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Circle Singing as affective and embodied methodology: educational responses to postmodern social challenges

Il Circle Singing come metodologia affettiva ed embodied: risposte educative alle sfide sociali della postmodernità

Fuori Call

This article examines Circle Singing as an affective and embodied pedagogical methodology capable of addressing key challenges of postmodern society, including identity fragmentation (Wang, 2021), hyperreality, and social isolation. Drawing on theoretical perspectives from Lyotard (1985), Bauman (2000), Jameson (1991), and Baudrillard (1983), it situates contemporary education within a broader framework characterised by insecurity, performativity, and the erosion of stable forms of knowledge. In a context increasingly shaped by digital technologies and social media practices, education is called upon to promote both critical engagement and embodied, relational forms of learning. The study presents a Circle Singing laboratory conducted at Roma Tre University between October and December 2025, involving 104 university students within a quasi-experimental, mixed-methods design. The intervention combined collective vocal improvisation with English-language activities and digital assessment tools, including Mini-PROMS and SpeechAce. The research aimed to enhance musical perception, phonological awareness, and socio-relational competences. Preliminary quantitative findings indicate improvements in musical and linguistic domains, while qualitative data from focus groups reveal increased group cohesion, the continuation of interpersonal relationships beyond the laboratory setting, and a perceived positive impact on well-being.

Keywords: Circle Singing, embodied learning, affective pedagogy, social Media and education, inclusive education

Il presente contributo propone il Circle Singing come metodologia pedagogica affettiva ed embodied, capace di affrontare alcune delle principali sfide della società postmoderna, tra cui la frammentazione dell'identità (Wang, 2021), l'iperrealtà e l'isolamento sociale. A partire dalle prospettive teoriche di Lyotard (1985), Bauman (2000), Jameson (1991) e Baudrillard (1983), lo studio colloca l'educazione contemporanea all'interno di un quadro più ampio caratterizzato da insicurezza, performatività ed erosione delle forme stabili di conoscenza. In un contesto sempre più plasmato dalle tecnologie digitali e dalle pratiche dei social media, l'educazione è chiamata a promuovere sia un uso critico delle tecnologie sia forme di apprendimento embodied e relazionali. Lo studio presenta un laboratorio di Circle Singing condotto presso l'Università Roma Tre tra ottobre e dicembre 2025, che ha coinvolto 104 studenti universitari all'interno di un disegno quasi-sperimentale mixed-methods. L'intervento ha integrato improvvisazione vocale collettiva, attività in lingua inglese e strumenti di valutazione digitale, tra cui Mini-PROMS e SpeechAce. La ricerca mirava a potenziare la percezione musicale, la consapevolezza fonologica e le competenze affettivo-relazionali. I risultati quantitativi preliminari indicano miglioramenti nelle competenze musicali e linguistiche, mentre i dati qualitativi dei focus group evidenziano un rafforzamento della coesione di gruppo, e un impatto positivo sul benessere.

Parole chiave: Circle Singing, apprendimento embodied, pedagogia affettiva, social media ed educazione, educazione inclusiva

OPEN ACCESS Double blind peer review

How to cite this article: Pantano, G., & Rizzo, A.L. (2026). Circle Singing as Affective and Embodied Methodology: Educational Responses to Postmodern Social Challenges. *Italian Journal of Special Education for Inclusion*, XIV, 1, 353-363. https://doi.org/10.7346/sipes-01-2026-32

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Received: 31/03/2026| **Accepted**: 29/05/2026 | **Published**: 30/06/2026

Italian Journal of Special Education for Inclusion | © Pensa MultiMedia®
ISSN 2282–6041 (on line) | DOI: 10.7346/sipes-01-2026-32

1. Introduction

The contemporary socio-cultural context poses new challenges to educational inquiry, which, alongside the development of disciplinary competences, must also consider students' wellbeing and social engagement. Education is deeply intertwined with an ever-changing society, one that continuously shifts in habits, values, and even idiomatic language from year to year. Moreover, the speed, intensity, and often brutal nature of these transformations, vividly reflected in contemporary social media environments, increasingly confront educators with students who display forms of disenchantment and mistrust toward adults and societal structures (Cunti, Priore, & Bellantonio, 2015). Within this context, education must assume responsibility for designing didactic devices grounded in an educational perspective that does not condemn digital technologies outright but instead equips students with the critical tools necessary to navigate them. At the same time, education should promote methodologies that meaningfully engage students in the real, human world, fostering forms of knowledge grounded in embodiment (Varela et al., 1991) and affectivity. This contribution presents a Circle Singing laboratory conducted at Roma Tre University between October and December 2025 (Pantano & Rizzo, 2025) as a methodology that fosters inclusive and interdisciplinary learning. Circle Singing — a practice of collective vocal improvisation in which participants arrange themselves in a circle and build harmonic and rhythmic structures in real time — directly addresses the challenges outlined above. By requiring full embodied participation (breath control, vocal production, postural awareness) and real-time affective coordination with others, it counteracts the hyperreal disengagement and fragmented selfhood that characterise both social media addiction and maladaptive behaviours in crowd disasters. The connection between these social complexities and Circle Singing lies in the intention to identify pedagogical devices and educational practices that foster inclusive and community-oriented modes of learning, while also supporting the development of both disciplinary and relational competences, as evidenced by the theoretical framework on the relationship between musical training and the brain. Furthermore, this contribution advocates for a constructive use of technology, framing it as a valuable tool in education—particularly within the Circle Singing context, where it supports processes of assessment and self-assessment. Ultimately, the study discusses preliminary results currently under analysis, together with reflections on the qualitative tools employed—particularly focus groups administered with students—to further support the role of embodied practices in higher education.

2. Postmodernity, insecurity, and the fragmented self: educational challenges in the social media era

Postmodern society is characterised by a transitory condition that cuts across all strata of social life and is articulated in what Jean-François Lyotard (1985) defines as the *temporary contract*, symbolising the predominance of short-term, provisional arrangements over more enduring forms of social interaction. This new paradigm permeates every sphere of life: it generates job insecurity; fosters the rise of transient and unstable relationships; delegitimises forms of knowledge that do not align with criteria of efficiency and performance; redefines family structures and contributes to increasing phenomenon of isolation. On a global scale, it leads to geopolitical instability, shifting allegiances, and the erosion of ideological continuity, undermining the foundation of knowledge itself. On the contrary, "performativity"—the evaluation of knowledge and its transmission according to principles of efficiency and utility rather than ethical or humanistic values—emerges as the dominant logic of the postmodern era, reinforcing a process of technical optimisation detached from human ends. In this specific context, society goes through:

> insecurity (of position, entitlements and livelihood), of uncertainty (as to their continuation and future stability) and of unsafety (of one's body, one's self and their extensions: possessions, neighbourhood, community) (Bauman, 2000, p. 161).

Building on these premises, it is particularly valuable for educational inquiry to align perspectives from postmodern studies with the contemporary use of digital technologies and social media. In this regard, Fredric Jameson (1991), conceptualised the notion of the *postmodern sublime* as a key framework for interpreting contemporary culture and late capitalism.

Starting from the assumption that "the sublime is that in comparison with which everything else is small" (Kant, 1951, §25), the postmodern sublime emerges when the subject is simultaneously attracted and overwhelmed, appealed to and flawed by the incomprehensible magnitude of the globalised, machine-driven, digital, post-human, society in which we live (Behrooz, Jannessari, & Pirnajmuddin, 2020). This existential disorientation is compounded by what Baudrillard (1983) defined as *hyperreality*—a condition in which the boundaries between true and false and real and artificial, become increasingly indistinct. Teachers—and adults more generally—are often victims of this sense of impotence and consequently, become suspicious and distant from the contemporary digital world of their students, a world they must understand to design more adequate teaching strategies. According to the *Digital 2025 – DataReportal* (updated to January 2025), nearly half of the world's 7.7 billion inhabitants are active users of social media apps such as Facebook, Twitter, WhatsApp, and WeChat. Following a report published in The Lancet (2024), 36% of teenagers declare being in constant online contact with others. Alarmingly, 11% of adolescents report behaviours resembling pathological use, exhibiting symptoms typically associated with addiction. To further illustrate the complexity highlighted by these reports, "the triangular theory of self" - which examines the sense of selfhood in the era of social media (Wang, 2022) – offers a useful framework for understanding how individual fragility may lead into the vulnerability of the masses. According to this theory, the self undergoes a tripartite fragmentation: the *represented self*, the *registered self*, and the *inferred self*. The represented self refers to the individual's own perception of their experiences, roles, and personal characteristics; the registered self corresponds to how these elements are selectively shared and displayed on social media platforms; and the inferred self is the reconstructed persona as interpreted by others within the digital networked environment. This hypnotic cycle of likes, comments, and posts activates a range of psychological processes, which interferes with the degree of social openness and self-disclosure depending on the audience's responsiveness — particularly in the form of positive feedback such as likes and comments (Walsh et al., 2020)[1]. Such complex forms of identity fragmentation render individuals—particularly young users—vulnerable to hate speech and disinformation, which circulate through intertextual objects across media, systematically targeting marginalised and minority social groups (Banaji & Ramnath Bhat, 2022). In response to these challenges, education should not evade digitalisation but instead train teachers to guide students towards a positive and critical use of digital technologies, while safeguarding creativity, human relationships, and holistic development.

3. The importance of the "how": educational perspectives beyond the condemnation of digital technologies

In navigating this complex panorama, teachers must neither fear nor reject the use of digital technologies; rather, they must decide how—and according to which narrative—they will orient their use. Digital technologies can, in fact, support the democratic process through free access to information and knowledge. Education is therefore required to analyse these forms critically and to reject "technological determinism" (Stocchetti, 2014), thereby liberating teachers from the role of mere delivery systems (Ferneding, 2003) and enabling higher education to conduct research and interrogate the use of technology in relation to inclusive pedagogical and democratic purposes. Supporting students in the use digital technologies is, in fact, associated with improved reading performance, greater ability to detect phishing emails, and more

1 For neurological correlates of social media feedback, see Sherman et al. (2018). On the phenomenon of suicidal contagion ("Werther effect"), see Phillips (1974); Romer et al. (2006); Stack (2005).

effective discrimination between spam and reliable information (Suárez-Álvarez et al., 2021). Students who do not typically achieve what is generally recognised as a "successful academic career" may nevertheless excel by drawing on their own distinctive expertise in digital technologies, gaining the admiration of their peers and discovering renewed motivation in the educational process (Maslow, 1954; von Glasersfeld, 1989). While the use of digital technologies is embedded in a multidimensional reality, the effectiveness of their educational applications does not reside in the technology itself but in the way the didactic experience is mediated by teachers (Suárez-Álvarez et al., 2021). Indeed, enhanced learning often occurs when educators reinterpret digital tools through their expertise and scaffolding (Selwyn, 2011). If, on the one hand, students are "digital natives" (Prensky, 2001) and accustomed to multimodal and synaesthetic approaches to technology, on the other hand they still require the mediation of teachers to transform digital experiences into effective learning processes. Therefore, teacher training in the use of digital technologies must be regarded as a key factor in guaranteeing the quality of education and in improving its standards so as to address the current and continuous cultural, social, economic, and technological changes (UNESCO, 2009; EU, 2018). As Shulman (2005, p. 53) reminds us:

> Professional education is not education for understanding alone; it is preparation for accomplished and responsible practice in the service of others. Professionals must learn abundant amounts of theory and vast bodies of knowledge. They must come to understand in order to act, and they must act in order to serve (Shulman, 2005, p. 53).

Didactics is thus called upon to equip future education professionals with the ability to select and adopt digital tools that respond to the diverse educational needs, refusing inadequate teaching models. Considering what has been discussed, although careful attention must be paid to how digital technologies are used, it is equally important to avoid relying on them exclusively. Rather, educational practices should foreground the widely recognised impact of embodied and affective forms of didactics, for which music education provides a particularly powerful device. If the literature identifies fragmentation of the self, hyperreality, and isolation as major risks of postmodernity, then effective and inclusive pedagogy should counter them with didactic practices that value embodiment, affectivity, and interpersonal communication. In this perspective, music – and Circle Singing in particular – actualises these principles. As will be detailed below, Circle Singing reconnects learning and relationship-building, on the one hand, with a sensory, embodied basis that cannot be falsified, and, on the other, with a real-time, unfiltered instrument of expression (the voice) free from technological mediation – returning participants to the authentic, unrepeatable experience of a shared "here and now".

4. The experience of music in inclusive education: communality, affect and embodiment

4.1 The potential of music in education

Music, as a cultural object within a high degree of interdisciplinary openness, has the potential to enhance both learning outcomes and classroom participation, even in contexts characterised by a high degree of heterogeneity in educational needs (Rizzo, 2021). Owing to its richness of practices and genres, music can be understood as an environmental facilitator that removes barriers to learning and promotes participation from all learners within a genuinely inclusive framework (Booth & Ainscow, 2014). Moreover, it provides an aesthetically rewarding experience that activates complex cognitive processes, in which attention, memory, reflection, and knowledge are deeply intertwined. Within the wide spectrum of musical practices, this study argues that musical interaction in choirs and ensembles can help overcome isolation and communicative barriers, contributing to the development of autonomy (Alvin, 1975) as well as to psychological well-being, while fostering forms of interpersonal bonding (Hove & Risen, 2009). As Graham F. Welch (2005) argues, musical activity engages multiple and widely distributed areas of the brain, while

singing, in particular, supports and enhances neural plasticity due to its multimodal and multispecialised nature. More broadly, Welch identifies that singing fosters overall development across at least three domains: physical, psychological, and musical: physical benefits include improved breathing control, cardiovascular function, and neurological efficiency; psychological benefits encompass enhanced intra- and interpersonal communication as well as emotional regulation; and musical benefits involve a deeper understanding of musical structure, strengthened musical memory, and the development of an individual musical repertoire. Choir practices can be also understood in relation to *flow*, as conceptualised by Mihaly Csikszentmihalyi (1990), referring to a condition of fluency, ease, and deep absorption that arises when individuals engage in activities that are both intrinsically rewarding and appropriately challenging.

4.2 Affective and embodied forms of engagement

A further theoretical orientation, which employed as a resource for addressing postmodern and social media–driven forms of alienation, draws on phenomenology, affect theory, and embodied knowledge. At its core stands Edmund Husserl's phenomenology (1970), particularly his insistence that lived experience constitutes the primary ground of analysis, alongside the concept of the *Lebenswelt*, understood as a space of sensorial immediacy, a domain in which objects appear and acquire significance through embodied encounter. This emphasis on embodied immediacy resonates strongly with affective and performative forms of intermediality, in which sensorial experience precedes codified meaning (Pethö 2023; Pantano, 2026). A milestone in comprehending embodiment is offered by Varela, Thompson and Rosch (1991), who advocate an enactive perspective in which cognition is understood as embodied action. According to this conceptualisation, perception is not a passive reception but an activity shaped by sensorimotor engagement. Cognitive structures emerge from recurrent embodied patterns rather than from abstract mental representations. These perspectives underpin an approach to education that foregrounds the profound impact of the socio-relational dimension on youth development. Within this framework, music – and singing in communal settings in particular – may represent a valuable means of fostering such processes. Accordingly, this article presents Circle Singing as a methodology for engaging students within a music laboratory based on vocal improvisation. In this context, while developing disciplinary skills, students also cultivate transversal skills – such as attentiveness and responsiveness – which are also useful for risk recognition and decision-making.

5. Methodology: contextualising Circle Singing

Circle Singing is a method of collective vocal improvisation which, in this study, is presented in combination with lyrics, enabling a progressive evolution – from playful interaction to aesthetic-musical expression, and ultimately to educational application – activating flow states and fostering collective creativity (Sawyer, 2012). The circle singing music workshop is conceived as a didactic device capable of translating the educational potential of music along the theoretical perspectives previously outlined. Widely disseminated by American singer and composer Bobby McFerrin, Circle Singing embodies a practice of collective vocal improvisation in which participants, arranged in a circle around an expert guide, build harmonic-tonal and rhythmic structures in real time. Within this setting, the expert assumes the role of conductor of the ludo-animative laboratory (Rizzo, 2021), a mediating function best understood through the etymological roots of the term *expert*, derived from the Latin *ex-perior* (to experience) and the Ancient Greek *πέρνημι* (*pérnēmi*, to transfer, to share), highlighting the educator's capacity to activate knowledge experientially through a non-hierarchical and horizontal approach. As the orienting figure in the vocal circle, the teacher's role is to inspire and motivate, transforming musical improvisation into a participatory and inclusive educational process that welcomes and valorises difference. As the session progresses, the expert moves within the circle, progressively assigning rhythm-melody patterns enriched with text, animat-

ing a choral form in which each group contributes to a different layer of the vocal stratification. This approach to music refuses arborescent, hierarchical forms representing an appropriate context for rhizomatic approaches to education (Bocci, De Angelis, Fregola, 2016). At the end of the performing phase, the methodology includes moments of reflection and analysis, aimed at fostering metacognitive processes. This final stage allows sound to be transformed into sign, through transcodification procedures and conceptual and interpretive re-elaborations of the experience.

5.1 Circle Singing at Roma Tre University: an empirical study

The present study presents a quasi-experimental research design conducted from October to December 2025 and involving 104 university students, recruited on a voluntary basis from courses within the Departments of Educational Sciences and DAMS at Roma Tre University. The research pursued multiple interconnected objectives. First, it aimed to conceptualise and implement an educational laboratory capable of fostering inclusive participation, through embodied, collaborative, and inclusive practices. Second, it investigated the effectiveness of Circle Singing in supporting English language development, with specific attention to pronunciation accuracy and phonological awareness. Third, it examined its impact on musical competences, including the perception and discrimination of pitch, rhythm, accent, and melody. Finally, the study sought to develop a transferable pedagogical model that may be adopted by future educators across both primary and secondary educational contexts. The research followed a structured sequence of phases. After an initial design stage, in which musical materials and English-language texts have been carefully selected, a baseline assessment was conducted through pre-testing. The pre-testing phase consisted of administering the assessments designed to evaluate participants' initial levels of aural perception skills, measured through PROMS (Law & Zentner, 2012), and English phonological accuracy, assessed through SpeechAce (Nguyen, Tran, Vo, 2025). In order to ensure the effectiveness of the assessment process and to avoid cognitive and attentional overload among participants, the tests were administered in two separate sessions, one dedicated to PROMS and the other to SpeechAce, each lasting between 15 and 20 minutes depending on participants' speed of completion. Participants completed the digital assessments through self-administration using their own devices and headphones, while the facilitators carefully organised them into groups of twenty participants, maintaining a distance of about one and a half metres between individuals in order to prevent audio interference and sound feedback, particularly during the SpeechAce assessment, which required participants to record their spoken voices. This phase was followed by the implementation of the Circle Singing laboratory, delivered through a fifteen-hour programme, and subsequently by the post-assessment phase, which followed the same procedures adopted during the pre-test. The final stage consisted of an integrated analysis of both quantitative and qualitative data, ensuring a comprehensive interpretation of the findings. Methodologically, the study adopted a mixed-methods approach, combining quantitative measurements with qualitative insights. Quantitative data were collected through self-assessment questionnaires and two digital tools: the Profile of Music Perception Skills (PROMS), designed to evaluate perceptual musical abilities across multiple domains, and SpeechAce, an AI-based system capable of analysing phonetic accuracy in spoken English. These devices enabled the collection of data concerning participants' musical and linguistic development, while contributing to the training of future teachers, who were introduced to digital assessment practices that they may later adapt within their own educational settings. In this sense, digital technologies are not merely instruments of measurement, but integral components of a broader educational framework that combines self-assessment and learning. The study has received favourable approval from the Ethics Committee of Roma Tre University, ensuring compliance with ethical standards for research involving human participants.

5.2 Sample

The sample consisted of 188 participants, including 104 individuals in the Experimental Group and 84 in the Control Group. The Experimental Group consisted predominantly of female participants (n = 96), with a smaller representation of male participants (n = 8). Participants were recruited from three different degree programmes at Roma Tre University: Primary Teacher Education (n = 71), Pedagogical Sciences (n = 15), and DAMS – Disciplines of Arts, Music and Performing Arts (n = 18). Considering the structure of the programmes involved, 71 participants were considered as holding at least a secondary school diploma, whereas 33 participants possessed at least an undergraduate academic degree. The mean age of the participants was 24 years, with an age range spanning from 19 to 61 years old, reflecting the heterogeneous composition of the sample. The Control Group consisted predominantly of female participants (n = 80), with a smaller representation of male participants (n = 4). Participants were mainly enrolled in the EduNido degree programme (n = 83), while one participant was enrolled in the Primary Teacher Education programme (n = 1). Considering the structure of the programmes involved, participants were considered as holding at least a secondary school diploma, as they were enrolled in undergraduate-level university courses. The mean age of the participants, was approximately 20 years, with an age range spanning from 18 to 26 years old. Overall, the sample reflected a relatively homogeneous population of young adult university students engaged in educational and pedagogical studies.

6. Results: preliminary analysis and focus group findings

The dataset has already undergone an initial exploratory screening, and the overall results of the study are currently available. However, the comprehensive transcription and systematic analysis of the data are still underway, particularly with regard to the examination of the individual subscales and the cross-tool correlations between PROMS and SpeechAce outcomes.

6.1 PROMS: first findings

Data were analysed using repeated-measures mixed ANOVA models conducted through IBM SPSS Statistics 29.0.1.0 to examine differences across time (pre-test vs. post-test) and between groups (control vs. experimental). The internal reliability of the PROMS instrument was assessed through Cronbach's alpha coefficient, calculated on the four subtests administered during the PRE phase across the entire sample (N = 188). The analysis revealed an acceptable level of internal consistency ($\alpha = .724$), a positive result considering that the instrument comprises only four subtests, a condition that generally tends to produce lower alpha values. This finding suggests that the Melody, Tuning, Accent, and Tempo dimensions share a sufficiently stable and coherent underlying construct while still detecting distinct aspects of musical perception. The analysis of the overall PROMS score represents one of the most significant findings of the study. The data revealed a markedly divergent trend between the two groups: the control group decreased from a mean score of 14.655 in the pre-test to 13.393 in the post-test ($\Delta = -1.262$), whereas the experimental group increased from 18.630 to 22.587 ($\Delta = +3.957$), showing a substantial improvement. Cohen's d value of 2.04 indicates an extremely large effect size, highlighting a very pronounced difference between the experimental and the control group. Overall, the findings suggest that the intervention produced a particularly substantial impact on the global musical perception abilities assessed through PROMS, involving, across the different subtests, the dimensions of Melody, Tuning, Accent, and Tempo.

6.2 *SpeechAce*: first findings

The internal reliability of *SpeechAce* was evaluated through Cronbach's alpha coefficient calculated on the pre-test scores of the entire sample (N = 188). The analysis revealed an excellent level of internal consistency ($\alpha = .965$), indicating a very high degree of homogeneity among the four tasks included in the scale. Although such elevated values may sometimes indicate partial redundancy among items, this aspect does not appear problematic in the present study, considering the limited number of tasks included in the scale and the use of the total score as a global indicator. Descriptive statistics revealed different trends across the two groups. The control group (CG) showed a slight decrease in mean scores from the pre-test (M = 78.830) to the post-test (M = 77.676), whereas the experimental group (EG) demonstrated a marked increase, rising from a pre-test mean of 82.986 to a post-test mean of 89.498. Furthermore, the experimental group showed a highly significant improvement in scores between the pre- and post-test phases, $t(103) = 10.638$, $p < .001$. The comparison between groups at the post-test stage also revealed a very large effect size (Cohen's $d = 1.36$), indicating a particularly strong impact of the intervention on the overall score. Overall, the findings suggest that the intervention produced a substantial effect on participants' performance across the SpeechAce assessments.

6.3 Preliminary qualitative findings

At the same time, responses to self-assessment questionnaires reveal significant progress in students' awareness and management of the vocal apparatus, particularly with regard to both spoken and sung voice production, breathing, and overall vocal regulation. Participants also report increased confidence in oral English communication and in their ability to design and facilitate music-based learning environments, suggesting a strengthening of self-efficacy. Beyond its evaluative purpose, the study was intentionally structured to provide participants with methodological competences enabling them to transfer and adapt the Circle Singing laboratory within future educational settings. Evidence emerging from both questionnaire data and focus group discussions further supports the effectiveness of the laboratory. Qualitative data from focus group discussions further illuminate the affective and relational impact of the Circle Singing laboratory:

> *I noticed that the circle activity really helped me connect with everyone. I felt part of the group, while still maintaining my individuality—as if I had my own space within a larger picture, where everyone had the opportunity to emerge equally* (FG1-P1a).

> *I felt a sense of adrenaline and positive energy. Even though the sessions took place at the end of the day, after work and classes, I always left feeling energised rather than tired. It also made me reflect a lot. I truly built relationships through this laboratory—it was the only course I attended from beginning to end, and it allowed me to maintain connections with my peers even after it ended* (FG1-P1b).

> *Having the opportunity to engage in practical work, in a context where we are constantly exposed to abstract and complex notions, allowed us to step out of our individual bubbles—away from our computers and notes—and be with others. For me, this was a strong source of motivation and enthusiasm, and I connect it directly to well-being* (FG2-P1a).

These excerpts highlight the role of Circle Singing in fostering relationality, emotional engagement, and a sense of belonging, while also supporting students' well-being and active participation within the learning environment.

7. Limits

The main critical aspect to be considered is that the Control Group did not participate in an alternative activity comparable to the Circle Singing laboratory intervention, a factor that may partially limit the interpretation of the observed differences between groups. Moreover, although the sample was constructed on a voluntary basis, participants were not assigned to groups through a process of randomisation. The sample presents a numerically uneven distribution between the Experimental Group (EG) and the Control Group (CG), with a difference of approximately twenty participants. Furthermore, the Control Group consisted of students enrolled in a degree programme different from those represented in the Experimental Group. While the Experimental Group included 71 students enrolled in Primary Teacher Education, 15 in Pedagogical Sciences, and 18 in DAMS – Arts, Music and Performing Arts Studies, the Control Group consisted of 83 students enrolled in the EduNido programme and only 1 student from Primary Teacher Education. Nevertheless, it is important to underline that the largest portion of the Experimental Group was represented by undergraduate students enrolled in the early stages of university education, whereas only a smaller proportion consisted of postgraduate students from Pedagogical Sciences and DAMS. Consequently, the majority of participants in both groups were comparable in terms of educational level, as they were predominantly undergraduate students holding a secondary school diploma and attending the first years of university education. The present research should therefore be understood as an initial empirical exploration of Circle Singing within the context of higher education. Future studies may extend the application of this methodology to different educational levels – including primary school, lower secondary school, and upper secondary school – adapting activities, repertoires, and levels of complexity according to students' age and educational objectives. Furthermore, a future development of the research could involve comparing the Experimental Group with a Control Group engaged in a comparable music-based activity involving the use of the English language, in order to isolate more rigorously the specific effects attributable not merely to the use of language through music, but more specifically to the Circle Singing intervention itself.

8. Conclusions

The contemporary educational context is increasingly populated by a generation born and raised in the digital world, commonly referred to as "screenagers" (Rushkoff, 2006). The dichotomous dilemma that often challenges teachers oscillates between outright rejection and uncritical adoption of technology. On the contrary, educators must develop critical skills to harness instrument – particularly those embedded in the everyday practices of young people. Drawing on inclusive, pedagogical, neuroscientific, and philosophical scholarship, this article has argued that Circle Singing – integrating English-language and self-administered digital assessment tools – may represent a valuable means of reconnecting students with embodied and relational dimensions of experience, thereby countering forms of hyperreal disengagement. Our preliminary findings indicate overall gains in musical perception (PROMS), English pronunciation accuracy (*SpeechAce*), and, crucially, affective-relational benefits as reported in focus groups. Participants, in fact, described enhanced group connection, sustained relationships beyond the laboratory, and a direct link to well-being. While it is not possible to provide unequivocal responses to the complexities of contemporary education, Circle Singing may nevertheless be understood as a pedagogical device capable of fostering inclusive, community-oriented, and embodied forms of disciplinary learning, while simultaneously enhancing socio-relational competences.

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