BEYOND THE DIGITAL DIVIDE: AI AS LINGUISTIC AND AFFECTIVE MEDIATION TOOL AMONG MIGRANT STUDENTS

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ABSTRACT
This case study explores how students with migrant backgrounds enrolled in a Provincial Centre for Adult Education in Bari (Italy) perceive Artificial Intelligence (AI) not only as a tool to support linguistic mediation and learning comprehension, but also as a potential resource for well-being, participation, and inclusion in multicultural classrooms. The study adopts an empirical design based on the administration of a questionnaire comprising closed-ended, multiple-choice, and numerical scale items, aimed at collecting socio-demographic, linguistic, and digital technology access data, as well as assessing sense of belonging and engagement in educational activities. The findings highlight the perceived potential of artificial intelligence tools in supporting forms of participation, inclusion, and school well-being within multicultural educational contexts.

KEYWORDS
Artificial intelligence; migrant students; digital affective literacy.

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[1]Although the research was conducted by all authors and this work is the result of their joint effort, the individual paragraphs, however, are attributed as follows: Introduction: Alba Caiazzo; Theoretical Framework: Alba Caiazzo; Methodology: Francesco Pio Dilillo; Results: Francesco Pio Dilillo; Discussion, Conclusions and Future Directions: Alba Caiazzo. The abstract was collaboratively developed and approved by all authors.

1. Introduction

In contemporary educational systems, digital transformation has profoundly reshaped teaching and learning processes, particularly within increasingly multicultural and multilingual classrooms. The integration of digital technologies into educational environments has broadened opportunities for communication, access to knowledge, and participation, while also encouraging more flexible and inclusive pedagogical approaches capable of responding to students' diverse linguistic and cultural backgrounds (Handayani & Lestari, 2025). However, these transformations do not affect all learners in the same way. For students with migrant backgrounds, digital innovation may intersect with pre-existing educational vulnerabilities, including socio-economic disadvantage, uneven access to digital resources, limited digital competences, and linguistic barriers. Within multicultural educational contexts, language represents a crucial dimension of inclusion. Students with migrant backgrounds frequently encounter difficulties related to comprehension and communication in the language of instruction, conditions that may affect learning processes, classroom interaction, and participation (Abacı Yıldız & Işıkcı Başkaya, 2024). Contemporary research also highlights how host language learning is closely connected to students' possibilities for social participation and sense of belonging within school communities (Queirós et al., 2025). Consequently, linguistic mediation becomes a central educational issue, since communication barriers may have significant implications not only for academic achievement, but also for relational inclusion and engagement in school life. In recent years, the rapid development of Artificial Intelligence-based tools has introduced new possibilities for supporting linguistic mediation in educational settings. Technologies such as machine translation systems and generative AI applications increasingly function as communicative supports capable of facilitating language comprehension and interaction among multilingual learners (AlAfnan, 2025). From this perspective, AI-supported linguistic mediation may be understood not only as a resource for accessing educational content, but also as a possible mediator of participation, belonging, and emotional engagement in multicultural classrooms. Starting from these considerations, the present exploratory descriptive survey investigates the potential role of AI-mediated linguistic support within a Provincial Centre for Adult Education (CPIA) in Bari, Italy, focusing on how students with migrant

backgrounds perceive its relationship with communication, participation, and inclusion. The article is structured into four main sections: the theoretical framework, the methodological design, the analysis of the collected data, and the discussion of the main educational implications emerging from the study.

2. Theoretical Framework

2.1 The Digital Divide: An International Perspective

The concept of digital divide has progressively evolved from a narrow interpretation based on access to devices and connectivity towards a broader understanding of digital inequality. In educational contexts, this shift is particularly relevant, as the availability of technological resources does not automatically ensure meaningful participation in learning activities. Digital inequality also includes variations in the quality of access, the enhancement of digital skills, the ability to use technologies for educational purposes, and the opportunities students have to participate in digitally mediated environments (Macevičiūtė & Wilson, 2018; Gottschalk & Weise, 2023). From an international perspective, digital inequality in education requires attention not only to material access, but also to the social and pedagogical conditions that enable students to use digital tools effectively. Gottschalk and Weise (2023) emphasize that digital inclusion depends on multiple factors, including infrastructure, skills, accessible learning environments, and institutional support. In this sense, the digital divide can be understood as a layered phenomenon. First-level inequalities concern access to devices and internet connection; second-level inequalities refer to students' digital skills, confidence, and capacity to engage in meaningful educational practices through technology; while third-level inequalities concern the unequal educational, social, and participatory benefits that students can derive from digital use (Macevičiūtė & Wilson, 2018). These dimensions are particularly significant for students with migrant and refugee backgrounds, who often experience overlapping forms of vulnerability. Socio-economic disadvantages, linguistic barriers, limited familiarity with institutional systems, and uneven access to educational resources may reduce their opportunities to participate fully in school life. Akinlar et al. (2023) argue that the digital divide in migrant education should be interpreted through a critical and inclusive educational lens, since technological inequalities are closely connected to broader structural forms of exclusion. Similarly, Potocky (2021)

highlights the role of digital skills in supporting integration processes, showing how digital competences may influence access to information, communication, education, and social participation among refugee and migrant populations. The experience of online schooling has further revealed the impact of digital inequality on migrant students' educational inclusion. Horsley et al. (2025) show that digital learning environments may offer new opportunities for flexibility and access but can also reinforce exclusion when students lack adequate devices, connectivity, digital competences, or institutional support. In these cases, digital education risks becoming another layer of disadvantage rather than a tool for inclusion. Evidence from the Italian context confirms the educational consequences of these inequalities. Buonomo et al. (2026), focusing on Grade 10 students in Campania (Italy), show that students with migratory backgrounds, particularly first-generation students, experience significant disparities in access to personal computers and internet connection at home. Their findings indicate that these material disadvantages are associated with lower educational performance, especially in relation to Italian language proficiency. This suggests that digital inequality cannot be separated from linguistic and educational inequality, particularly for students who already face barriers in the language of schooling. Therefore, addressing the digital divide in education requires moving beyond the mere provision of technological devices. It involves promoting digital competences, ensuring equitable access to meaningful learning opportunities, and recognizing the specific vulnerabilities of students with migrant backgrounds. Within this framework, digital inclusion becomes a necessary condition for educational participation, but not a sufficient one: it must be accompanied by pedagogical strategies capable of responding to linguistic, cultural, and relational barriers.

2.2 Artificial Intelligence and Linguistic Mediation in Multicultural Educational Contexts

In multicultural educational contexts, linguistic mediation represents a crucial condition for ensuring access to learning, communication, and classroom participation. Over the past few years, Artificial Intelligence has introduced new possibilities in this field, particularly through machine translation systems, multilingual applications, and generative AI tools capable of supporting language comprehension and production (Athanassopoulos et al., 2023; AlAfnan, 2025). These technologies can function as linguistic bridges,

facilitating interaction between learners, teachers, and educational content across different languages (AlAfnan, 2025). In this perspective, AI-based tools may support students with migrant backgrounds by reducing immediate barriers to comprehension and by making school materials more accessible. The educational potential of AI in language learning is particularly relevant for allophone learners, who often face difficulties in understanding the language of instruction and participating in classroom activities. Calenda (2025) highlights how AI may offer new opportunities for learners with different linguistic backgrounds, especially when used to support personalized language pathways and access to educational content. Similarly, Athanassopoulos et al. (2023) show that ChatGPT can be used as a learning tool in multilingual and multicultural classrooms, particularly to support foreign language writing and scaffold students' linguistic production. These applications suggest that generative AI may not only provide translation, but also assist learners in reformulating, simplifying, and producing texts in the target language. However, the use of AI for linguistic mediation cannot be understood as an automatic solution to language-related inequalities. While machine translation and generative AI can facilitate communication, they also present significant limitations. Shahmerdanova (2025) emphasizes that AI-based translation systems may struggle with contextual meanings, cultural references, pragmatic nuances, and linguistic variation. These limitations are especially relevant in educational settings, where misunderstanding may affect not only comprehension, but also interaction and participation (Abacı Yıldız & Işıkcı Başkaya, 2024). Moreover, excessive dependence on automated translation may reduce opportunities for active language learning and may reinforce dependency on technological solutions (Shahmerdanova, 2025; Grassini, 2023). For these reasons, the pedagogical role of teachers and educational institutions remains central. AI tools need to be integrated within teaching practices, guided by critical awareness, ethical responsibility, and inclusive design. Grassini (2023) underlines that AI and ChatGPT offer significant opportunities for education, but also raise concerns related to reliability, equity, transparency, and the changing role of educators. Similarly, Singh and Thakur (2024) stress the importance of addressing ethical challenges when implementing AI in educational contexts, particularly in relation to fairness, bias, and responsible use. Within multicultural classrooms, AI-supported linguistic mediation should therefore be understood as a pedagogically

mediated resource rather than as a substitute for human interaction. As argued by Dilillo, Caiazzo, and Agrati (2026), Artificial Intelligence can contribute to inclusion when it is used to support communication, comprehension, and participation, but its effectiveness depends on the educational framework in which it is embedded. In this sense, AI may become a meaningful tool for linguistic mediation only when combined with teacher guidance, critical digital competence, and attention to students' linguistic and cultural diversity.

2.3 The Role of AI in the Educational and Socio-Emotional Support of Students with Migrant Backgrounds

Beyond its function as linguistic support, Artificial Intelligence may also influence students' educational experience by fostering engagement, classroom involvement, and perceived inclusion. Recent studies highlight that AI-based tools can enhance student engagement when they are integrated into learning environments through personalized and adaptive approaches (Farhat et al., 2025; bin Salem, 2024). In this sense, AI may support not only access to content, but also students' ability to interact more actively with peers, teachers, and learning activities, especially when linguistic or cultural barriers are present. For students with migrant backgrounds, the reduction of linguistic barriers may also affect the way they perceive their own communicative competence within the classroom. AlAfnan (2025) emphasizes the role of AI as a bridge between languages, suggesting that language technologies can facilitate communication and improve linguistic accessibility. This may contribute to strengthening students' communicative confidence, understood as the perceived ability to understand, express oneself, and take part in classroom interactions (AlAfnan, 2025; Potocky, 2021). Drawing on this perspective, this link between linguistic accessibility and communicative confidence is particularly relevant in multicultural classrooms, where language barriers may limit not only the understanding of educational content, but also students' willingness to engage in social and academic exchanges. When AI-based tools help learners decode, reformulate, or translate information, they may create more accessible conditions for interaction, allowing students to perceive themselves as more capable of contributing to classroom communication. In this sense, the educational value of AI does not lie only in its capacity to provide linguistic support, but also in its potential to affect the relational conditions through which learning takes place (AlAfnan, 2025;

Potocky, 2021). For migrant learners, these processes are closely connected to the possibility of experiencing the classroom as a space of interaction rather than as a context of linguistic distance. When students can be understood, communication may become a condition for more active engagement with peers and teachers. From this standpoint, AI-based tools may acquire educational relevance not simply because they provide technical assistance, but because they can support the communicative conditions through which students take part in shared classroom practices. In this regard, the perceived emotional support associated with AI should be understood less as a direct psychological effect and more as an indirect outcome of improved communicative access, greater autonomy, and increased opportunities for interaction (AlAfnan, 2025; Pagliara et al., 2024). Nevertheless, this potential requires critical attention. Long et al. (2026) show that the impact of AI on student engagement is mediated by teaching methods, suggesting that the educational effects of AI depend on how these tools are embedded within instructional practices. In line with this view, Pagliara et al. (2024) argue that inclusive AI requires accessible design, ethical awareness, and pedagogical intentionality. Therefore, in multicultural educational contexts, the socio-emotional value of AI depends on its capacity to support meaningful interactions, rather than isolated individual use. Its inclusive potential emerges when linguistic accessibility is connected to shared classroom practices, peer communication, and opportunities for students to recognize themselves as active participants in the learning community.

3. Methodology

This study adopts an exploratory descriptive survey design, appropriate for obtaining preliminary insights into a phenomenon while providing a structured description of participants' perceptions without seeking to establish causal relationships (Ponto, 2015; Slater & Hasson, 2025). The research context is the CPIA 1 of Bari "Alessandro Leogrande", attended by adult migrant learners with heterogeneous linguistic and cultural backgrounds. Within this context, a questionnaire was administered to investigate participants' perceptions of the digital divide, their use of technologies for studying, and the possible role of artificial intelligence in processes of linguistic and educational inclusion.

Participants were selected through non-probability, purposive and convenience sampling, as they were reached within the specific context under investigation (Etikan, Musa, & Alkassim, 2016). The sample consists of 17 respondents. This sample size does not allow statistical generalizations to the reference population; however, it is consistent with the exploratory nature of the study and with the aim of collecting initial empirical evidence on a circumscribed case.

The questionnaire was purpose-built for this study. The items of the five thematic sections were formulated by the research team on the basis of the three theoretical areas outlined above, so that each construct (linguistic mediation, inclusion, and affective experience) was represented by a dedicated set of statements rated on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree) (Corbetta, 2014; Ponto, 2015; Taherdoost, 2022). The instrument was prepared in Italian, English and French to facilitate the participation of respondents from different linguistic backgrounds. However, for the purposes of the analysis, only the responses collected through the Italian and French versions were considered, as the English version produced no valid responses. All translations were produced and reviewed by the research team to ensure semantic equivalence across versions. An introductory section informed participants of the study's aims and its voluntary nature. The study was conducted in accordance with the ethical principles of the Declaration of Helsinki and the Oviedo Convention, and no personal or sensitive data were collected; data were processed anonymously in compliance with EU Regulation 2016/679 (GDPR) and Legislative Decree No. 196/2003. By completing and submitting the questionnaire, participants gave informed consent to take part and to the processing of their data for research purposes only, freely and revocably. The questionnaire was also reviewed and formally approved by the teacher collaborating with the school principal of the CPIA prior to its administration. The full questionnaire is provided in the Appendix. Data were collected through Google Forms between 22 April 2026 and 15 June 2026.

Overall, 17 valid responses were collected: 16 through the Italian version of the questionnaire and 1 through the French version. The questionnaire included 25 substantive variables, in addition to the completion timestamp. The first

questions were designed to collect descriptive information on the respondents' profile, including gender, age group, language or languages spoken in the family, length of stay in Italy, length of study in Italy, and self-perceived level of knowledge of the Italian language. The questionnaire also included one multiple-response question on the digital tools available at home and one question on the frequency of technology use for studying.

The second part of the questionnaire consisted of 17 items on a numerical scale from 1 to 5, aimed at detecting respondents' perceptions of the digital divide, the use of artificial intelligence in studying, the linguistic support provided by AI tools, and the possible contribution of AI in terms of inclusion, participation and collaboration among students with different linguistic and cultural backgrounds.

3.1 Data preparation and analysis

Before the analysis, the responses collected through the two language versions used, Italian and French, were compared to verify their structural correspondence. Since the two instruments presented the same order of items and equivalent questions, the 16 responses from the Italian version and the single response from the French version were integrated into one dataset.

The categories of the French-language response were harmonized with those used in the Italian version to make comparable the variables relating to the respondents' profile, length of stay in Italy, length of study in Italy, self-perceived level of Italian, and frequency of technology use. The question concerning digital tools available at home was treated as a multiple-response question, recording each option as the presence or absence of the specific device or service.

Given the limited sample size, the analysis was conducted using descriptive statistics, consistently with the exploratory nature of the questionnaire-based survey (Ponto, 2015). For categorical variables, absolute frequencies and percentages were calculated. For the items on a 1-to-5 scale, response distributions, median, mode and, for descriptive purposes, mean values were considered, considering the ordinal nature of the data obtained through Likert-type scales (Sullivan & Artino, 2013). To facilitate the interpretation of the

results, response options 4 and 5 were also considered as “high responses”, interpreted as indicators of stronger agreement or a higher perceived usefulness in relation to the proposed statement. Acknowledging the constraints of the sample size, percentages were used exclusively to support the reading of absolute frequencies and not as a basis for statistical generalization.

For the presentation of the results, the items were organized into thematic areas consistent with the objectives of the study: perception of the digital divide, use of AI in studying, linguistic support, educational inclusion, collaboration and sense of belonging. This grouping has an exclusively descriptive and interpretative function and does not claim any psychometric validation. Percentages were calculated on the number of valid responses for each item; in the case of the single item with one missing value, the analysis was conducted using the actual number of available responses.

4. Results

4.1 Respondents’ profile

The analyzed sample consists of 17 respondents. In terms of gender, 10 participants identified as male and 7 as female. The most represented age group was 25–34 years, indicated by 9 of 17 respondents (52.9%). Regarding the length of stay in Italy, most respondents reported having been in the country for between 1 and 3 years: 11 of 17 respondents (64.7%). Regarding their educational pathway, 12 of 17 respondents reported having studied in Italy for between 6 months and 1 year, while 5 indicated a period between 1 and 3 years. The self-perceived level of knowledge of the Italian language appears heterogeneous. Six respondents reported a good level, three a very good level, four a sufficient level, and four stated that they had difficulties. This finding suggests the presence of differentiated linguistic competences within the sample, an element that is relevant to the use of digital technologies and artificial intelligence as possible supports for comprehension and participation in educational settings.

4.2 Access to digital tools

Regarding access to digital tools, the most widespread device was a personal smartphone, reported by 16 of 17 respondents. Access to a computer or laptop was less frequent, as shown in table 1, reported by 3 respondents, as was the availability of a stable Internet connection, also reported by 3 respondents. Access to a tablet was reported by 2 respondents.

Table 1: Digital tools available at home

Digital Tool Available	Respondents	Percentage
Personal smartphone	16	94.1%
Computer/Laptop	3	17.6%
Stable internet connection	3	17.6%
Tablet	2	11.8%

Note. N = 17. Multiple-response question; percentages do not add up to 100%.

The data show a form of digital access mainly centred on smartphone use. However, the almost widespread availability of a mobile device does not necessarily correspond to full access to the tools most functional for studying, especially considering the limited availability of computers and stable Internet connections.

4.3 Frequency of technology use for studying

Regarding the frequency of technology use for studying, 9 respondents reported using them every day, 3 several times a week, 4 once a week, and 1 almost never (Table 2).

Table 2: Frequency of technology use for studying

Frequency of Use	Respondents	Percentage
Every day	9	52.9%
Several times a week	3	17.6%
Once a week	4	23.5%
Almost never	1	5.9%

The data show that technology use is part of the study routine of most participants. However, this frequency of use should be interpreted alongside the material conditions of access: daily or weekly use of technologies does not necessarily imply the availability of adequate devices or a stable Internet connection.

4.4 Perceptions of the digital divide and AI

The 1-to-5 scale items related to artificial intelligence were analyzed by considering values 4 and 5 as high responses. Table 3 reports the most significant items in relation to language support, comprehension, communication and inclusion.

The analysis of the items reveals some main trends. The highest value concerns the usefulness of AI for understanding texts in a language that is not well known, with a mean score of 4.06 and 13 high responses out of 17. Support in understanding difficult words and subject-specific explanations also shows a positive orientation, with 11 high responses out of 16. Similarly, several items related to inclusion, study confidence, reduction of discomfort and relationships among students collected 11 high responses out of 17.

Table 3: Perception of AI as a support for studying and inclusion

Item	High Responses (4-5)	Percentage
Understanding texts in a language they are not very familiar with	13/17	76.5%
Understanding difficult words/explanations	11/16	68.8%
Communication among students who speak different languages	11/17	64.7%
Reducing language barriers	11/17	64.7%
Feeling more confident in their studies	11/17	64.7%
Feeling more included in the class	11/17	64.7%
Improving relationships among students from different backgrounds	11/17	64.7%
Understanding complex topics	9/17	52.9%

Note. Values 4 and 5 on the 1–5 scale are considered high responses. For one item, the number of valid responses is 16 due to one missing value.

The responses show a generally positive perception of artificial intelligence as a support for studying, especially at the linguistic level. The item with the highest value concerns the possibility of understanding texts in a language that is not well known, with 13 high responses out of 17. Aspects related to understanding difficult words, communication among students with different languages, the reduction of linguistic difficulties and the sense of inclusion also received 11 high responses. Conversely, the perception of the digital divide as a general school-related problem appears less marked, as only 4 respondents out of 17 assigned high values to the item concerning differences in access to technologies among students.

Overall, the data suggest that, within the analysed sample, AI is perceived mainly as a tool for linguistic mediation, support for comprehension and facilitation of participation. In the analyzed sample, the digital divide does not appear to be strongly perceived as a general school-related problem, whereas the potential of AI as a linguistic, communicative and inclusive support seems to be more clearly recognized.

4.5 Main emerging evidence

The collected data suggest an important distinction between formal access to technologies and the actual availability of tools suitable for studying. Almost all respondents reported having access to a personal smartphone, while access to computers, laptops and stable Internet connections was much less widespread. This indicates that digital access cannot be interpreted simply as the possession of a device but must also be assessed in relation to the quality and stability of the tools available. The responses concerning artificial intelligence show a generally favourable orientation, especially regarding language support. The items with the highest values concern the possibility of understanding texts in unfamiliar languages, receiving help in understanding difficult words and facilitating communication among students with different languages.

5. Discussion

The findings of this exploratory survey reveal how adult migrant learners enrolled at the CPIA 1 of Bari perceive digital technologies and artificial intelligence tools in their educational experience. While generalizations are not warranted given the limited and non-probabilistic nature of the sample, the data provide meaningful preliminary insights into a largely underexplored intersection between digital inclusion, linguistic mediation, and the affective dimensions of learning in multicultural adult education settings.

The most consistent pattern to emerge from the data concerns participants' perception of AI as a resource for linguistic support. Items related to comprehending texts in an insufficiently mastered language, understanding difficult words and disciplinary explanations, and facilitating communication among students with different linguistic backgrounds all attracted notably high levels of agreement; the highest-rated item, namely "AI supporting comprehension of texts in an unknown language", received high responses (values 4-5) from 13 out of 17 respondents. Crucially, the data suggest that this perceived utility extends beyond cognitive and linguistic functions. Several items addressing emotional dimensions, such as feeling more secure in one's studies, experiencing reduced discomfort when not understanding classroom content, and feeling more included in the class group, similarly attracted substantial agreement. This convergence between linguistic and affective perceptions may be read as a preliminary indication that, in the participants' view, the perceived usefulness of AI is not confined to comprehension but also extends to emotional dimensions of the school experience. We tentatively propose the notion of affective mediation as an interpretative hypothesis to describe this pattern, not as a demonstrated effect, but as a conceptual lens for future research. By contrast, perceptions of the digital divide as a structural school-level problem were considerably less pronounced. Only 4 of 17 respondents attributed high scores to items concerning inequalities in technology access or the impact of limited digital resources on academic outcomes. The near-universal smartphone ownership, reported by 16 out of 17 participants, may attenuate the subjective perception of digital exclusion, even where access to computers, laptops, or stable internet connections remains limited. This distinction between device possession and meaningful digital

access points to the need to evaluate digital inclusion beyond simple ownership metrics and represents an analytically relevant contribution of this study.

Regarding the strengths of this study, several methodological features deserve recognition: the questionnaire was administered in Italian and French, which lowered participation barriers and respected the linguistic plurality of the target population, while the focus on adult migrants attending a CPIA addresses an underexplored group in Italian educational research. The explicit connection between digital divide, AI, and the affective dimensions of schooling constitutes an original contribution to the field. Limitations must nonetheless be acknowledged. The sample is small (N=17) and relies on convenience and purposive sampling, which limits the possibility of generalizing results to the broader reference population (Etikan, Musa, & Alkassim, 2016). The single institutional context restricts transferability, and all data are self-reported perceptions rather than objectively measured competencies. The near absence of non-Italian responses, with only one valid French questionnaire returned and none in English, further limits cross-linguistic comparisons. As van de Schoot and Miočević (2020) note, small sample sizes are frequent in applied research involving hard-to-reach populations and do not invalidate exploratory findings. These constraints do not undermine internal validity but should be carefully considered in the broader scholarly context.

6. Conclusions and Future Directions

This study set out to explore how adult migrant learners enrolled at the CPIA 1 of Bari perceive artificial intelligence tools in relation to linguistic mediation, educational inclusion, and affective well-being. Despite the inherently exploratory and small-scale nature of the inquiry, the findings converge on a substantively coherent picture: participants tend to perceive AI not merely as a functional aid for comprehension, but as a potential resource for reducing the sense of discomfort and exclusion that can accompany learning in a non-native language. This dual dimension, at once linguistic and affective, represents the most promising line of interpretation emerging from the study and invites further theoretical and empirical elaboration. The exploratory value of this work lies precisely in its situated character. By focusing on a specific, underrepresented population in a real institutional context, the study generates first-order empirical evidence on a phenomenon that remains largely

unaddressed in the Italian literature on adult migrant education. The findings are not intended to be generalized, but to serve as a foundation for more systematic investigations involving larger and more diverse samples. Future research could extend this line of inquiry in several directions. Longitudinal designs would allow researchers to observe whether perceived utility translates into sustained engagement with AI tools over time. Comparative studies across different CPIA contexts or European adult education settings could illuminate how institutional, linguistic, and cultural factors shape learners' orientations toward AI. Additionally, integrating qualitative methods, such as interviews or focus groups, would allow for a richer understanding of the mechanisms underlying the affective dimension identified here. Finally, involving teachers and educators as co-participants could shed light on the conditions under which AI tools are most effectively integrated into inclusive, multilingual pedagogical practices.

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Appendix

https://forms.gle/gMugjbaCzbPDykeQ9 (ITA version)

https://forms.gle/LarNgnqVqWjCk3S79 (ENG version)

https://forms.gle/Ad5e6Z7Z7sD5ht6Y8 (FRA version)