

**Developing the Learner Interaction Simulation App (LISA):
An AI-Powered Tool for Advisor Education**

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Abstract

This paper reports on the development and preliminary evaluation of *LISA*—the *Learner Interaction Simulation App*—an AI-powered tool designed to enhance professional development for learning advisors. Rooted in the field of Advising in Language Learning (ALL) and grounded in self-determination theory (SDT), LISA offers educators a safe and accessible environment to practice and reflect on advising dialogues through simulated interactions with AI avatars. The app addresses a recurring challenge in advisor education: Finding opportunities for authentic practice. Eight learning advisors with varying experience piloted LISA and completed a post-use survey comprising Likert-scale and open-ended items. Findings indicated that participants found the interface intuitive, the experience authentic, and the simulation useful for practicing advising skills. However, they also highlighted areas for improvement, including increased response variety and interface enhancements. The results suggest that LISA may become a valuable supplement to existing advisor education, providing flexible, theory-informed practice opportunities.

本論文は、学習アドバイザーの専門的成長を支援することを目的として開発された、AI搭載ツールLISA（Learner Interaction Simulation App）の開発過程および予備的評価について言及する。LISAは、学習アドバイジング（Advising in Language Learning: ALL）の理論的枠組みと自己決定理論（Self-Determination Theory: SDT）に基づき、教育者がAIアバターとの模擬対話を通して、安全かつアクセスしやすい環境でアドバイジング対話の実践と省察を行えるよう設計されている。本アプリは、アドバイザー教育において繰り返し指摘されてきた課題である「実践の機会を確保すること」に対応するものである。経験年数の異なる8名の学習アドバイザーがLISAを試用し、リッカート尺度項目および自由記述項目から成る事後アンケートに回答した。その結果、インターフェースの直感性、体験の真正性、アドバイジング技能の練習における有用性が評価された一方で、応答の多様性の向上やインターフェースの改善といった課題も示された。これらの結果から、LISAは既存のアドバイザー教育プログラムを補完する、理論に基づいた柔軟な実践機会を提供するツールとして有用となる可能性が示唆された。

Keywords: advisor education, AI-powered tool, advising in language learning, self-determination theory, reflective dialogue

In this fast-changing world where people are expected to learn and relearn throughout their lives, coupled with the ever-increasing array of resources available, promoting awareness and ownership of learning is more important than ever. Language teachers are having to rethink their roles and develop new skills for supporting 21st-century learners in developing learner autonomy, i.e., taking charge of their learning (Benson, 2011). One effective way to promote responsibility for learning is to foster reflection through powerful dialogue, which is known as advising in language learning (Kato, 2023). Advising in language learning is a one-to-one, reflective dialogue that promotes learner autonomy and awareness (Kato & Mynard, 2016). To become a proficient learning advisor, it is necessary to develop an awareness of skills that help people reflect deeply on their language-learning process. In addition to learning about the skills, it is essential to practice them. Not everyone has access to learners for practice purposes, and as the authors, who are instructors in an online advisor education program (AEP), have seen across generations of teaching the courses, many participants struggle to find real learners to practice with. While many AI tools exist for language learning (e.g., Liu & Reinders, 2025; Pan et al., 2025), and some apps serve as counselors or coaches (e.g., Gettel et al., 2025; Terblanche, 2024; Vowels et al., 2024), none target the professional development of language learning advisors. To address this gap, the authors have developed a purpose-built web-based application, the Learner Interaction Simulation App (LISA), which is a web-based AI simulator for advisor training. In this paper, drawing on the theoretical framework of self-determination theory (SDT), the authors discuss the app's design and development, present an initial study that collected feedback from users of the beta version of the app, and outline the next steps of the project, including implications for advisor education.

Theoretical Framework

Advising in Language Learning

Advising in language learning is defined as a one-to-one reflective dialogue between a language learner and a learning advisor, intentionally structured to promote language learner autonomy (Carson & Mynard, 2012; Karlsson et al., 2007; Kato & Mynard, 2016). Learning advisors will be sensitive to the learners' needs and individual differences (Griffiths & Soruç, 2020; Hurd & Murphy, 2012) and frame their advising accordingly. In other words, learning advisors take into account factors such as the learner's metacognitive awareness, preferences, previous experiences, motivations, interests, goals, willingness to take charge of the learning

process (i.e., their degree of autonomy), available time and resources, and other factors. Learning advisors are trained to read verbal and nonverbal cues, draw on a range of tools and discursive strategies, apply the appropriate degree of directiveness, and help learners to deepen their understanding and take action. Advising is skilled work and focuses on empathy, trust, and learner agency (Kato, 2024; Shelton-Strong & Tassinari, 2022). Throughout the process, learning advisors use reflective questions to foster self-awareness and self-endorsed goal-setting.

Self-Determination Theory (SDT)

Self-determination theory (SDT) (Deci & Ryan, 1985; Ryan & Deci, 2017) is central to advising practice and the Learner Interaction Simulation App (LISA)'s design. SDT is a meta-theory of motivation and wellness that situates learning within a person's sense of self and well-being. A thorough overview of SDT and its mini-theories is beyond the scope of this study. Still, it is important to note that 'autonomy' from an SDT perspective is conceptualized differently from the description of learner autonomy earlier in this paper. Autonomy, along with competence and relatedness, is considered a basic psychological need in SDT. The three basic psychological needs are interconnected and serve as crucial 'nutrients' that allow people to thrive. *Autonomy* in SDT refers to the need to experience volition and ownership over one's decisions and behavior. *Competence* is the need to feel effective in meeting challenges, to develop confidence, and to experience personal growth. This involves receiving feedback and moving towards mastery in a skill. *Relatedness* is the need to feel a sense of belonging and emotional connection with others, along with empathy, connection, and trust. LISA aims to simulate advising dialogues that help advisors reflect on how to meet these three basic psychological needs, both for learners and for advisors.

Advisor Education

Just as teacher education is necessary for classroom-based teachers, initial and ongoing advisor education is essential for learning advisors. This is the case even for experienced teachers retraining as learning advisors, as the skills and knowledge required are distinct from those required for teaching (Carson & Mynard, 2012). In the 1990s—the early years of the field—advisors were self-trained and often formed collegial groups to support each other in developing the necessary skills and knowledge (see Mozzon-McPherson & Vismans, 2001). Soon after, systematic training was established in some institutions, for example, the MA in advising from the University of Hull, UK, the *Diplomado Formación de Asesores de Centros Autoacceso de Lenguas Extranjeras* (Diploma in self-access for learning

advisors) from Universidad Nacional Autónoma de México (UNAM) (in Spanish), the *Advisor Education Program* from the Research Institute for Learner Autonomy Education (RILAE) at Kanda University of International Studies (KUIS), Japan (in English and Japanese), and the *Advisor Education Program* from Ankara Yıldırım Beyazıt Üniversitesi in Ankara, Türkiye (in Turkish, based on the KUIS program). In Japan, the private sector has also played a role. Since the mid-2000s, ALC (educational publishing company) has offered advisor training and certification, positioned differently from academically grounded, university-based advisor education programs.

If new learning advisors are unable to attend any of these courses, in-house training is usually provided, often by invited experts who facilitate workshops. In addition, the International Association of Teachers of English as a Second Language (IATEFL) Learning Autonomy Special Interest Group (LASIG) has held several online and hybrid events supporting advisor education. The programs generally cover the basic theory and practical skills needed to conduct advising sessions, but advisors still need to develop confidence and competence through practice.

Context - The Advisor Education Program (AEP)

The Advisor Education Program (AEP) offered at RILAE has been developed over more than a decade to equip educators with the knowledge, skills, and dialogic sensitivity required for advising (Mynard & Kato, 2025). The program consists of five 4-week online courses that integrate live lectures, live discussions, recorded sessions, and reflective forum tasks, forming a structured and scalable system for advisor preparation. Participation has continued to grow, so far with 341 course takers from 16 countries, 89 graduates, and 25 trained advisor educators, demonstrating the increasing recognition of advising as a distinct professional practice within language education. Many participants are faculty members at universities and other educational institutions, and a significant number already possess expertise in language education or applied linguistics. These educators join the program because reflective dialogue requires a different kind of pedagogical engagement. It is an approach that places the learner's motivations, emotions, and agency at the center rather than the teacher's expertise. This relational, question-guided, and learner-centered form of dialogue is challenging yet deeply transformative, which is why so many experienced educators are drawn to the AEP. The AEP highlights relational advising/mentoring as one of its strengths, where experienced instructors (mentors) and novice advisors (mentees) engage in a reflective dialogue that benefits both parties.

A distinctive feature of the AEP is the requirement to practice real advising dialogues after each class. However, two recurring challenges limit participants' opportunities for experiential learning. First, it can be difficult to find learners to practice with outside of class. Second, novice advisors often feel unprepared to begin advising real learners immediately. These barriers highlight a critical gap in advisor education: Although knowledge can be acquired through coursework, the development of advising competence requires repeated and safe practice. To address this need, we developed LISA, an AI-based simulator designed specifically for advisor training. LISA provides: 1) accessible practice anytime, anywhere, 2) realistic learner interactions with varied profiles, and 3) a review function for reflection and skill growth.

Overview and Design Principles

AI-Powered Tool for Advisor Education

The development of generative AI has opened new possibilities for fostering language learning, including tailored, dynamic, personally meaningful dialogues rather than relying on scripts or generic roleplays. Various options for Generative AI-assisted language-learning software (e.g., Language, Duolingo, Speak Buddy) have been developed in the past decade. However, they are typically targeted for language learners, not educators. While the flexibility of Generative AI provides some viable means to support professional development, general-purpose Generative AI tools like ChatGPT and Gemini are insufficient as educator training tools. They lack the tailored structure and user interface to provide a consistent practice environment for specialized skills, such as learning advising in language learning. LISA addresses such limitations by offering an interface specifically designed for practicing advising with virtual learners and reflecting on that practice. For the current study, the GPT 4o-mini was embedded to simulate natural speech responses, both in written and spoken formats.

Web Application

While the majority of internet access is through mobile devices, and the need for native applications (those installed on mobile devices) has been increasing, they have practical limitations, namely, platform-specific specifications, challenging optimization for application stores (Roumeliotis & Tselikas, 2022), and potential incompatibility for different OS versions (Cai et al., 2019). In order to address such limitations of native mobile applications while also enabling mobile access, LISA was developed in the form of a web

application, a software delivered via the web that runs on web browsers such as Chrome and Safari, making it accessible across different platforms, including mobile and desktop. This also enables users to authenticate their login and access their user data across different devices without the need to download separate applications from platform-specific application stores.

Features to Support Reflection and Basic Psychological Needs

Intended to provide on-demand practice advising sessions, LISA promotes self-endorsed behavior of novice learning advisors who seek supplementary practice opportunities. This aligns with autonomy in SDT, which is characterized by behaviors that are volitional and self-endorsed (Ryan & Deci, 2017). The wide range of customizable fields enables users to practice advising the kinds of learners they find difficult to advise (e.g., particular topics or personalities), thereby supporting the basic need of competence, i.e., the need to “feel effectance and mastery” (Ryan & Deci, 2017, p. 11). While simulating realistic advising dialogue, the simulation allows the user more time to consider their responses, fostering reflection-in-action throughout sessions. Additionally, the user can save the session transcript for further reflection. On the other hand, relatedness, i.e., the need to feel significant to others, is not directly addressed in the current version of LISA as it is primarily targeted for independent users. However, the need for relatedness can potentially be supported by integrating the app into an advisor education program, where participants share their experiences and reflections with other course-takers as part of a supportive community.

Core Functions

LISA encompasses three major functions: *Quick Simulator*, *Advanced Simulator*, and *Review & Reflect* (see Figure 1 for the selection page). Quick Simulator is primarily designed for first-time users and offers seamless access to an advising simulation with minimal manual settings. The AI avatar has prestructured character settings: A university student named Yuta, who wants to discuss a learning plan for his target languages, English and Spanish. Advanced Simulator is designed to cater to diverse advising experiences and offers a customizable AI avatar. The customizable learner profile fields include the main topic, learning goal, target language proficiency, metacognitive awareness level (Kato & Mynard, 2016), motivation type (Ryan & Deci, 2017), personality, and hobbies/interests (Figure 2 illustrates the user interface for editable fields; Table 1 presents examples of selectable options for each field). Review & Reflect allows the user to review saved transcripts from previous simulations, each of which also includes a text area for the user to save reflection notes. While AI functionality

is not currently embedded in this function, future editions potentially include a mentor avatar who provides tailored guidance to enhance the user's reflection on their advising practice.

Figure 1

Function Selection Page

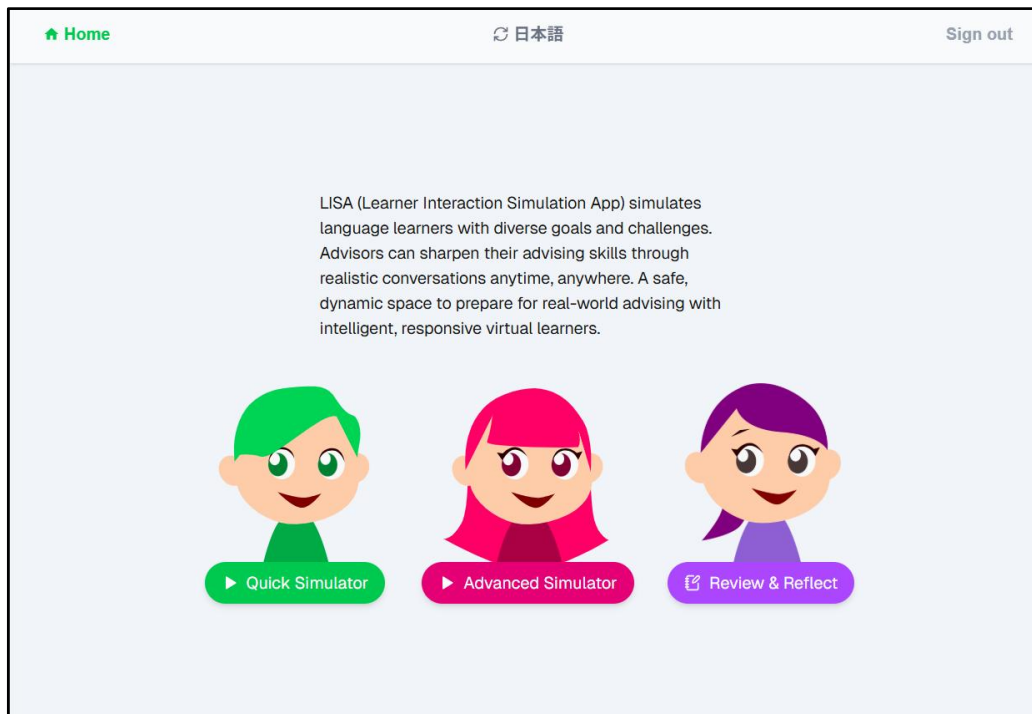


Figure 2

AI Avatar Setting Page for Advanced Simulator

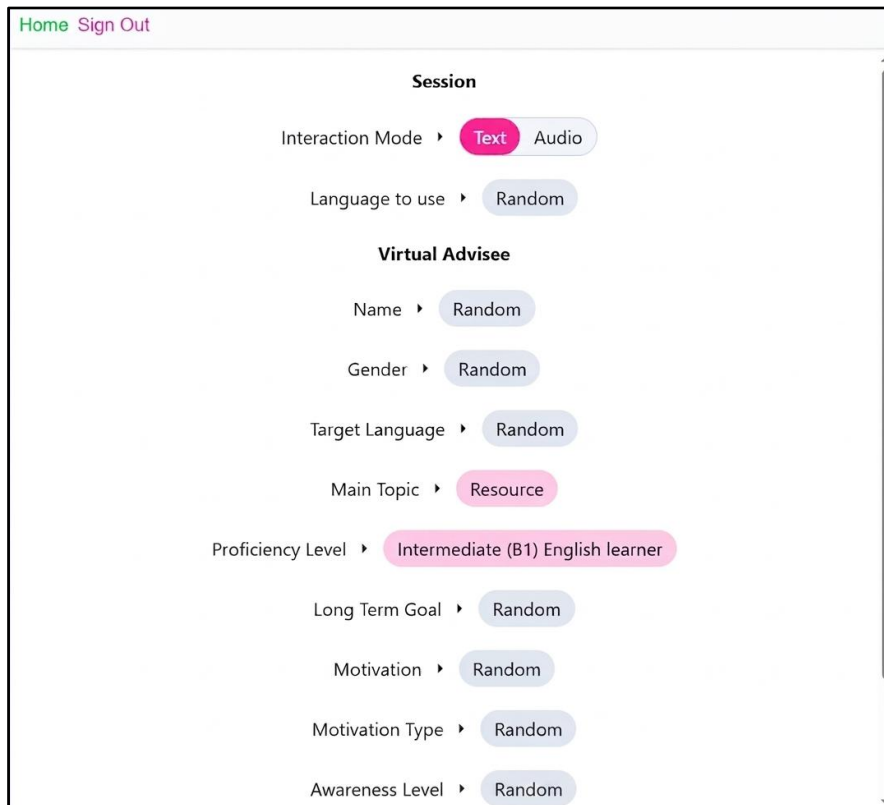


Table 1*Illustrative Examples of Selectable Options for Learner Profile Fields*

| Field | Example Options |
|-------------------|---|
| Name | Aoi, Hikaru, Sora, Yuuki |
| Gender | Male, Female, Non-binary |
| Target Language | English, Japanese |
| Main Topic | Learning plan, Resources, Confidence, Motivation, TOEIC |
| Proficiency Level | Pre-beginner (Pre-A1), Beginner (A1), Intermediate (B1) |
| Long Term Goal | Study abroad in Canada, Become fluent in daily conversation, Read English novels without translation, Work in the hotel industry |
| Motivation | Travelling, Writing Poetry, Listening to music, Tabletop games |
| Motivation type | Amotivated (no motivation), Extrinsically motivated 1 (for external rewards), Extrinsically motivated 2 (for approval), Intrinsically motivated |
| Awareness Level | Low, Middle, High |
| Personality | Shy, Nervous, Easily confused, Friendly, Perfectionist |
| Hobbies/Interests | Hiking, Cooking, Movies, Birdwatching, Video games |

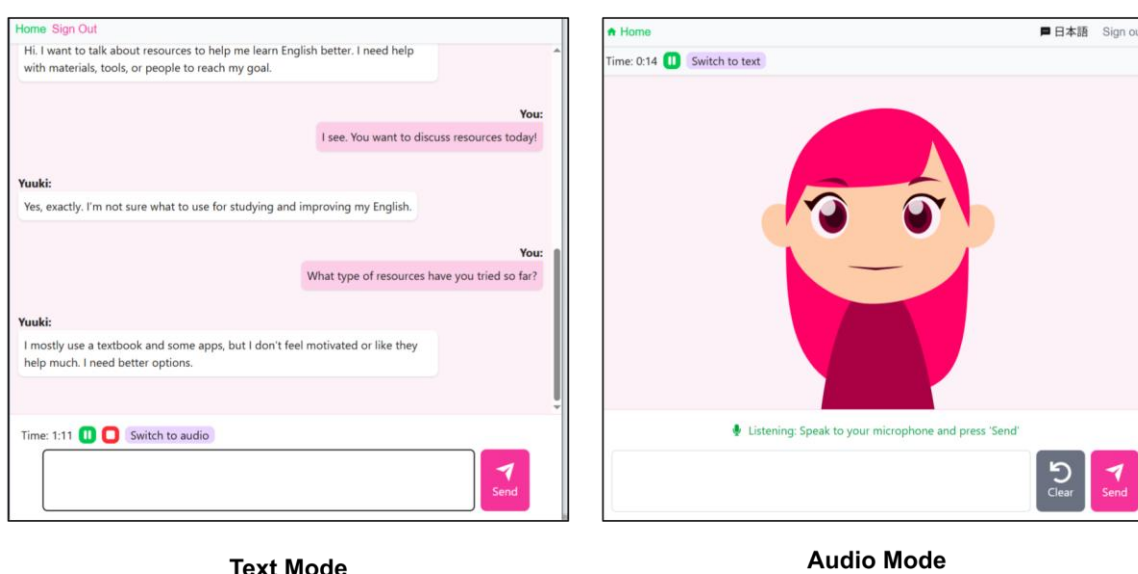
Interaction with the Avatars

During a simulation session, the avatar assumes the role of a language learner whose traits reflect the customized profile settings. For example, in Figure 3, an avatar's responses include "Hi, I want to talk about resources to help me learn English better. I need help with materials, tools, or people to reach my goal," and "I mostly use a textbook and some apps, but I don't feel motivated or like they help much. I need better options," reflecting the Main Topic set to Resources. Both types of simulators provide two interaction modes, *text mode* and *audio mode*, which can be selected and switched before and during a simulation session. Text mode functions similarly to conventional short messaging applications, allowing the

user to read previous responses, which encourages slower-paced dialogue and reflection before sending each response (illustrated in Figure 3, Text Mode). Audio mode displays an animated 2D avatar and uses speech recognition and text-to-speech capability to simulate real-time verbal communication, while also allowing the user to retake their speech and keyboard input to maximize accessibility (illustrated in Figure 3, Audio Mode).

Figures 3 and 4

Screenshots of Text Mode and Audio Mode



Text Mode

Audio Mode

The Present Study

Rationale, Purpose, and Research Questions

As established in the previous section, opportunities for novice advisors to engage in realistic practice remain limited due to scheduling challenges and a lack of preparedness to work with learners. Consequently, there is a need for training tools that offer meaningful, low-stakes practice without involving real learners. LISA addresses this gap by providing a controlled but realistic environment in which advisors can develop, refine, and reflect on their skills.

The purpose of this research is to develop and evaluate a fully functioning version of LISA and to explore its potential contribution to advisor education. This project examines how simulated (text and voice/audio) interactions with virtual learners can help both novice and experienced advisors build confidence, strengthen advising skills, and connect theoretical

principles with practical application. By analyzing users' experiences, the study aims to gather initial impressions on how AI-based simulations can support professional learning in self-access and language-support contexts.

Research questions guiding this study are: 1) How do advisors perceive the usability, accessibility, and realism of the LISA simulation environment? and 2) To what extent do advisors consider LISA a valuable tool for developing advising skills and supporting advisor education?

Participants and Procedure

After receiving ethical approval from the University, the researchers contacted former and current AEP course participants by email, and eight volunteered to participate in this study. Each respondent first provided informed consent before participating, then individually interacted with LISA by conducting at least one simulated advising session, and finally completed a three-part online questionnaire (see Appendix).

The survey gathered:

- 1) background information (e.g., advising experience, training),
- 2) two sets of five Likert-scale items (5-point evaluation ranging from strongly agree to strongly disagree) evaluating the interface clarity, avatar realism, practice value, accessibility, and potential for skill development (one set for the text version of LISA and another set for the voice/audio version), and
- 3) five open-ended questions regarding perceived benefits, challenges, and suggestions for improvement.

Drawing on the first part of the questionnaire, we established the profile of the eight participants. All of them reported having prior training in advising or reflective dialogue. Three participants were graduates of the AEP (and were also advisor educators), while the remaining five had partially completed the AEP. The cohort consisted of teachers, learning advisors, and a career consultant working in different educational settings, representing a broad range of advising experience, from novices with fewer than 10 sessions to highly experienced advisors with more than 100 sessions, spanning two to eight years in the field.

The second part of the survey, analyzed descriptively due to the small number of participants, provided quantitative insights on practical aspects of using LISA, and the third part of the questionnaire collected qualitative data on observed strengths, limitations, and suggestions for future development. The qualitative data were analyzed thematically by one of the researchers to identify emergent themes, which were then discussed with the research

team. The process broadly followed Braun and Clarke's (2022) six-phase thematic analysis framework. Findings are presented in the following sections.

Findings

Quantitative Results

All participants (N = 8) reported their experience using the text version of LISA, and half of the cohort (n = 4) also tried the voice/audio version. The results indicate a highly positive overall evaluation of the app. Most participants either agreed or strongly agreed with statement A, "The LISA interface was clear and user-friendly," and similar levels of agreement were reported for statement B, "The avatar's reactions felt close to how real learners would respond." The responses to both statements suggest that usability of the app and the authenticity of the interaction were the strongest aspects of the experience. Regarding statement C, "The session with the avatar provided me with a useful opportunity to practice advising", showed more variability, indicating differences in the perceived value of the app for advising practice (one disagreed, three neither agreed nor disagreed, two agreed, and five strongly agreed).

The accessibility of the simulator was also viewed positively, with six participants agreeing or strongly agreeing with the statement "Using LISA is more accessible than finding a real practice partner" (Statement D). Finally, most advisors agreed or strongly agreed with statement E, "Continued use of LISA would help novice advisors to improve their basic advising skills," indicating that participants recognized its pedagogical potential.

Among the participants who evaluated both versions of the app, a few discrepancies emerged. Two participants rated the text version more favorably in terms of interface clarity, usefulness for practicing advising skills, and ease of finding an advisee. In contrast, one participant evaluated the voice-audio version more positively, agreeing that it was clear and user-friendly, whereas they selected "neither agree nor disagree" for the text version. These quantitative findings are supported and nuanced by the analysis of the qualitative responses, presented in the following sub-section.

Qualitative Results

Four themes emerged from the analysis of the responses to the five open-ended questions about the benefits, challenges, and suggestions for future development when using LISA: Authenticity and personalization, areas for improvement, strategic and reflective

practice, and experiencing hesitation and problem-solving moments. The sub-sections below provide an analysis of each theme with representative quotes.

Authenticity and Personalization

The most frequently mentioned theme concerns LISA's realism and relevance to real face-to-face advising sessions, with six participants describing the interaction as similar to an authentic communicative experience and contextually meaningful, while two highlighted subtle limitations in human-likeness. Three participants expressed surprise at the app's degree of authenticity and customization, with one participant noting, "It felt no different from interacting with a real learner," and another explaining, "In some way, this is actually how students talk, and it can be hard to get to the core issue, so that part is pretty realistic." Similarly, the comment "[...] it feels similar to talking to a student, especially with the 'ums' and the vocabulary it uses," highlighted how subtle conversational features were integrated into the dialogue. However, as the interaction progressed, one participant noted that the app struggled to sustain the same level of authenticity, explaining that "after a while, it feels like talking to a robot," and that "it was difficult to feel like he was a real learner after a while." The same participant also pointed to the absence of non-verbal cues typically present in face-to-face advising, observing that "real students are rarely like that," and that "with a real learner other aspects come in, how they look like, how they sit, etc."

Areas for Improvement

This theme was the second most frequent among the participants. Seven provided feedback regarding four aspects: User interface and technical issues, limited or repetitive dialogue, lack of realism, and lack of structure and flow. Firstly, five respondents reported that the interface and technical issues could interrupt the flow of the advising dialogue. Participants explained their confusion regarding the response input method, e.g., "Not being able to push enter after writing my response was impractical," and "Enter instead of a Send button might be more intuitive, but I know sometimes we mistakenly press enter although we just want to start a new line, and in a dialogue situation it will complicate the flow." While mentioned as minor, these concerns could be important barriers to seamless communication to consider addressing to mitigate possible impact on the flow of future conversations using LISA.

The second drawback highlighted in four comments was connected to the lack of depth and variety in the advising dialogue, contrasting with the app's aim of "naturalness". One participant noted, "After some sequences, the same sentences popped up. [...] After some time, it was clear that the advice had a loop." This limitation indicates that the app database

of responses or, perhaps, its generative skills are currently insufficient, leading to predictable interactions, potentially disrupting LISA users' sense of authentic simulation, according to the participants.

Beyond repetition and depth, three participants criticized the app's lack of realism. As mentioned in the previous sub-section, aspects of the dialogue were incoherent with the "typical" human advisees the participants interacted with. Specifically, in one cited case, the AI partner (avatar learner) did not have a genuine problem or a clear objective. The participant described, "[...] I felt like I did not really have to advise him, [...] He had the answers ready," In a similar case, another participant explained, "I got the sense that no matter how much I keep talking, there isn't going to be a core issue that I can grab onto." Also, one participant noted that the simulator "agree [*sic*] with me without having a will of his [*sic*] own," indicating the app's limitation to provide, to some extent, sufficient challenge, that would best mimic the reality of advising sessions, for a user to practice their advising skills.

Finally, three participants reported issues concerning the flow and structure of the interactions. In particular, one participant mentioned a lack of narrative closure, stating, "I also was not sure how the conversation ends [*sic*] or at what point the student felt like he had a sense of resolution." Another participant described the AI's inability to keep the focus on the conversation, as the simulator "kept talking to me and even steered the conversation to ask about my hobbies." These responses indicate that LISA occasionally has difficulty recognizing conversational cues for closure, which impacts the impression of authenticity.

Strategic and Reflective Practice

This theme connects to the participants' comments about strategic planning and metacognitive reflection while using the tool. Seven participants identified LISA as a space that not only required the use of the advising skills taught in the RILAE courses but also provided the possibility of "reflecting before asking questions or giving advice," often limited in face-to-face interactions. Furthermore, five respondents described conscious planning, noting for example, "I had to think really carefully about how I could get the learner to take responsibility in learning," leading to stating powerful questions, including "What do you think is your core issue?", and specific actions, mentioned in the written dialogue with AI, such as "Please summarize for me what you are going to do next."

Also, six participants mentioned the simulator's effectiveness in refining their advising skills; one described it as a "very good pedagogical decision" and indicated their intention "to use this more to improve my advising and questioning skills." Another

participant said it could be especially useful “to have novice advisors talk to the AI for a little while and then discuss to compare what strategies they used,” showing the value of collaborative reflection. The advisors’ comments indicate that their experience using LISA fostered reflection on their advising skills.

Experiencing Hesitation and Problem-Solving Moments

Five participants’ responses also included comments about experiencing advisees’ struggles, hesitation, and uncertainty, triggering problem-solving and reflective moments. Some comments validated the authenticity of those episodes to practice problem-solving moments in the advising dialogue, stating, “Sometimes the questions were so natural and challenging that I froze for a moment, which often happens in real life, too,” or mirroring learners’ insecurity, perceiving LISA as “really good at imitating the ‘I don’t know what to do’ moments.” Two respondents appreciated the possibility of reflective pauses in the conversation, not always possible in a face-to-face setting, noting, “It’s nice that you have time to think of what you want to say next.” These simulated challenging moments did not discourage the participants; they seemed to foster persistence and a desire to further practice their advising skills.

Discussion

The results showed that LISA has great potential to create much-needed opportunities for both novice and experienced learning advisors to develop their skills. In this section, we discuss the implications of the results by returning to the research questions: 1) How do advisors perceive the usability, accessibility, and realism of the LISA simulation environment? 2) To what extent do advisors consider LISA a valuable tool for developing advising skills and supporting advisor education?

Participants generally found the experience to be usable, accessible, and realistic. The data highlighted the satisfaction of the basic psychological need of competence. LISA replicates authentic advising challenges, such as hesitation and some contradictions in goal setting, that provoke reflective problem-solving on the part of the advisor, just as in a real session. The process showed that LISA was easy to access, and the systems were user-friendly. Whether voice or text mode was a matter of individual preference. The advisors who tested LISA found that they could comfortably rehearse the advising skills they learned in the course in a safe space free of the pressures and emotional load that a real session might entail. The practice opportunities that LISA provided are particularly helpful for novice advisors

who need to develop automaticity in using the skills they may have learned during their advisor training but might not have had time to fully internalize.

In terms of LISA's limitations, the data suggest that while many participants appreciated LISA's ability to replicate fluid, realistic, and low-pressure interactions, they also identified boundaries to this algorithm-based dialogue, indicating that affective and physical dimensions are key in this type of conversation. Nevertheless, the dialogues with LISA provided opportunities for reflection on practice, demonstrating the need for competence satisfaction.

Satisfaction of the other two basic psychological needs of autonomy and relatedness from SDT was more difficult to discern. As this was a research scenario, the participants were using LISA to give feedback to researchers, not because they had identified a personally meaningful autonomous goal. However, participants acknowledged that LISA could provide targeted and individually meaningful practice opportunities for learning advisors. Regarding relatedness, as mentioned earlier, this version of the app does not include mechanisms to satisfy this basic psychological need, but one participant did recognize the potential for the experience to serve as a useful starting point for a follow-up reflective group discussion. In our AEP, relatedness is satisfied through the sense of community participants feel from opportunities to practice and reflect in real time during weekly meetings and on an online asynchronous discussion board (Mynard & Kato, 2025), and LISA could provide another tool for stimulating such reflection.

Conclusion and Next Steps

The study shows the potential for LISA to serve as a supportive tool for advisor education, complementing instructor-led and peer-supportive courses. The purpose of LISA is not to eliminate the important process of relational advising/mentoring, but to provide helpful, on-demand, practice and reflection opportunities for learning advisors that will enhance the effectiveness of the mentoring and ultimately advisor development.

LISA represents an innovative step in AI-assisted advisor education. It extends opportunities for reflective practice and skill development while preserving the human-centered ethos of advising. The findings affirm that AI can simulate authentic advising conditions and promote advisor growth when grounded in autonomy-supportive, empathy-based frameworks like SDT. The study showed that LISA is an accessible, on-demand practice environment that complements advisor training courses.

Several further stages are planned for this project. After reviewing the feedback, we will continue to improve the interface and the range of responses available to the avatar and move into the next stage of usability investigation. The second stage of usability testing will involve following the UX Design Institute procedures to observe and record additional testers using LISA and asking them to think-aloud as they do so to describe their experiences. This will lead to further improvements to the interface and user experience. Currently, we have only been testing LISA in English, but we are due to trial a Japanese version shortly, and this might be followed by other languages in the future.

Following usability testing, we will explore whether users can effectively apply advising skills and whether using LISA supports their ongoing development as advisors by stimulating reflective processes. This research focus will also be useful for evaluating the AEP and improving the lessons and materials. This process is likely to involve the collection and analysis of transcripts of the avatar-based sessions and associated written reflections. In addition, follow-up interviews with users would be invaluable for establishing the effectiveness of LISA as a training tool for advisors. We plan to evaluate the long-term development of advising skills and awareness by collecting data from advisors over a one-year period. This longitudinal and systematic approach will ensure we can eventually share the theoretically grounded, research-driven potential of LISA as a tool for effective advisor education.

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Appendix

Survey Items

Part 1: Background Information

- Have you taken or completed any training in advising or reflective dialogue?
- Your current role
- How long have you been a Learning Advisor? (If applicable)
- How many advising sessions have you conducted with real learners?

Part 2: Experience Using LISA (Text version)

Please rate your level of agreement with the following statements regarding text interactions with the avatar: (1 = Strongly disagree, 5 = Strongly agree)

- The LISA interface was clear and user-friendly.
- The avatar's reactions felt close to how real learners would respond.
- The session with the avatar provided me with a useful opportunity to practice advising.
- Using LISA is more accessible than finding a real practice partner.
- Continued use of LISA would help novice advisors to improve their basic advising skills.

Part 2: Experience Using LISA (Optional - voice/audio version)

Please rate your level of agreement with the following statements, regarding audio interaction with the avatar: (1 = Strongly disagree, 5 = Strongly agree)

- The LISA interface for audio interaction was clear and user-friendly.
- The avatar's reactions felt close to how real learners would respond.
- The session with the avatar provided me with a useful opportunity to practice advising.
- Using LISA is more accessible than finding a real practice partner.
- Continued use of LISA would help novice advisors to improve their basic advising skills.

Part 3: Open-Ended Questions

- What aspects of LISA did you find most helpful? Why?
- Were there any aspects you found confusing or difficult?
- How did the experience with LISA compare to practicing with a real learner?
- What suggestions do you have to improve LISA for future users?
- Any other comments or feedback?