


FROM THE CLASSROOM TO PRACTICE: ROLE-PLAYING AS A TRANSFORMATIVE LEVER IN NURSING EDUCATION

DALLA CLASSE ALLA PRATICA: IL ROLE-PLAYING COME LEVA TRASFORMATIVA NELLA FORMAZIONE INFERMIERISTICA

Giovanna Scala

University of Campania "Luigi Vanvitelli"
giovanna.scala@unicampania.it

<https://orcid.org/0000-0001-8224-5797> 

Federica Badii Esposito

University of Naples "Parthenope"
federica.badiiesposito@uniparthenope.it



Double Blind Peer Review

Scala, G., Badii Esposito (2025). From The Classroom To Practice: Role-Playing as a Transformative Lever in Nursing Education. In *Italian Journal of Health Education, Sports and Inclusive Didactics*, 9(4).

Doi:

<https://doi.org/10.32043/gsd.v9i4.1632>

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: 978-88-6022-528-3

ABSTRACT

This study at the University of Campania "Luigi Vanvitelli" evaluated role-playing in nursing education with 100 students split into experimental and control groups. Using psychometric tools (IRI, PSI, PPOS) and focus groups, results showed significant gains in empathy (+18%), problem solving (+15%), and patient-centred orientation (+20%) for the role-playing group. Qualitative analysis confirmed its transformative impact, supporting role-playing as a core method in nursing curricula.

Uno studio dell'Università della Campania "Luigi Vanvitelli" su 100 studenti di infermieristica ha confrontato role-playing e didattica tradizionale. Con strumenti psicometrici (IRI, PSI, PPOS) e focus group, il gruppo sperimentale ha mostrato miglioramenti in empatia (+18%), problem solving (+15%) e orientamento al paziente (+20%). L'analisi qualitativa ha confermato l'impatto trasformativo, indicando il role-playing come metodo chiave nella formazione infermieristica.

KEYWORDS

Role-playing, empathy, problem solving, interpersonal skills, medical pedagogy

Gioco di ruolo, empatia, risoluzione dei problemi, abilità interpersonali, pedagogia medica

Received 2025-10-08

Accepted 2026-01-07

Published 2026-01-12

Introduction

Healthcare training is currently undergoing a cultural and pedagogical transformation in response to the growing complexity of healthcare systems. The demand for personalised, person-centred care based on scientific evidence requires professionals who possess not only solid technical and scientific knowledge, but also interpersonal, communication, and ethical skills. Nursing care, in particular, lies at the intersection of clinical expertise and human sensitivity, where the quality of the care relationship is a key factor in achieving positive therapeutic outcomes and ensuring patient satisfaction. Despite progress in recent decades, many studies report a discrepancy between theoretical university training and the practical skills required in clinical settings, which are frequently characterised by high pressure, uncertainty, and unpredictability (Zhang, Wang, & Zhou, 2023). Students sometimes report feeling cognitively prepared, yet less ready to handle situations requiring empathy, quick decision-making and mediation with patients and families. These critical issues have prompted medical education to seek innovative strategies that overcome the limitations of traditional teaching models centred on lectures and rote learning. In this scenario, the Medical Humanities have taken on an increasingly important role in helping to redefine educational paradigms. Approaches such as narrative medicine, the performing arts, and simulation have been progressively integrated into curricula to promote knowledge, empathy, critical thinking, and professional resilience (Artioli et al., 2021; Czerwiec, Huang & Squier, 2020). The World Health Organization and other international bodies, such as the OECD, emphasise the importance of training professionals who can combine clinical expertise with humanistic sensitivity. They highlight that these qualities are now essential for ensuring the quality, safety, and sustainability of healthcare systems (OECD, 2023). Medical education fits into this landscape as an interdisciplinary field combining clinical sciences, pedagogy, psychology and the humanities to train professionals capable of responding to complex, multidimensional needs. This approach is constructivist and transformative, considering the student to be an active protagonist in their own learning journey. Learning is not viewed as merely transmitting content, but as a participatory, reflective and contextualised process in which practical experience, social interaction and critical reflection facilitate the development of ethical, relational and communication skills (Creswell & Creswell, 2021).

Within this framework, role-playing is one of the most effective experiential methodologies. By simulating realistic clinical scenarios, students take on the roles of patient, caregiver and healthcare professional, practising communication, decision-making and emotional dynamics. This allows them to develop crucial transferable skills such as empathy, problem solving and interprofessional collaboration in a safe environment where the risk of error is reduced and innovative strategies can be experimented with (Cairns, Aitken, Pope & McDonald, 2024).

A distinctive feature of role-playing in nursing training is reflective debriefing. This is a time to critically re-examine the experience, express emotions and consider alternative decisions. This phase consolidates learning and stimulates processes of awareness and identity growth, contributing to the development of a more mature, care-centred professionalism. Thus, role-playing cannot be reduced to a mere teaching technique; it is a transformative tool that connects theory and practice, cognition and emotion, and knowledge and knowing. This study fits into this framework, aiming to systematically analyse the impact of role-playing in university nursing education. The focus is on three dimensions that are considered key to contemporary healthcare professionalism: empathy, problem-solving skills, and a relational approach to care. To achieve this, a mixed-methods approach combining quantitative and qualitative methods was adopted to capture both measurable changes and the more subtle, subjective transformations related to the construction of students' professional identities.

1. Aim of the research

The main objective of this study is to evaluate the effectiveness of role-playing as an innovative teaching methodology in university nursing education. The study aims to investigate the impact of this practice on three key areas of training for future healthcare professionals: empathy, problem-solving, and relational orientation to care.

The first of these analysed is empathy, which is defined as the ability to recognise, understand, and share the emotions and perspectives of patients. Numerous studies have demonstrated that experiential activities based on simulation and critical reflection can strengthen empathy levels in healthcare students, significantly impacting the care relationship and outcomes (Xue, Li & Zhang, 2023; Zhao, Chen & Wu, 2023).

The second dimension is problem solving, a vital skill for navigating the complexities of modern clinical scenarios, where the capacity to devise prompt and effective solutions, even in uncertain or emergency situations, is paramount. Role-playing offers the opportunity to experience realistic scenarios in a safe and controlled environment and has been shown to be particularly effective in enhancing students' perceived self-efficacy and improving their ability to manage critical teamwork dynamics (Childress, Tait & Hughes, 2022; Cairns, Aitken, Pope & McDonald, 2024).

The third dimension explored is a relational approach to care, which is defined as a predisposition to establishing professional relationships based on trust, respect, and collaboration. Recent studies emphasise that innovative teaching methodologies, such as role-playing, promote a more person-centred approach to nursing, moving away from the traditional, predominantly transmissive and technical method (OECD, 2023).

To explore these three dimensions, the study takes a qualitative-quantitative approach, integrating the robustness of psychometric data with the depth of qualitative research. Internationally validated tools are used to detect measurable variations in empathy, problem-solving skills and relational orientation, while exploratory methodologies such as focus groups allow subjective experiences and perceptions that are difficult to capture through standardised questionnaires alone to emerge. This combination of methods provides a more comprehensive, multidimensional view of the impact of role-playing. It offers evidence of not only the effectiveness of the methodology as a training tool, but also its contribution to transforming the learning experience and the development of nursing students' professional identities.

1.1 Sample Selection

The research was conducted at the University of Campania 'Luigi Vanvitelli's' Nursing Degree Course at its Caserta campus and involved 100 second-year students. This decision was made in order to work with a homogeneous sample in terms of academic training and clinical experience, thus reducing variability due to differences in background. Literature emphasises the importance of selecting relatively uniform groups in terms of age and experience to ensure reliable results in educational and healthcare contexts (Zhang, Wang & Zhou, 2023). The students were divided into two groups of equal size using a simple

randomisation procedure. The first group (n = 50) participated in innovative teaching activities based on role-playing, while the second group (n = 50) followed a traditional training programme focused on lectures and theoretical content. This allocation method balanced the characteristics of the two groups and reduced the risk of bias, in line with methodological recommendations for educational and clinical research (Creswell & Creswell, 2021).

To guarantee the methodological quality of the study, strict inclusion and exclusion criteria were defined to ensure the homogeneity of the sample and reduce possible confounding factors.

The most important inclusion criterion was regular enrolment in the second year of the Nursing Degree Course. This enabled us to work with students who had already acquired theoretical knowledge and had some experience of clinical practice, but had not yet fully developed their interpersonal and professional skills. The literature highlights the importance of the second year of the course as a pivotal stage in the development of communication and empathy skills alongside technical skills (Zhang, Wang & Zhou, 2023).

A second fundamental criterion was informed consent to participate. Students were informed about the study's objectives and methods, and only those who voluntarily agreed to participate were included. In addition to complying with the ethical principles of the Declaration of Helsinki (World Medical Association, 2020), this step also ensures a higher level of involvement and motivation, which directly affects the quality of the data collected (Cairns, Aitken, Pope & McDonald, 2024). Finally, participants were asked to agree to take part in all activities included in the protocol, including role-playing sessions and pre- and post-intervention assessment tools. This was considered essential to ensure full exposure to the educational intervention, given that recent studies emphasise the importance of the 'training dose' in the effectiveness of innovative teaching methodologies (Palla, Rossi & Borrelli, 2024).

Students who could not guarantee regular attendance at teaching activities were excluded from the research due to the exclusion criteria. Irregular attendance could have compromised the validity of the results by introducing uncontrollable variables linked to partial exposure to the intervention. Those who did not provide informed consent were also excluded, as voluntary participation is essential for the ethical protection of participants (World Medical Association, 2020). Applying these criteria enabled us to select a sample that was both methodologically robust and consistent with the research objectives. This

minimised the risk of dropouts and improved the reliability of the quantitative and qualitative data.

1.2 Tools

The study adopted a mixed-methods research design, combining quantitative and qualitative tools to provide a comprehensive, multidimensional assessment of the impact of role-playing on nursing students' training. Adopting an integrated methodology allows us to combine the objectivity of psychometric data with the depth of subjective experiences, providing a reliable picture of both measurable variations and perceived transformations (Creswell & Creswell, 2021; Braun & Clarke, 2021). Three internationally validated instruments were used to measure the quantitative dimensions:

- **Interpersonal Reactivity Index (IRI).** This is one of the most widely used questionnaires for assessing the different aspects of empathy. Originally developed by Davis (1980) and subsequently adapted for use in various healthcare contexts, the IRI investigates dimensions such as empathic concern and perspective taking. These aspects are fundamental to nursing education as they foster care relationships based on mutual understanding and respect. Recent studies have demonstrated the tool's reliability and sensitivity in detecting changes following experiential educational interventions (Zhang, Wang & Zhou, 2023).
- **Problem-Solving Inventory (PSI).** Developed by Heppner and Petersen (1982), this tool assesses students' perceptions of their problem-solving abilities. The analysis is divided into areas such as confidence in abilities, problem-solving style and sense of control. In a healthcare context, the capacity to address complex issues and devise effective solutions is regarded as a vital skill. Recent evidence confirms that the PSI is a valid indicator for monitoring training progress in a clinical setting, as well as for evaluating the effectiveness of innovative methodologies, such as role-playing (Cairns, Aitken, Pope & McDonald, 2024).
- **Patient-Practitioner Orientation Scale (PPOS).** This questionnaire explores students' relational orientations, particularly the degree of centrality they attribute to the patient in the care relationship. Originally developed by Krupat et al. (2000), the scale measures the predisposition to establish relationships based on collaboration and respect as opposed to a more paternalistic and

directive approach. Recent literature confirms the usefulness of the scale in investigating the transition to patient-centred care models, which are now considered an essential part of healthcare professional curricula (Zhao, Chen & Wu, 2023).

Alongside quantitative tools, qualitative methodologies were adopted to explore the experiential and reflective dimensions of learning. In particular, focus groups were organised with representative samples of students from both the experimental and control groups at the end of the intervention. Led by an expert moderator, the focus groups aimed to gather perceptions, experiences and reflections gained during the training course. Particular attention was given to relational dynamics, challenges encountered, and perceived changes in empathy, problem-solving, and care orientation. This approach allows aspects to emerge that would be difficult to capture with standardised questionnaires alone, thus offering a richer, more multifaceted picture of learning processes (Braun & Clarke, 2021). The qualitative data were analysed using thematic analysis, following Braun and Clarke's (2021) systematic approach, which enables the identification, organisation and interpretation of recurring themes within students' narratives. To ensure methodological rigour and accurate data management, NVivo software, which is widely used in qualitative research in healthcare and education to improve the transparency and traceability of analyses (Castleberry & Nolen, 2018; Woods et al., 2020), supported the entire coding and categorisation process. Overall, combining quantitative and qualitative tools with structured thematic analysis and specialised software allows for triangulated analysis of the impact of role-playing. This strengthens the reliability and validity of the results, responding consistently to the objectives of educational and clinical research oriented towards the integral formation of the person.

1.3 Methods

The educational intervention took place during the first academic semester and lasted twelve weeks. It involved structuring two distinct training courses for the two groups of students. This approach enabled a direct comparison to be made between traditional teaching and an innovative approach based on role-playing in order to evaluate the latter's effectiveness in relation to the research objectives. The control group followed a traditional training course focusing mainly on lectures

and expository presentations. These lessons, delivered by the teacher with the aid of PowerPoint presentations and multimedia materials, aimed to provide students with a solid theoretical foundation in core subjects such as anatomy, physiology, nursing sciences, and clinical care methodologies. While this approach ensured rigour and systematicity, it left little room for active interaction and critical reflection, thereby limiting the development of transversal skills such as empathy and problem solving (Czerwiec, Huang & Squier, 2020; Zhang, Wang & Zhou, 2023). To support the lessons, the course included guided reading of academic textbooks and scientific articles selected by the lecturer. These texts were discussed in class mainly in an explanatory manner to consolidate evidence-based knowledge and explore specific clinical aspects in depth. However, recent literature highlights that an approach focused exclusively on theoretical acquisition is insufficient to stimulate transformative learning processes or develop relational and reflective skills (Palla, Rossi & Borrelli, 2024).

Finally, the control group took part in regular formative assessments consisting of multiple-choice quizzes and short-answer questions designed to monitor the acquisition of theoretical content. While these tools encouraged individual study and memorisation of fundamental concepts, several studies have highlighted their limited ability to promote the development of communication and empathy skills or encourage critical reflection on the ethical aspects of care (Childress, Tait & Hughes, 2022; Cairns, Aitken, Pope & McDonald, 2024).

In contrast, the experimental group (n = 50) participated in an innovative, role-play-based educational workshop consisting of twelve three-hour sessions held weekly. The main activities involved simulating realistic clinical scenarios drawn from nursing practice, such as managing emergencies in the ward, communicating bad news, mediating conflicts with caregivers or interviewing chronic patients. Students took turns playing the roles of patient, caregiver and healthcare professional, experiencing different perspectives and learning to adapt their communication and relational strategies to the context. This process promoted cognitive and emotional de-centring, thereby strengthening the ability to understand the needs and experiences of others.

After each simulation, the teacher-facilitator led a reflective debriefing session, during which the emerging dynamics were discussed and analysed collectively. This was a crucial learning opportunity, as it enabled students to critically re-evaluate their choices, identify alternative strategies, and develop their ability to handle complex situations. Recent studies show that structured debriefing promotes critical thinking and improves the application of acquired skills in real clinical

contexts (Childress, Tait & Hughes, 2022; Cairns, Aitken, Pope & McDonald, 2024). The workshop also included reflective writing sessions, during which students described their emotions, experiences, and lessons learned during the simulations. This activity promoted self-awareness and consolidated transformative learning, in line with literature on reflective writing in healthcare professions (Artioli, Cheli & Marzorati, 2021). Additionally, small group discussions enabled students to share experiences and perspectives, fostering a sense of mutual support and promoting interprofessional collaboration (Efthymiou, Papadopoulos & Antoniou, 2025). Finally, some sessions involved multimedia stimuli, such as film clips, audiovisual patient testimonials, and clinical simulation videos, to enrich the learning experience and stimulate ethical and communicative reflection. This approach broadened the scope of training and helped engage students more actively and consciously (Palla, Rossi & Borrelli, 2024).

Overall, there was a substantial difference between the two training programmes: while traditional teaching focused on the theoretical transmission of knowledge, the role-playing approach centred on experience, reflection, and interaction. This offered students the opportunity to develop technical, interpersonal, communication, and ethical skills. This distinction enabled the direct and systematic evaluation of the impact of role-playing, demonstrating its potential as a transformative pedagogical tool in contemporary nursing education.

2. Results

2.1 Quantitative analysis

Data collected using the Interpersonal Reactivity Index (IRI), the Problem-Solving Inventory (PSI) and the Patient-Practitioner Orientation Scale (PPOS) were analysed using repeated measures analysis of variance (ANOVA). This compared the differences in pre- and post-intervention scores between the experimental and control groups. This statistical approach enabled us to detect internal variations within the groups over time, as well as the interaction between time and group, highlighting how each subgroup responded differently to the educational intervention (Field, 2021). The analysis revealed significant main effects for both the time and group factors, as well as a significant time \times group interaction ($p < .01$). Notably, while the control group's scores remained stable, the experimental group showed marked and statistically significant improvements in all three analysed dimensions.

Regarding empathy (IRI), mean scores in the experimental group increased by 18% compared to the initial assessment, with particularly noticeable increases in the perspective-taking (+21%) and empathic concern (+16%) subscales. In contrast, the control group recorded marginal changes of +2%, which were not statistically significant. These data confirm the effectiveness of role-playing in enhancing relational sensitivity, in line with recent studies (Xue, Li & Zhang, 2023; Zhao, Chen & Wu, 2023).

Regarding the Problem-Solving Inventory (PSI), the experimental group demonstrated an overall score improvement of 15%, with notably greater increases in confidence in their decision-making abilities (+19%) and perceived sense of control (+13%). In contrast, the control group showed minimal changes (+3%), which confirms the limited impact of transmissive teaching models on the development of problem-solving skills. These results are consistent with existing literature emphasising the role of experiential simulations in enhancing self-efficacy and the capacity to navigate intricate clinical situations (Cairns, Aitken, Pope & McDonald, 2024).

For the relational orientation to care (PPOS), the data showed a 20% increase in the experimental group, indicating a clear shift from a more directive approach to a more patient-centred one. Students involved in the role-playing workshop in particular reported a significant increase in openness to dialogue and in the value placed on collaboration with patients. The control group, on the other hand, maintained virtually unchanged scores (+1%). These results align with international evidence indicating that role-playing fosters the development of person-centred care models (OECD, 2023; Palla, Rossi & Borrelli, 2024).

Overall, the quantitative data indicate that role-playing led to percentage improvements of between 15% and 20% in the three investigated areas, compared to minimal changes of 1–3% in the control group. These differences were statistically significant ($p < .01$), which reinforces the initial hypothesis that experiential teaching methodologies have a more significant impact on the development of the transversal skills essential for nursing practice than frontal teaching alone. This evidence lends weight to the recommendations of medical pedagogy and medical humanities, which advocate integrating innovative, person-centred training approaches into university curricula (Artioli, Cheli & Marzorati, 2021; Efthymiou, Papadopoulos, & Antoniou, 2025).

2.2 Qualitative analysis

Qualitative analysis conducted through focus groups and subsequently processed using a thematic approach (Braun & Clarke, 2021) provided rich, detailed insights into students' perceptions. This analysis highlighted substantial differences between the control and experimental groups.

Students in the control group, who followed a traditional training programme based mainly on lectures and individual study, described it as useful for consolidating theoretical knowledge but also as 'static' and 'uninspiring'. Many of them said that despite having acquired solid disciplinary knowledge, they found it difficult to envisage how this could be translated into practical behaviour in clinical settings. They reported a particular lack of opportunities to practise interpersonal skills or deal with the emotional aspects of care, which they felt was not addressed by the teaching model adopted. Some students expressed feeling as though they were "studying to pass the exam" rather than achieving real professional growth. This confirms the limitations of an exclusively transmissive approach, which tends to favour memorisation over critical reflection and transformative learning (Palla, Rossi & Borrelli, 2024; Zhang, Wang & Zhou, 2023).

The picture that emerged from the experimental group was radically different. Students who participated in the role-playing workshop described the experience as 'engaging', 'realistic', and conducive to deep learning. Taking on the roles of patient, caregiver, and healthcare professional in rotation was seen as a valuable way to understand the various perspectives involved in the care relationship. Many students emphasised that developing empathy enabled them to become more sensitive, teaching them to recognise not only clinical needs, but also the emotional and relational needs of patients.

Reflective debriefing was particularly appreciated and unanimously recognised as a fundamental part of the intervention. Students reported that guided discussions with the teacher-facilitator and their peers helped them to make sense of the experience by enabling them to re-examine their mistakes, choices and strategies. Some stated that 'without the debriefing, the simulation would have remained a role-playing game', and that it was the critical discussion that transformed it into an authentic learning opportunity. This is consistent with recent literature emphasising the value of debriefing in consolidating transferable skills such as critical thinking and problem solving (Cairns, Aitken, Pope & McDonald, 2024).

Another central theme that emerged was that of collaboration and a sense of belonging. Students in the experimental group reported that they had developed greater mutual trust and perceived an improvement in group cohesion. Activities such as reflective writing and working in small groups stimulated the exchange of perspectives, strengthening personal and collective awareness. Several students

reported that they had 'discovered new ways of relating to their peers', viewing the workshop as a shared, non-competitive learning environment. By contrast, students in the control group adopted a more individualistic approach, focusing mainly on personal study and lacking structured opportunities for exchange and discussion. The literature identifies this lack of structured opportunities as limiting the development of relational and collaborative skills (Efthymiou, Papadopoulos & Antoniou, 2025).

Overall, the qualitative data reinforce and complement the quantitative evidence, showing that students perceive role-playing not only as an innovative methodology, but also as a transformative experience that influences their professional identity during training. While traditional teaching is associated with cognitive growth, the experiential approach is recognised as a means of developing empathy, decision-making and communication skills — all of which are now considered essential in contemporary nursing practice (Artioli, Cheli & Marzorati, 2021; Efthymiou, Papadopoulos & Antoniou, 2025).

3. Discussion

The results of this study significantly confirm the effectiveness of role-playing as an innovative teaching methodology in nursing education. They show how this practice contributes to developing essential transferable skills, such as empathy, problem-solving, and a relational approach to care. The improvement observed in the experimental group, in contrast to the stability of scores in the control group, suggests that an experiential and reflective approach is superior to traditional teaching characterised by unidirectional content transmission (Xue, Li & Zhang, 2023; Zhao, Chen & Wu, 2023). These results align with international studies that have demonstrated the efficacy of active and participatory methodologies in promoting transformative learning and enhancing relational skills among healthcare students (Cant & Cooper, 2017; Cairns, Aitken, Pope, & McDonald, 2024).

Integrating quantitative and qualitative data provides a particularly robust picture: psychometric instruments showed significant increases in all analysed dimensions, while focus groups captured students' subjective experiences, highlighting that they perceived the role-playing experience as engaging, realistic, and transformative. Convergence of the two data types reinforces the validity of the conclusions, suggesting the observed benefits are not just temporary effects linked to workshop activity, but may reflect more profound changes in professional identity construction (Jeffries, 2016).

A crucial aspect that emerged concerns empathy. Students' testimonies confirm the significant increase in Interpersonal Reactivity Index scores, with many emphasising how identifying with the roles of patient and caregiver fostered greater sensitivity towards emotional and relational needs. This is a particularly relevant result, given that several studies have reported a progressive decline in empathy during healthcare-related university education, with negative repercussions for the quality of care relationships (Ward, Cody, Schaal & Hojat, 2012; Zhang, Wang & Zhou, 2023). Role-playing not only counteracts this trend, but also helps consolidate a stable, functional empathic disposition in clinical practice. Similarly, data on problem solving show an increase in confidence in one's decision-making abilities and perception of control. Students in the experimental group reported feeling more prepared to handle complex scenarios and emphasised that the ability to "make mistakes without real consequences" provided a valuable opportunity to experiment with different strategies. This highlights the educational value of protected and simulated environments, which allow students to practise critical skills without compromising patient safety. Regarding the relational orientation to care, the increase in scores on the Patient-Practitioner Orientation Scale confirms that role-playing promotes greater openness to dialogue and collaboration with patients. This evidence contributes to the broader debate on transitioning from paternalistic care models to patient-centred paradigms, in line with WHO and OECD recommendations (2019; 2023). Therefore, university education has the task of not only transmitting clinical knowledge, but also guiding future professionals towards care practices based on shared responsibility and mutual respect.

Another element that emerged concerns the role of reflective debriefing, which was unanimously recognised by students as a decisive moment in the course. In line with previous studies, reflective debriefing enables learning to be consolidated, critical thinking to be developed, and skills to be transferred to real clinical contexts (Fanning & Gaba, 2007; Dreifuerst, 2012). Combining simulation, reflection and reflective writing made the experience educational and transformative, contributing to the development of a more mature professionalism. From a pedagogical point of view, the study's results prompt critical reflection on the design of university nursing curricula. The systematic inclusion of role-playing, alongside other innovative methodologies such as high-fidelity simulation, narrative medicine and immersive digital technologies, could help to overcome the fragmentation that still exists between theory and practice, promoting training programmes that are more consistent with the needs of the contemporary healthcare system (Jeffries, Rodgers & Adamson, 2015). Of course, the study has

some limitations. Firstly, the sample was limited to one university and second-year students, which reduces the generalisability of the results. Furthermore, follow-up was limited to immediate post-intervention assessment without considering learning retention in the medium to long term. Future studies could expand the sample size to include multiple locations and conduct longitudinal surveys to verify the persistence of effects over time and their impact on actual clinical practice (Cantrell, Franklin, Leighton & Carlson, 2017).

In conclusion, the discussion of the results shows that role-playing, especially when integrated with reflective and collaborative activities, is a powerful tool for transformative training. It is not an ancillary methodology, but a key approach to preparing professionals to face the clinical, communicative, and ethical challenges of the 21st century, combining technical competence and humanistic sensitivity.

Conclusions

This study has highlighted the effectiveness of role-playing as a pedagogical tool in nursing training, capable of integrating cognitive, relational, communicative and ethical dimensions. Quantitative results showed statistically significant improvements in the three investigated areas – empathy, problem-solving, and care orientation – while qualitative data provided a multifaceted picture of the experiential and reflective transformations experienced by students. These findings confirm that, when designed and conducted in a structured manner, experiential learning can profoundly impact the development of students' professional identities (Cairns, Aitken, Pope & McDonald, 2024).

In a healthcare context characterised by increasing complexity and multidimensionality, it is not only important to train professionals who are technically competent, but also to develop their ability to understand patients' needs, deal with uncertain situations using effective problem-solving strategies, and establish relationships based on trust, collaboration, and mutual respect. Recent literature emphasises that patient-centred care and the quality of the care relationship are now crucial indicators of care safety and effectiveness (OECD, 2023; Zhao, Chen & Wu, 2023).

In light of the results, role-playing should be considered a structural component of university nursing curricula, rather than an ancillary or complementary activity. The systematic inclusion of this methodology can promote transformative learning, which goes beyond the mere acquisition of theoretical knowledge to foster the

development of transversal skills and humanistic sensitivity, in line with the principles of Medical Humanities (Artioli, Cheli & Marzorati, 2021; Palla, Rossi & Borrelli, 2024).

Looking ahead, integrating role-playing with other innovative methodologies, such as high-fidelity simulation, narrative medicine, and immersive digital technologies, could further enhance the effectiveness of nursing education. This would prepare professionals capable of addressing clinical, ethical, communicative, and interpersonal challenges. The evidence presented here suggests that academic programmes should adopt a person-centred and profession-centred training model that combines technical skills with human values in order to respond to the needs of a modern, inclusive healthcare system (Efthymiou, Papadopoulos & Antoniou, 2025).

In conclusion, the results of this research encourage us to reconsider the educational strategies employed in nursing degree programmes more broadly. Role-playing emerges as a high-impact training practice capable of preparing future professionals who are clinically and scientifically competent as well as empathetic, reflective, and oriented towards the care relationship — in line with the contemporary healthcare system's needs.

References

- Artioli, G., Cheli, S., & Marzorati, C. (2021). Health humanities: Theoretical and practical applications for healthcare professionals. *Acta Bio Medica: Atenei Parmensis*, 92(S6), e2021570. <https://doi.org/10.23750/abm.v92iS6.12415>
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Cairns, C., Aitken, L. M., Pope, A., & McDonald, S. (2024). Simulation-based education in healthcare: A systematic review of impact on critical thinking and decision-making. *Nurse Education Today*, 128, 105882.
- Cant, R. P., & Cooper, S. J. (2017). *Use of simulation-based learning in undergraduate nurse education: An umbrella systematic review*. *Nurse Education Today*, 49, 63–71.
- Cantrell, M. A., Franklin, A., Leighton, K., & Carlson, A. (2017). *The evidence in simulation-based learning experiences in nursing education and practice: An umbrella review*. *Clinical Simulation in Nursing*, 13(12), 634–667.
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815.
- Childress, M., Tait, L., & Hughes, M. (2022). Role-playing and simulation in healthcare education: Enhancing decision-making and empathy. *Journal of Nursing Education*, 61(7), 345–352
- Creswell, J. W., & Creswell, J. D. (2021). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.
- Czerwiec, M. K., Huang, E., & Squier, S. M. (2020). Graphic medicine in the classroom: Using comics to teach empathy and patient-centered care. *Academic Medicine*, 95(9), 1382–1386.
- Dreifuerst, K. T. (2012). *Using debriefing for meaningful learning to foster development of clinical reasoning in simulation*. *Journal of Nursing Education*, 51(6), 326–333.
- Fanning, R. M., & Gaba, D. M. (2007). *The role of debriefing in simulation-based learning*. *Simulation in Healthcare*, 2(2), 115–125.
- Field, A. (2021). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE.

- Jeffries, P. R. (2016). *The NLN Jeffries Simulation Theory*. Wolters Kluwer.
- Jeffries, P. R., Rodgers, B., & Adamson, K. (2015). *NLN Jeffries simulation theory: Brief narrative description*. *Nursing Education Perspectives*, 36(5), 292–293
- OECD. (2023). *Health at a glance 2023: OECD indicators*. OECD Publishing.
- Shin, S., Park, J. H., & Kim, J. H. (2015). *Effectiveness of patient simulation in nursing education: Meta-analysis*. *Nurse Education Today*, 35(1), 176–182.
- Ward, J., Cody, J., Schaal, M., & Hojat, M. (2012). *The empathy enigma: An empirical study of decline in empathy among undergraduate nursing students*. *Journal of Professional Nursing*, 28(1), 34–40.
- World Medical Association. (2020). *World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects*. *JAMA*, 324(11), 1136–1140. <https://doi.org/10.1001/jama.2020.13912>
- Woods, M., Paulus, T., Atkins, D. P., & Macklin, R. (2020). *Advancing qualitative research using qualitative data analysis software (QDAS)? Reviewing potential versus practice in published studies using ATLAS.ti and NVivo, 1994–2013*. *International Journal of Social Research Methodology*, 23(3), 355–374. <https://doi.org/10.1080/13645579.2019.1576316>
- Xue, H., Li, Y., & Zhang, W. (2023). *Role-play and empathy training in nursing education: Evidence from a randomized controlled trial*. *Nurse Education Today*, 122, 105687. <https://doi.org/10.1016/j.nedt.2023.105687>
- Zhang, Y., Wang, L., & Zhou, H. (2023). *The effectiveness of role-playing on nursing students' empathy and communication skills: A systematic review and meta-analysis*. *Nurse Education in Practice*, 65, 103523. <https://doi.org/10.1016/j.nepr.2022.103523>
- Zhao, L., Chen, Y., & Wu, J. (2023). *Patient-centered communication in nursing education: The impact of experiential learning strategies*. *BMC Nursing*, 22, 45. <https://doi.org/10.1186/s12912-023-01044-3>