, https://neurosciencenews.com/ai-empathy-25911/

Further Reading

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