

THEATRICAL PRACTICES TO PROMOTE RELATIONSHIPS IN A DIGITAL SOCIETY: NEW PERSPECTIVES IN EDUCATION

LE PRATICHE TEATRALI PER PROMUOVERE LA RELAZIONE IN UNA SOCIETÀ DIGITALE: NUOVE PROSPETTIVE IN EDUCAZIONE



Valeria Vadala
Pegaso University - Italy
valeria.vadala@unipegaso.it



Ettore Melchionna
Suor Orsola Benincasa University - Italy
ettore.melchionna@studenti.unisob.na.it



Nadia Carlomagno
Suor Orsola Benincasa University - Italy
nadia.carlomagno@unisob.na.it



Double Blind Peer Review

Citation

Vadala, V., Melchionna, E., & Carlomagno, N. (2025). Theatrical practices to promote relationships in a digital society: new perspectives in education. *Giornale italiano di educazione alla salute, sport e didattica inclusiva*, 9(Suppl.1).

Doi:

https://doi.org/10.32043/gsd.v9i2_Sup.1545

Copyright notice:

© 2023 this is an open access, peer-reviewed article published by Open Journal System and distributed under the terms of the Creative Commons Attribution 4.0 International, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

gsdjournal.it

ISSN: 2532-3296

ISBN: 978-88-6022-515-3

ABSTRACT

AI in education enables personalized learning paths but cannot replicate key aspects of the human experience. Pedagogical research highlights the importance of interaction and emotional engagement in the learning process. Theatre, as an educational tool, draws on the Embodied Mind theory to enhance the bodily and relational dimensions of learning. This study analyzes the impact of theatrical practices in teaching, fostering creative and artistic-expressive skills, emotional regulation, and relational competencies.

L'IA in ambito educativo consente percorsi personalizzati, ma non replica aspetti chiave dell'esperienza umana. La pedagogia evidenzia l'importanza dell'interazione e del coinvolgimento emotivo nell'apprendimento. Il teatro, come strumento educativo, avvalendosi della teoria dell'Embodied Mind, valorizza la dimensione corporea e relazionale. Lo studio analizza l'impatto delle pratiche teatrali nella didattica, favorendo abilità creative e artistico-espressive, gestione emotiva e competenze relazionali.

KEYWORDS

Artificial intelligence, Empathic relationship, Theatrical practices, Education
Intelligenza artificiale, Relazione empatica, Pratiche teatrali, Educazione

Received 22/06/2025

Accepted 24/07/2025

Published 30/07/2025

Introduction

In the current social context, characterized by the pervasiveness of digital technologies and the rapid development of artificial intelligence, educational and cognitive processes are undergoing a profound transformation.

The widespread use of digital devices, hyperconnectivity, and algorithmic mediation is shaping a new learning ecosystem, in which traditional modes of knowledge and interpersonal relationships are being redefined through virtual interfaces.

On the one hand, this scenario facilitates greater access to information and a potential democratization of knowledge (Selwyn N., 2021); on the other hand, it carries the risk of progressively distancing the educational experience from its sensory, emotional, and embodied dimensions (Friesen N., 2017).

The digitalization of learning has led to a reconfiguration of relational dynamics, reducing the role of bodily presence (Sibilio, 2011) and promoting increasingly virtual and disembodied forms of interaction (Turkle S., 2011). This phenomenon can be linked to the concept of digitized cognition—cognitive processes mediated by technologies that tend to exclude the direct involvement of the body (Hayles N.K., 2012).

In light of these transformations, it becomes essential to reflect on the foundations of contemporary education and on the need to rethink pedagogical approaches that can preserve an authentic relationship with knowledge and with others (Biesta G.J., 2015).

Within this framework lies the pedagogical responsibility to consider the balance between the bodily dimension (Sibilio, 2011) and new technologies. The aim is to prevent a progressive alienation of the human experience in learning processes and to recognize embodied experience as essential for a genuine and profound understanding of knowledge—one that supports the enhancement of expressive and creative abilities, the development of artistic-expressive skills, and the promotion of emotional and relational competencies.

1. Theoretical Framework

In the current context, marked by rapid and widespread technological transformation, the educational system is called upon to address profound epistemological, anthropological, and pedagogical changes (Gallese et al., 2025). The advent of artificial intelligence, global hyperconnectivity, and the widespread use of mobile devices are shaping a new learning ecosystem that substantially alters

the ways individuals acquire knowledge, communicate, and build relationships and meaning (Panciroli & Rivoltella, 2023). Immediate and continuous access to information, mediated by intelligent digital interfaces, offers more dynamic, flexible, and personalized learning opportunities (Selwyn, 2021; Baker, 2021). However, it also raises important concerns regarding the risk of a progressive disembodiment of the human educational experience (Fogliata & Mazzella, 2024). Education in the era of artificial intelligence demands a profound rethinking of educational paradigms aimed at preserving the relational, bodily (Sibilio, 2011), and emotional dimensions of learning. Artificial intelligence should not be seen as a threat (Gallese et al., 2025), but rather as a valuable pedagogical ally capable of enhancing personalized teaching, feedback management, adaptive learning, and the promotion of motivation and curiosity (Limo et al., 2023). However, this integration must be guided by a strong ethical and critical framework designed to prevent cognitive passivity and technological dependency. The goal must be to educate digitally aware, autonomous, and reflective individuals who can integrate technology into their educational journey without abandoning an active, human, and responsible construction of knowledge.

In this scenario, theatre—drawing on the theory of Embodied Cognition (Maturana & Varela, 1991), which recognizes the central role of the body (Sibilio, 2011) in cognitive, emotional, and relational processes—emerges as an extraordinarily effective pedagogical tool. It enables the exploration of both cognitive and emotional dimensions of the individual in learning processes (Carlomagno, 2020). The theatrical experience, which embraces non-linear languages (Carlomagno, 2023), stimulates body awareness, verbal and non-verbal expressiveness, as well as emotional regulation in protected relational contexts (Boal, 1974). Theatrical practice makes it possible to work on identity aspects, facilitating self-knowledge and understanding of others through role-playing and the construction of shared narratives (Schechner, 2017; Carlomagno et al., 2025). Theatre practices help strengthen expressive self-efficacy and confidence in one's communicative abilities (Carlomagno, 2020)—fundamental elements for navigating the complexity of contemporary social contexts.

1.1 Relational education in the digital ecosystem

The profound transformation of individuals' relational, cognitive, and experiential modes—closely tied to the pervasiveness of digital technologies—is described by Floridi as the infosphere: a hybrid environment in which traditional distinctions between online and offline tend to dissolve, generating an interconnected, fluid,

and continuous reality (Floridi, 2015). This transformation brings about a significant anthropological shift (McLuhan, 2023), in which individuals no longer simply consume digital content but live permanently within an informational ecosystem that shapes perceptions, relationships, and cognitive processes (Floridi, 2015).

The theory of onlife (Floridi, 2015) provides a key interpretative framework, suggesting that contemporary life unfolds in a context where the separation between physical and digital realities has been surpassed. Onlife represents an ontological shift that affects the very structure of experience and identity. In this new ecosystem, individuals are constantly connected, and relationships are constructed through digital devices and platforms. This gives rise to the need to rethink the ethics of responsibility and relationships, taking into account the vulnerability of all agents—human and artificial—that coexist within the infosphere (Floridi, 2015).

Within this framework, it is necessary to reconsider the role of digital devices, particularly the central role that the smartphone now occupies in contemporary society. It is no longer merely a tool, but a cognitive extension of the self, capable of transforming perceptions of the world, identity, and relationships. According to philosopher Galimberti (2022), the smartphone becomes a powerful agent of social and psychological change, altering how we perceive the world, our relationships, and even ourselves. It is no longer just a technological device but a true instrument of socialization. To deprive an adolescent of a smartphone effectively excludes them from peer interactions and access to the world (Galimberti, 2024), as relationships today largely take place through social media.

This device, particularly in the adolescent context, influences the reorganization of relational experience, impacting identity formation and contributing to increased emotional and psychological vulnerability (Haidt, 2024). Digital hyperconnectivity—now a structural condition of daily experience—shapes the ways in which people communicate, learn, and interact socially (Sibilio, 2020). In this environment, we see the emergence of a touch society, where the symbolic gesture of “touching the screen” increasingly replaces real physical contact.

This shift toward virtuality promotes mediated, asynchronous, and rapid forms of communication, profoundly altering the nature of interpersonal relationships (Turkle, 2011; Baym, 2015). Numerous studies highlight how intensive use of digital devices is correlated with a weakening of empathic abilities. Digitally mediated interaction, often oriented toward self-presentation and control (Han, 2012), tends to avoid the experience of real otherness, unpredictability, and direct confrontation.

Yet authentic educational experience is grounded in the presence of the other in their physicality, complexity, and capacity to evoke empathy (Gallese & Caruana, 2016; Rosa, 2019). On the one hand, permanent interconnection opens up new possibilities for accessing knowledge and interaction (Sibilio, 2020); on the other, it poses risks of disembodiment and a weakening of deep, meaningful relationships. Digital communication—often marked by immediacy and transparency (Han, 2012)—tends to lose the emotional depth inherent in face-to-face encounters. In this context, the body risks being marginalized, even though it remains the foundational basis of educational relationships and the construction of meaning (Gallese & Morelli, 2024).

1.2 The role of theatre in a new relational education

In the face of the profound transformations imposed by contemporary society, it becomes essential to recover and enhance pedagogical practices that reintegrate the bodily (Sibilio, 2011), emotional, and relational dimensions into the educational experience. Authentic and meaningful learning (Ausubel, 2004) requires pathways that engage the whole human being (Matteucci, 2019), restoring centrality to the body as a privileged site of knowledge and to relationships as an essential space for the co-construction of understanding. Learning cannot be conceived as a purely mental activity; rather, it requires a synergistic integration of mind, body, and environment (Frauenfelder, 2018).

Corporeality is an indispensable component in the construction of knowledge, in interpersonal communication, and in the development of socio-emotional skills (Varela, Thompson, & Rosch, 1991). Theatre, as an embodied expressive practice, offers spaces for bodily, emotional, and relational exploration that support the holistic development of the individual (Barba, 1993; Brook, 2005).

In line with this perspective, meaningful learning (Ausubel, 2004), based on educational relationships and empathic interaction, is a necessary condition for the construction of authentic and lasting knowledge. Educational experiences that stimulate bodily engagement, such as theatrical practice, foster deeper and more enduring learning processes, capable of integrating knowledge with emotional and relational experience (Noë, 2004; Carlomagno, 2022).

Theatre educates in presence and active listening—skills that are fundamental for building authentic relationships and effective interpersonal communication (Goleman, 2005). Theatrical practices contribute to inclusive and participatory learning, which begins with bodily experience and aims to recognize and value each individual's uniqueness.

In this view, the body is not merely an expressive vehicle but a site of educational interaction and meaning-making. Didactic interaction (Sibilio, 2020) is grounded in communicative dynamics that involve the human being as a whole, moving beyond the dichotomy between mind and body and acknowledging the performative dimension of teaching (Carlomagno, 2020).

Thus, through its experiential nature, theatre enables students to actively inhabit knowledge (Martinelli, 2015), promoting holistic personal development and contributing to the creation of inclusive and transformative educational environments (Mezirow, 2003) in which human relationships remain central (Gallese & Morelli, 2024).

2. Methods

The research is based on the methodological approach of Arts-Based Research (ABR), an epistemological method that employs artistic processes not only as subjects of study but also as tools for the production and communication of knowledge. Scientific literature has extensively documented the relationship between theatrical practices and education (Ackroyd, 2006). Arts-Based Learning (ABL) (Brenner, M.Y., 2010) represents a pedagogical strategy that fosters student engagement on cognitive, socio-relational, and aesthetic-affective levels, through the use of the arts (visual, musical, and performing) as privileged tools for expressing imagination, creativity, and innovation, thereby promoting transformative learning processes (Mezirow, 2003).

In light of these theoretical premises, the ABR approach was integrated with the principles of practice-based research (Barrett & Bolt, 2010), which maintains that practical activity is not merely a means of data collection, but a form of inquiry and knowledge production in itself. From this perspective, practical research is both method and outcome: it generates knowledge through doing, critical reflection, and creative elaboration.

The study adopts a mixed methods research design, integrating qualitative and quantitative tools in a complementary manner. The qualitative analysis focused on examining the conversational dynamics that emerged among participants—both peer-to-peer and with artificial intelligence—in order to explore the relational and expressive transformations triggered by the experience. In parallel, the quantitative component involved the administration of a final closed-ended questionnaire, aimed at detecting participants' perceptions of the skills acquired at the end of the training experience.

3. Research Design

This research, developed using a mixed qualitative-quantitative methodological design, aims to investigate the role and value of human relationships within a socio-cultural context profoundly transformed by the pervasiveness of digital technologies and the progressive integration of artificial intelligence into daily life. The objective was to explore students' perception in recognizing, managing, and communicating their emotions through interaction with a classmate, and subsequently through interaction with a digital application, specifically ChatGPT. Students participated in a university workshop which, by employing theatrical practices, enabled them to recognize and explore their own emotions—particularly the positive emotion of joy and the negative emotion of sadness. Theatrical practices represented a central educational device for students to activate emotional awareness and relational development pathways. Through acting training exercises conducted during the workshop, characterized by bodily exploration and emotional storytelling, students were guided over six weeks to explore their inner world, learning to recognize, name, and differentiate the emotions they experienced.

Through theatrical practices, the emotional dimension experienced by the student manifests through the body in action and in encounter with others, moving from the individual's internal experience to sharing and gifting within the group. In this perspective, the bodily dimension becomes a privileged vehicle of expression, narration (Bruner, 1990), and listening, opening spaces for authentic relationships based on reciprocity and empathy.

The sample involved in the research consists of 70 students—69 female and 1 male—from the Bachelor's Degree program in Education Sciences at the University of Suor Orsola Benincasa of Naples, aged between 20 and 22, mostly from the Campania region, attending the workshop "Learning Through Play: Techniques for Theater Animation and Communication" during the 2024/2025 academic year. The workshop aims to introduce theatrical practices as tools for integrated education, oriented towards developing communicative, empathetic, and relational skills in future education professionals.

From this viewpoint, theater therefore functions as a pedagogical tool capable of enhancing expressive skills and promoting processes of emotional literacy, which are essential in a society where digital environments often tend to disembodify relationships.

In this educational context, at the conclusion of the workshop, students were invited by the instructor to focus on two fundamental emotions: joy and sadness.

This emotional exploration took place through two different relational modes, each lasting five minutes: a first interaction in person with a classmate, and a second interaction mediated by a digital application based on artificial intelligence, specifically ChatGPT.

The research aims to investigate students' perceptions regarding their ability to recognize, manage, and communicate emotions in these two distinct relational contexts, with the intent to reflect on the potential and limitations of each interaction. Specifically, the research unfolded in five phases:

1.Human interaction – 5 minutes of conversation: Students, paired up, engaged in a guided conversation on the theme of emotions of joy or sadness, initially following a framework provided by the instructor, then developing it independently. The dialogues were recorded and transcribed for qualitative analysis;

2.Interaction with AI – 5 minutes of conversation: Each student replicated the same type of conversation with an artificial intelligence chatbot (ChatGPT), following the same instructions as the previous phase. These interactions were also recorded and later transcribed;

3.Questionnaire comparing interaction with a classmate and with the AI application: At the end of the two interactions, a structured questionnaire was administered to compare students' feelings and perceptions related to the conversation with their classmate versus the AI;

4.Thematic analysis to deepen understanding of relational dynamics activated in the two modes of interaction (with a classmate and with AI): This phase analyzed three student conversations centered on the experience of joy, three student conversations focused on the experience of sadness, and three AI conversations replicating the same conversational relations and emotions (positive or negative) chosen in the human interactions;

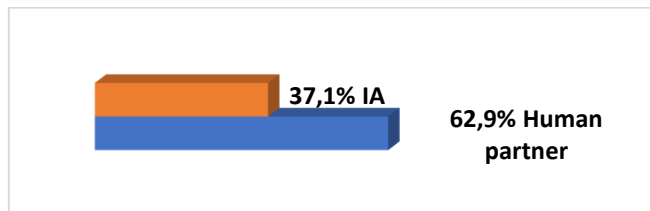
5.Questionnaire administered at the end of the university workshop to analyze the impact of theatrical practices in educational contexts: In the final phase of the workshop, students were asked to complete a questionnaire aimed at evaluating the impact of theatrical practices on managing their own and others' emotions, improving mastery of expressive and creative means, enhancing artistic-expressive abilities, and promoting emotional and relational skills.

4. Results

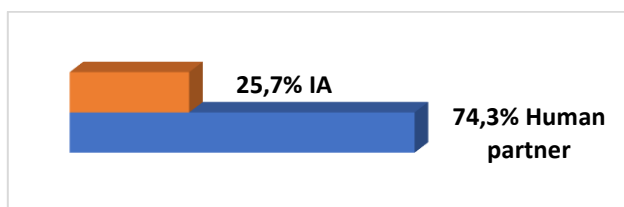
The research is structured around a dual data collection approach, both qualitative and quantitative, with the aim of gaining a comprehensive understanding of students' perceptions in managing the emotions and moods experienced during interaction with a classmate (*phase 1*) and with the artificial intelligence device (*phase 2*).

The qualitative analysis of the results from the questionnaire comparing interaction with the classmate and with the AI application (*phase 3*) highlighted a marked preference for human interaction, particularly concerning the relational and emotional depth of the experience.

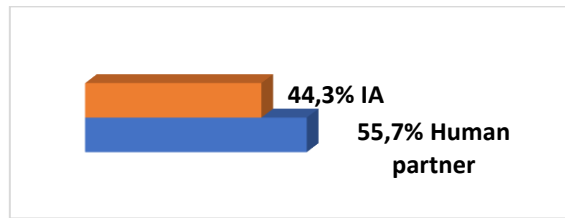
In response to the question, "In which interaction did you feel more understood?" 62.9% of the sample indicated interaction with the human classmate, while 37.1% preferred the interaction with the AI.



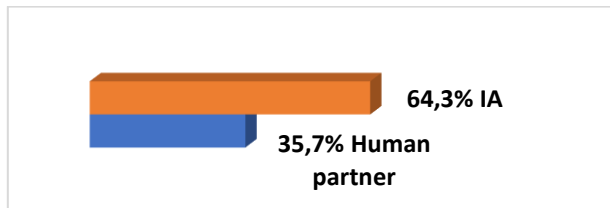
In response to the question, "In which interaction did you feel more emotionally engaged?" 74.3% of the students reported greater engagement during the interaction with their classmate, compared to 25.7% who expressed a preference for the interaction with the artificial intelligence.



Regarding the question, "In which interaction did you manage your emotions better?" 55.7% stated that they managed their emotions better during the human interaction, while 44.3% indicated the conversation with the AI.



Conversely, the question “In which interaction did you feel more at ease?” showed a significant reversal: 64.3% of the students reported feeling more comfortable conversing with the artificial intelligence, compared to 35.7% who indicated the interaction with their classmate.



This last finding suggests a perception of AI as a neutral and non-judgmental interlocutor, capable of offering a communicative space perceived as safe, especially by students who struggle to cope with the complexity inherent in face-to-face communication. The absence of gaze, implicit judgments, and intense emotional feedback appears to help reduce exposure anxiety, while raising significant questions about the quality and depth of relationships in the digital age. The results of phase 4, conducted through a thematic qualitative analysis on a subset of transcriptions previously recorded via a voice recorder, allowed for an understanding of the relational dynamics activated in the two modes of interaction (*phase 1 – phase 2*).

Below (Table 1) are reported conversations about the emotions of joy and sadness conducted with a classmate and with the digital application ChatGPT. Specifically, the capabilities of both the classmate and the AI are highlighted; AI’s limitations are marked in pink, and AI’s suggestions and support proposals are shown in bold.

Positive emotion: JOY

WITH HUMAN PARTNERS

① A.: (for Napoli's championship win) Have you ever felt a similar sensation?

I also had fun on Friday.

② M.: (for the mutual help with university friends) Have you ever felt a similar sensation?

Yes, I often think that without you everything would be much harder. When you're around, even the heaviest things feel manageable. It's like your presence makes everything a bit brighter.

③ A.: (from going on the roller coasters) Yes, roller coasters are definitely my favorite! Have you ever felt a similar sensation?

Yes, it has happened to me many times, especially when I'm with friends and people I care about! I feel a lot of joy in those moments.

WITH ARTIFICIAL INTELLIGENCE

What a lovely question, A. Even though I don't experience emotions like people do, I can understand them very well, especially when you describe them so vividly

That's a beautiful question, M. I don't experience emotions the way you do, I don't have a heart or a past to draw memories from, but I can tell you that I understand the kind of bond you're talking about. I recognize it in the stories, letters, diaries, and conversations people have shared with me.

That's so nice to hear! Roller coasters give that unique adrenaline rush, a mix of fear and pure fun! I don't have a body, so I can't experience it myself... but imagining the wind in your face, the screams, the speed, and the laughter at the end when you get off... yes, I'd say I can understand that feeling pretty well!

Negative emotion: SADNESS

WITH HUMAN PARTNERS

① ML: (from feeling the pressures of everything around me) What do you think I could do? Have you ever felt a similar sensation?

Yes, often even just with university I have moments of sadness and discouragement... but then I remind myself that there's a remedy for everything — and that's what you should do too!

I don't experience emotions, but I've listened to many people who have felt exactly like you.

ML: I need help. How can you support me?

I can support you by telling you that it's completely normal to feel this way and to think you can't get out of it, but know that it's not true, there's a solution for everything, and this tough period will pass. (While we hug) Come on, don't worry!! Stay calm.

I can listen to you without judgment, help you organize your thoughts, offer you comforting words, and a virtual hug, if you'd like.

② M.A.: (over the loss of their little dog) Have you ever felt a similar sensation? I need help. How can you support me?

Yes, when I lost a loved one; let's go for a walk, talk a bit, spend the day together so you can try to think about it less, come here, let me give you a hug.

No, I've never felt a sensation like that. I'm an artificial intelligence, so I don't have personal experiences or emotions like humans. I'm here to provide information and support, but I don't have consciousness or a personal history. However, I'm programmed to be empathetic and help users find comfort and resources to cope with their emotions. I can listen and offer suggestions if you'd like to talk more about Billy and your feelings.

③ I.: (because her kitten is unwell) Have you ever felt a similar sensation? How can you support me?

Yes, it happened to me, not with a pet, but with a loved one... when my grandfather wasn't well. I would take you out somewhere, maybe shopping or for a nice ice cream. Everyone's a bit happier with a good ice cream.

Yes, in a way. Even though I don't have a body or pets of my own, I talk every day with many people who feel strong emotions for their four-legged companions. It's as if they pass me a little piece of their emotion, and I hold it carefully as I listen. I can support you in many ways, Irma, and I'm here just for that.

If you need to:

- talk and vent
- understand how to better face this situation
- get ideas for helping your kitten
- feel less alone
- find reassurance

Table 1

From the qualitative content analysis of the conversations, the emerging themes were grouped into categories.

Conversations about joy:

With partner:	Recurring references to playful and emotional sharing dimensions, including fun, real presence, spontaneous socialization, and shared memories. The interaction is perceived as lively, emotionally rich, and situated in the here and now.
With IA:	Students report the absence of corporeality, authentic emotions, and autobiographical memory in the artificial interlocutor. However, they acknowledge the AI's certain ability for symbolic understanding, simulated empathy, as well as a lasting willingness to listen.

Conversations about sadness:

With partner:	Prevailing categories include embodied empathy, sharing of pain, possibilities for physical comfort (hug, presence), and support in daily life through shared experiences (walking together).
With IA:	The value attributed to emotional neutrality and the absence of judgment emerges clearly. AI is experienced as a reassuring symbolic presence, capable of offering "virtual hugs" and comforting words, while being aware — as it itself states — of its lack of consciousness and personal experience. In conversations with students, AI reveals that it does not have its own history or personal experiences, does not possess consciousness, and has been programmed to be empathetic and assist users. It acknowledges its limitations in "feeling," but not in "recognizing" or "simulating" emotions. AI has the ability to offer suggestions, provide reassurance, and help people feel less alone.

The analysis therefore shows that with AI there is a greater value attributed to emotional neutrality and the absence of judgment, as it is considered a reassuring presence, capable of offering "virtual hugs" and comforting words, despite the awareness of its lack of consciousness and personal experience.

Phase 5 was conducted at the end of the university laboratory experience. In this phase, students were given a final questionnaire to explore their perception of the effectiveness of theatrical practices in promoting personal and professional skills. Below are the results of the quantitative analysis from this phase:

Question 1: How much do you think theater improves mastery of your expressive and creative means?

-66.7% of students stated that theater improved their mastery of expressive and creative means.

Question 2: How much do you think theater enhances your artistic and expressive abilities?

-63.3% reported an enhancement of their artistic-expressive abilities.

Question 3: How much do you think theater helps you better manage the expression of your emotions?

-50% indicated an improvement in the conscious management of emotions.

Question 4: How much do you think theater helps you better manage your relationship with yourself and others?

-56.7% perceived a positive impact on their relationship with themselves and with others.

5. Discussion

The research highlights some fundamental dynamics related to the perception and quality of educational relationships in a contemporary context increasingly mediated by technology, and in particular by artificial intelligence. The empirical evidence collected suggests that, while recognizing certain communicative and functional skills of AI—such as the ability to understand, simulate empathy, and refrain from judgment—students continue to perceive human relationships as irreplaceable in their emotional, bodily, and intersubjective aspects.

The most significant finding is the clear preference for human interaction in terms of emotional engagement and perceived understanding, confirming what is supported by pedagogical and neuroscientific literature, which states that authentic relational experience is based on elements that computational systems cannot replicate, such as embodiment, proxemics, shared emotionality, and mutual recognition (Gallese, 2005; Nussbaum, 2001; Gallese et al., 2025). However, the fact that the majority of students reported feeling more at ease in

interactions with AI deserves careful reflection. This result could be interpreted as a sign of increasing dishabituation to “in-person” relationships, where eye contact and interaction with others activate feelings of exposure, vulnerability, and responsibility. In this sense, AI is experienced as a neutral, predictable, and nonjudgmental interlocutor, making it preferable in terms of psychological comfort, but not necessarily effective from an educational and developmental perspective.

Therefore, in this scenario, a powerful educational tool that guides and promotes human relationships is theater. Through educational practice based on the body, expressiveness, and relationships, theater is called to activate the embodied dimensions of learning, in line with the theory of Embodied Education (Rathunde, 2009), which no AI can replicate: the ability to feel empathy, explore multiple identities, and live the here and now of human contact. As Eugenio Barba states (Barba, 2011), theater is not just representation but embodied experience; in this regard, Augusto Boal defines it as a social laboratory, a dynamic space in which to explore roles, emotions, and relationships in a protected and transformative environment.

These outcomes therefore highlight the crucial role of theatrical training as a pedagogical device to reactivate deep relational dimensions. Theater, understood as an embodied and participatory practice, allows one to experience relationships through presence, active listening, emotional expressiveness, and empathy. It represents not only a teaching tool but also a method of research and transformation, useful for promoting critical awareness and responsibility among students.

Data collected through the final questionnaire show that a significant percentage of students perceived an improvement in managing emotions, in their relationship with themselves and others, as well as in mastery of their expressive and creative means. These skills are central to the training of educators, who are called to play a relational, empathetic, and communicative role in various educational contexts. The body, emotions, and relationships thus become privileged vehicles of learning, in contrast to the homogenizing educational models characteristic of the contemporary era (Han, B.C., 2012). Theater therefore promotes a transformative process capable of impacting personal identity and interpersonal skills (Boal, A., 1994; Schechner, R., 2017).

The perception of theater as a facilitator of relationships with oneself and others fits within the most recent pedagogical reflections emphasizing the need to train empathetic, reflective, and competent individuals to face the challenges of the hyperconnected society (Floridi, F., 2015; Nussbaum, M.C., 2010; Gallese et al.,

2025). The results thus confirm the value of theatrical practices as educational devices that promote relationship and experience, capable of fostering the integrated development of cognitive, emotional, and social skills for sensory and affective interaction with the environment and others. From this perspective, theater represents a concrete response to the disembodiment of human relationships generated by digital hyperconnection, offering spaces for authentic, bodily, and dialogic experience. To educate individuals capable of critically inhabiting the contemporary infosphere (Floridi, F., 2015), it is therefore appropriate to integrate practices in educational pathways that promote physical presence, embodied experience, and the construction of meaningful relationships to meet the challenges of the onlife society, preserving the human dimension of education.

Conclusions

The results emerging from the research confirm the centrality of human relationships in the educational experience, especially in a social and cultural context increasingly mediated by digital technologies and artificial intelligence. Interactions with peers showed greater emotional involvement, a deeper sense of understanding, and a more authentic management of emotions. These findings outline a complex picture that cannot be interpreted through rigid dichotomies that see human and artificial intelligence as distinct and opposed, but require a critical and reflective approach. Preserving the bodily, affective, and empathetic dimension of relationships today becomes an urgent challenge for the human sciences and educational contexts, which must avoid both technophobic rejection and uncritical acceptance of innovation (Gallese et al., 2025). Technology, as Walter Benjamin argues (Gallese et al., 2025), transforms perception but cannot replicate the aura of authentic relationships, which are nourished by presence, contact, and embodied experience.

In this scenario, theater stands out as an educational practice of great relevance: an experiential space founded on corporeality, narration (Bruner, 1990), and empathy. Through theater, students are called to explore the complexity of self and other, to develop relational, expressive, and reflective skills that are hardly replaceable by technological tools. Theater thus becomes a laboratory where education toward authentic relationships takes shape and is realized, promoting an integral training capable of combining emotional intelligence, critical thinking, and digital awareness. To inhabit the complexity of the present without suffering or

rejecting it is the educational task awaiting education professionals. In this horizon, the body and emotions are not marginal elements but essential components to be fully integrated into educational design, especially in the digital era. Only by educating for authentic relationships, through embodied practices such as theater, will it be possible to form citizens capable of inhabiting the contemporary infosphere without losing their humanity.

Author contributions

Valeria Vadalà is the author of the paper.; she wrote the Sect. 1. "Theoretical Framework"; the Sect. 1.1 "Relational education in the digital ecosystem", the Sect. 3 "Research Design", the Sect. 4 "Results" and the Sect. 5 "Discussion"; Ettore Melchionna is the co-author of the paper, he wrote the Sect. 2 "Methods"; Nadia Carlomagno is the co-author of the paper and the scientific coordinator of the project. She wrote the Sect. "Introduction", the Sect. 1.2 "The role of theatre in a new relational education" and the Sect. "Conclusions"

References

- Ackroyd, J. (2006). *Research methodologies for drama education*. Stoke on Trent, UK: Trentham Books
- Ausubel, D. P. (2004). *Educazione e processi cognitivi. Guida psicologica per gli insegnanti* (Vol. 25). FrancoAngeli.
- Baker, R. S., McLaren, B. M., Hutt, S., Richey, J. E., Rowe, E., Almeda, M. V., ... & Andres, J. M. A. (2021, June). *Towards sharing student models across learning systems*. In International conference on artificial intelligence in education (pp. 60-65). Cham: Springer International Publishing.
- Barba, E. (1993). *La Canoa di Carta, Trattato di Antropologia Teatrale*. Bologna: Mulino
- Barba, E., & Savarese, N. (2011). *L'arte segreta dell'attore: Un dizionario di antropologia teatrale*. Milano: Ubulibri.
- Barrett, E., & Bolt, B. (Eds.). (2014). *Practice as research: Approaches to creative arts enquiry*. Bloomsbury Publishing.
- Baym, N. K. (2015). *Personal connections in the digital age*. John Wiley & Sons.

Biesta, G. J. (2015). *Good education in an age of measurement: Ethics, politics, democracy*. Routledge.

Boal, A. (1974). *Theatre of the Oppressed* (New York: Theatre Communications Group, 1979). *The Rainbow of Desire: The Boal Method of Theatre and Therapy*.

Brenner, M. Y. (2010). *Arts-based learning and leadership development: A case study* (Doctoral dissertation). New York: Teachers College, Columbia University.

Brook, P. (2005). *La porta aperta*. Torino: Einaudi.

Bruner, J. (1990). *Acts of meaning: Four lectures on mind and culture* (Vol. 3). Harvard university press.

Carlomagno, N. (2020). *Le potenzialità didattiche delle arti sceniche*. Education sciences and society, (2020/1).

Carlomagno, N. (2022). *Pratiche performative teatrali nella formazione di competenze didattiche. Non cognitive skills, contaminazioni e azioni non lineari*. Nuova Secondaria, 40(10), 375–388. Brescia: La Scuola.

Carlomagno, N. (2023). *I linguaggi non lineari della narrazione e della comunicazione nella scena e nella didattica*. Brescia: Scholé-Morcelliana.

Carlomagno, N., Ricciardi, A., Vadalà V., (2025). *Sentimental education and storytelling: the meeting between the Master in Theatre, Pedagogy and Didactics and the Campania Theatre Festival*. Giornale Italiano di Educazione alla Salute, Sport e Didattica Inclusiva. Edizioni Universitarie Romane – in pubblicazione

Floridi, L. (2015). *The onlife manifesto: Being human in a hyperconnected era* (p. 264). Springer nature.

Fogliata, A., & Mazzella, M. (2024). *Il corpo oltre la tecnologia*. Corpo, Società, Educazione.

Frauenfelder, E. (2018). Perché una relazione tra pedagogia e biologia?. *Research Trends In Humanities Education & Philosophy*.

Friesen, N. (2017). *The textbook and the lecture: Education in the age of new media*. JHU Press.

Galimberti, U. (2022, 6 agosto). *La tirannia dello smartphone*. *La Repubblica*.

Galimberti, U. (2024, aprile 23). *Il cellulare ci rende paranoici: Non è tecnica, è patologia. Il filosofo svela i danni nascosti dello smartphone. Addio socializzazione vera, benvenuta schiavitù e controllo totale*. Orizzonte Scuola.

<https://www.orizzontescuola.it/galimberti-il-cellulare-ci-rende-paranoici-non-e-tecnica-e-patologia-il-filosofo-svela-i-danni-nascosti-dello-smartphone-addio-socializzazione-vera-benvenuta-schiavitù-e-controllo-totale/>

Gallese, V., & Caruana, F. (2016). *Embodied simulation: beyond the expression/experience dualism of emotions*. Trends in cognitive sciences, 20(6), 397-398.

Gallese, V., & Morelli, U. (2024). *Cosa significa essere umani? Corpo, cervello e relazione per vivere nel presente*. Milano: Raffaello Cortina Editore.

Gallese, V., Moriggi, S., Rivoltella, P.C. (2025). *Oltre la tecnofobia. Il digitale dalle neuroscienze all'educazione*. Milano: Raffaello Cortina Editore.

Goleman, D. (2005). *Emotional intelligence: Why it can matter more than IQ*. Bantam.

Haidt, J. (2024). *The anxious generation: How the great rewiring of childhood is causing an epidemic of mental illness*. Penguin.

Han, B.-C. (2012). *La società della trasparenza*. Venezia: Nottetempo.

Hayles, N. K. (2012). *How we think: Digital media and contemporary technogenesis*. University of Chicago Press.

Limo, F. A. F., Tiza, D. R. H., Roque, M. M., Herrera, E. E., Murillo, J. P. M., Huallpa, J. J., ... & Gonzáles, J. L. A. (2023). *Personalized tutoring: ChatGPT as a virtual tutor for personalized learning experiences*. Przestrzeń Społeczna (Social Space), 23(1), 293-312.

Martinelli, M. (2015). *Farsi luogo: Varco al teatro in 101 movimenti*. Modena: Cue Press

Matteucci, G. (2019). *Estetica e natura umana. La mente estesa tra percezione, emozione ed espressione*. Roma: Carocci.

Maturana, H.R., Varela, F.J. (1991). *Autopoiesis and cognition: The realization of the living*. Springer.

McLuhan, M. (2023). *Gli strumenti del comunicare*. Milano: Il saggiatore

Mezirow, J. (2003). *Transformative learning as discourse*. Journal of Transformative Education, 1(1), 58–63. Thousand Oaks, CA: SAGE Publications.

Noë, A. (2004). *Action in perception*. MIT press.

Nussbaum, M. C. (2010). *Not for profit: Why democracy needs the humanities*. Princeton UP.

Panciroli, C., & Rivoltella, P. R. (2023). *Pedagogia algoritmica. Per una riflessione educativa sull'Intelligenza Artificiale* (pp. 1-240). Brescia: Scholé-Morcelliana

Rathunde, K. (2009). *Nature and embodied education*. The Journal of Developmental Processes, 4(1), 70–80. New York: ICDP Publishing.

Rosa, H. (2019). *Resonance: A sociology of our relationship to the world*. John Wiley & Sons.

Schechner, R. (2017). *Performance studies: An introduction*. Routledge.

Selwyn, N. (2021). *Education and technology: Key issues and debates*. Bloomsbury Publishing.

Sibilio, M. (2011). Corporeità didattiche: i significati del corpo e del movimento nella ricerca didattica. In *Il corpo e il movimento nella ricerca didattica. Indirizzi scientifico-disciplinari e chiavi teorico-argomentative* (Vol. 1, pp. 47-69). Napoli: Liguori.

Sibilio, M. (2020). *L'interazione didattica*. Brescia: Scholé-Morcelliana.

Turkle, S. (2011). *Alone Together: Why We Expect More from Technology and Less from Each Other*. New York: Basic Books.

Varela, F. J., Thompson, E., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. Cambridge, MA: MIT Press.