



Simulated participant feedback modalities: their contribution to humanized health training

Modalidades de retroalimentación del participante simulado: su aporte a la formación humanizada en salud


Modalidades de feedback dos participantes simulados: sua contribuição para a formação humanizada em saúde

Fabiola Matte Larraín^{1a} , Carolina Álamo Calvanese² ,
Esmérta Opazo-Morales^{3a} 

¹ Universidad de Chile, Santiago, Chile.

² Pontificia Universidad Católica de Chile, Santiago, Chile.

³ Universidad de Chile, Santiago, Chile.

^a **Corresponding Author:** esmeritaopazo@uchile.cl 

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ABSTRACT

Objective: To reflect on the feedback modalities provided by a Simulated Patient. **Development:** Clinical simulation, as a didactic technique organized in simulation-based learning experiences, represents a set of activities structured by the educator to recreate real or potential clinical or professional practice situations. These can range from high to low-frequency settings that significantly impact people's health. These experiences allow learners, students, and professionals to develop or enhance their knowledge, skills, and attitudes in a controlled and protected environment, making their actions safe and providing them with better human quality. Simulation-based learning consists of several stages. A very important stage is feedback, which can be delivered by an educator, a peer, or a simulated participant, all of whom need proper knowledge and training. Simulated patients can offer the learner a unique perspective on how their actions or performance affect the represented person's emotional experience, trust, and understanding of the provided information. **Conclusions:** This reflection is contributed from the training and experience of the authors in the roles of simulated participant and teacher. Furthermore, it offers a guideline to help reduce the existing gap in feedback

training for simulated participants and educators, aiming for orderly, effective, and affectionate feedback that promotes meaningful learning and the humanization of health care.

Keywords: Education, Professional; Simulation Training; Patient Simulation; Formative Feedback; Humanization of Assistance.

RESUMEN

Objetivo: Reflexionar sobre las modalidades de retroalimentación a entregar por un Paciente Simulado. **Desarrollo:** La simulación clínica como técnica didáctica organizada en experiencias de aprendizaje basadas en simulación, representan un conjunto de actividades que tienen una estructura definida por el educador y que recrean situaciones de la práctica clínica o del ejercicio profesional reales o potenciales, de alta o baja frecuencia y que impactan en la salud de las personas. Estas experiencias permiten a los educandos, tanto estudiantes como profesionales, desarrollar o mejorar sus conocimientos, habilidades y actitudes en un entorno controlado y protegido, transformándose en acciones seguras y de mejor calidad humana. El aprendizaje basado en simulación requiere la ejecución de varias etapas, en especial, la retroalimentación o feedback. Esta puede ser entregada por un educador, un par, o un participante simulado; en cualquiera de los casos se necesita conocimiento y entrenamiento. Los pacientes simulados pueden proporcionar al educando una perspectiva única sobre cómo sus acciones o desempeños afectan la experiencia emocional de la persona representada, la confianza en él, y la comprensión de la información entregada. **Conclusiones:** Con esta reflexión se aporta desde la formación y experiencia de los autores en rol de participante simulado y docente, estableciendo una guía para colaborar en disminuir la brecha en la formación en feedback de los participantes simulados y los educadores para una retroalimentación ordenada, efectiva y afectiva que colabore con un aprendizaje significativo y en la humanización de la atención en salud.

Palabras claves: Educación Profesional; Entrenamiento Simulado; Simulación de Paciente; Retroalimentación Formativa; Humanización de la Atención.

RESUMO

Objetivo: Refletir sobre as modalidades de feedback a serem fornecidas por um Paciente Simulado. **Desenvolvimento:** A simulação clínica como técnica didática organizada em experiências de aprendizagem baseadas em simulação, representa um conjunto de atividades que possuem uma estrutura definida pelo educador e que recriam situações reais ou potenciais da prática clínica ou da prática profissional, de alta ou baixa frequência e que impactam a saúde das pessoas. Essas experiências permitem que os alunos, tanto estudantes quanto profissionais, desenvolvam ou aprimorem seus conhecimentos, habilidades e atitudes em um ambiente controlado e protegido, transformando-os em ações seguras e de melhor qualidade humana. A aprendizagem baseada em simulação requer a execução de diversas etapas, principalmente feedback. Isto pode ser ministrado por um educador, um colega ou um participante simulado; em qualquer caso, é necessário conhecimento e formação. Pacientes simulados podem fornecer ao aluno uma perspectiva única sobre como suas ações ou performances afetam a experiência emocional da pessoa representada, a confiança nelas e a compreensão das informações fornecidas. **Conclusões:** Esta reflexão contribui a partir da formação e experiência dos autores no papel de participante simulado e professor, estabelecendo um guia para colaborar na redução da lacuna na formação de feedback de participantes simulados e educadores para um feedback ordenado, eficaz e afetivo. colabora com a aprendizagem significativa e a humanização da assistência à saúde.

Palavras-chave: Educação Profissionalizante; Treinamento por Simulação; Simulação de Paciente; Feedback Formativo; Humanização da Assistência.

INTRODUCTION

The use of simulation for healthcare staff training continues to grow worldwide, enabling learners to provide safer and higher-quality patient care, while developing or enhancing their knowledge, skills, and attitudes. Moreover, it allows them to analyze and respond to realistic situations in a simulated, safe, and protected environment.^{1,2} Learners or trainees can include students, professionals, technicians, or job candidates.³

Simulation-Based Learning (SBL) recreates scenarios by using resources such as tissues, cadavers, mannequins, advanced technology equipment, computer programs, and human simulators (HS) also known as simulated participants (SP).

The origin of simulators can be traced back to remote times, with publications documenting their early use in nursing and medicine.⁴ The origin of modern simulation, as it is known today, is found in aviation. Furthermore, since the mid-20th century, increasingly sophisticated simulators or mannequins have been developed for SBL.⁵

This article contributes to encouraging reflection on the process of feedback provided by SPs. Two modalities are presented: One from the actor's perspective and another from the character's viewpoint. This is motivated by the limited literature found on this topic, as opposed to the amount of information that can be found on feedback provided by facilitators or instructors.⁶

The objective of this essay is to reflect on the feedback modalities provided by Simulated Participants.

DEVELOPMENT

Barrows, a neurologist at the University of California and a pioneer in the incorporation of SPs in simulation during the 1960s defined Simulated Participants as individuals trained to realistically and credibly portray a patient with a specific condition, to the extent that the learner feels they are interacting with a real patient. This portrayal includes body language, physical conditions, emotional characteristics, and personality traits of the person being represented.⁷

The concept of 'standardized patient' was later introduced, referring to a simulated patient capable of repeating a performance multiple times in a given scenario. This has been fundamental for evaluating learners under consistent criteria.⁸ For a long time, these two terms were used interchangeably. As training involving HS has progressed, the representation of other roles such as family members, caregivers, and healthcare staff has been incorporated, thus broadening the term to Simulated Participant (SP).⁹ Since Barrows' time, the use of HS has expanded and been valued worldwide for training in all health professions.

Alongside the development of simulation and the use of SPs, processes began to be standardized. Specifically in 2016, the International Nursing Association for Clinical Simulation and Learning (INACSL)¹⁰ established eleven standards with respective criteria for implementing best simulation practices, including a feedback or debriefing session after the simulation-based experience.

Additionally, in 2017, the Association of Standardized Patient Educators (ASPE)⁹ established Standards of Best Practice defining five domains to ensure growth and integrity. Domain 3 emphasizes training SPs to use their observations, responses, and knowledge to provide feedback on students' observable and modifiable behaviors, ensuring SPs are prepared through repeated practice and directed feedback.

The incorporation of SPs in Chile began in 1995 under the leadership of Dr. Philippa Moore at Pontificia Universidad Católica de Chile.⁷ Later, in 2000, *Unidad de Pacientes Entrenados* (Trained Patient Unit) was established. Subsequently, the use of SPs expanded in the country, and in 2012, Universidad de Chile inaugurated its Clinical Skills Center (*Centro de habilidades clínicas*), which currently includes more than 20 SPs as part of its staff.

Contribution of SPs to SBL

Regarding the contribution of SPs, various studies confirm the need to develop soft or non-technical skills (NTS) in the training and performance of healthcare professionals.^{11,12} NTS are cognitive, social, and personal resources that complement technical skills, enhancing safety and performance in any field of work.¹³ They include communication skills, crisis management, active listening, and ethical problem-solving, among others.¹⁴

NTS can be developed, with SBL being an ideal setting for this purpose,^{15,16} particularly with the assistance of SPs. Moore states that "the closest thing to a real patient is a simulated patient." This contributes to the humanization of care,⁷ defined as the type of assistance that includes respecting and actively listening to the patient, as well as considering the working conditions of the health professional, resulting in more effective and affectionate care.¹⁷

During feedback or guided reflection in SBL, learners analyze their actions and reflect on thought processes, psychomotor skills, and emotional states to improve or maintain their performance in the future.¹⁷ The plan should also include guiding trainees in achieving desired learning outcomes, allowing them to identify strengths and opportunities for performance improvement, which is fundamental for the teaching-learning process.¹⁸

Adequate feedback can help learners improve, correct errors, and progress in their learning; conversely, poor feedback can lead to demotivation, learning blocks, low self-esteem, and loss of confidence when using techniques.⁷ Participants in this reflection process can include peers, instructors, and/or SPs.

SPs are individuals, mostly actors or actresses, who contribute to realism not only through role representation but also through performance assessment from a unique viewpoint—that of the person they represent.⁷ This particularly promotes self-reflection in the learner regarding their performance, thereby positioning SPs in a collaborative role in the context of teaching for self-regulation and meaningful learning.¹⁹

When this guided reflection is provided by SPs, it is typically confined to the performance indicated by the instructor in charge of the simulated activity, generally focusing on communication skills related to interaction, non-technical language in health education, and crisis management, among others.

Characteristics of SPs that Contribute to SBL

It should be noted that not all actors make good SPs. For this role, actors should set aside the prominence typically offered by the stage and immerse themselves in the pedagogical setting.⁷

Several characteristics of acting training are important for the SP role. First, the actor must develop techniques that allow them to connect with emotions while also being able to quickly disengage from them, achieving a neutral state that enables them to face a new simulation.⁷ The new simulation could be part of a standardized sequence or a different scenario.

Second, having the ability to portray a role with great precision and authenticity, while simultaneously being able to step back and observe their own performance and that of the learner without losing concentration.⁷ These characteristics enable SPs to provide effective feedback.

Regarding feedback, just as instructors encourage trainees to reflect on their simulated practice, SPs should also reflect on their own practice. A good acting performance does not ensure effective feedback delivery; therefore, SPs must develop skills that contribute to this by ensuring ongoing training and professional development.⁹

1. Characteristics, Structure, and Modalities of SP Feedback

Regarding the recommended feedback structure, in all cases, and regardless of who is delivering it, planning is essential. The process begins by asking the student how they feel in order to address any potential emotional states of either very low or very high intensity and to help them achieve a balanced or calm state conducive to better learning.²⁰ It continues by asking the learner's self-perception and self-assessment of the experience and their performance. This is followed by observations from peers, SP, and/or the instructor in charge, concluding the session with tasks or agreements for future development.

Below are some characteristics of effective feedback,¹⁸ with corresponding examples:

Specific and focused on observable behaviors: For example, instead of saying "You are being unempathetic," it is more effective to say, "When the patient was talking about the death of their mother, you interrupted with a question about additional family history, which made them feel their story wasn't important."

Timely: Providing feedback during a learning activity: "Excuse me, I don't understand, what is dyspnea?" In this case, it helps the trainee realize at that moment that they are using technical language, incomprehensible to the patient. Feedback can also be provided immediately after the simulated experience: "When you asked about dyspnea, the person (patient) did not understand what you meant; it was too technical for them."

Constructive and positive: Instead of pointing out mistakes, it is important to offer solutions and suggestions on how to improve. Rather than saying, "You are not empathizing," you could say, "A... (name of the character) would have liked to finish their story and have a space to express their emotions. I suggest in a similar future situation, listening to them and attending to their needs. Perhaps saying you are very sorry, offering a glass of water, and then asking if they would like to continue the interview or need a moment. This would have been helpful."

A safe, respectful, and peaceful environment, free from interruptions, should be provided for feedback, ideally on an individual basis. In the case of group feedback, prior confidentiality consent should be considered.

Individuals are more receptive to feedback when they feel they are being listened to and their perspective is respected, which promotes self-assessment and self-analysis.

Finally, regarding SP feedback, different modalities can be found depending on the focus of the educational institution, as well as the experience and preference of the instructor. This article addresses two modalities, each from the position of the SP. One comes from the perspective of the portrayed character and the other from the actor or actress. These will be referred to as feedback modalities A and B, respectively.

In both modalities, the SP prepares a brief script for feedback, including relevant aspects of the skills being evaluated, as defined by the person in charge of the simulation. The script highlights positive behaviors and those that could be improved, from different perspectives.

Depending on the culture and education of individuals, as well as the region or country, this feedback may slightly differ but can maintain a consistent structure.

a) Modality A: Feedback from the character's perspective.

This modality is characterized by being constructed and conveyed in the first person, without abandoning the role. It provides a broader perspective, considering the character's traits such as education level or cultural context, from the experience of the HS or SP.

The intervention of the instructor in this modality is necessary to guide the process. Example: “Mrs. María (character), could you tell Pedro (learner) how you felt about the care he provided?” The scenario continues until the SP completes their feedback.

Examples of feedback in Modality A:

“When you were typing on the computer and asking me questions without looking me in the eyes, I felt that, as a person, I was not important at that moment and that the only valuable thing was the information I could provide. I would appreciate more eye contact next time to feel valued as a person.”

This modality cannot always be employed. For example, when portraying a mental health case where the character may lack awareness or clarity about the interaction, or when representing a role with language or motor difficulties that hinder expression.

b) Modality B: Feedback from the SP’s perspective.

This is expressed in the third person, with the actor abandoning the character and positioning themselves as the HS. Continuing with the previous examples, it would be communicated as follows:

“Regarding the interview, when you were typing on the computer and asking the patient questions without looking her in the eyes, she felt that, as a person, she was not important, and that the only valuable thing was the information she could provide. Therefore, I suggest establishing more eye contact next time so the patient can feel valued as a person.”

In this case, the instructor does not need to moderate the session; the SP can do it themselves, introducing their real name and commenting on what the character felt during the interaction. A clear break marks the change from character to SP, which can be done by changing posture, moving to a different physical location, changing attire partially or completely, or leaving the room and re-entering.

The characteristics of feedback modalities A and B provided by SPs are presented in Table 1, with summaries and dialogues by SPs being presented in Table 2.

Table 1: Characteristics of Feedback Modalities for Simulated Participants.

Modality A: From the Character	Modality B: From the Actor
The Simulated Participant (SP) remains in character and expresses themselves in the first person.	The SP speaks in the third person about the character they portrayed.
The speaker is the patient or participant, although they may somewhat moderate their discomfort or reason for consultation.	The speaker is the actor or individual who performed the role and fully steps out of character.
They retain the essence of their character, including their attitude, educational level, and language, while responding to their context.	They use their own resources and experience as an SP and employ a more technical language.
To provide feedback, the scenario is not closed; rather, within the ongoing setting, the character is asked to take a “pause” to comment on their experience during the care they received.	The scenario is closed with a brief pause to give way to feedback.

<p>The feedback process is facilitated by the instructor, who allows the character to offer observations. The tutor requests that the character reports on the quality of the care provided by the learner.</p> <p>This method is not feasible in some cases, such as when dealing with mental health conditions or situations where the character has difficulty expressing themselves.</p>	<p>The feedback session can be initiated either by the instructor or the SP.</p> <p>It requires the SP to step out of character, creating a clear separation between the role-play and the feedback phase.</p> <p>This method is feasible in all cases with different characters.</p>
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Source: Developed by the Authors.

Table 2: Examples of Feedback Modalities Provided by Simulated Participants

A: Character's Perspective	B: SP's Perspective
<p>(A person with primary education) "At one point, when you asked me about my pain and I started to tell you what was happening, you immediately wrote on the computer. I felt like I was talking to myself, like as a person I didn't matter, and that what was important was my illness, not me."</p>	<p>"When you asked [character's name] about the characteristics of her joint pain and then immediately started writing on the computer, she felt that she was not really important as a person, but rather that what was relevant to you was her condition as an object of study for filling out the form."</p>
<p>"When you turned the computer around to show me the X-ray and explained what is happening to me using the image, it made my situation much clearer."</p>	<p>"When you turned the computer around to show [character's name] the X-ray and explained her condition using the image, it made her situation much clearer."</p>
<p>"Doctor, I felt cared for when you came to get me at the door and, when you noticed my difficulty walking, you brought the chair closer to me."</p>	<p>"When you went to get [character's name] at the door and, noticing her difficulty walking, brought the chair closer to her, she felt cared for."</p>
<p>"It was very helpful when you gave me the diagnosis and drew a picture of what was happening to me, as it helped me understand it better."</p>	<p>"It also helped [character's name] a lot when you provided the diagnosis and drew a picture of what was happening to her, as it helped her understand the situation better."</p>

Source: Developed by the Authors.

CONCLUSIONS

Feedback provided by Human Simulators, also known as Simulated Participants (SPs), who are trained specifically for this role, is increasingly employed in Simulation-Based Learning since it provides a unique perspective to learners and emphasizes a patient-centered approach, i.e., one developed from the perspective of those receiving healthcare. This type of feedback encourages reflection in trainees and can prompt a change in behavior if necessary or reinforce behaviors that contribute to humane and empathetic patient care.

Given the importance of SPs in humanized training for healthcare professionals, it is necessary to implement a continuous training plan. This plan should address new challenges in health and simulation, as well as consider the working conditions of SPs.

This article proposes a method designed to guide both the performance of SPs and educators in the development of simulated scenarios involving standardized patients, as well as the feedback modalities required for students.

It is important to note that there is currently no information regarding which of the two feedback modalities has a greater impact on learning, which opens up the possibility for further research in this area.

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REFERENCES

1. Reyes Martínez MC, Mansilla Sepúlveda J, Muñoz Gámbaro G, Robles Jélvez M. Significados construidos de las prácticas en simulación clínica por estudiantes de enfermería. *Enfermería (Montevideo)*. 2020;9(2):243-254. <https://doi.org/10.22235/ech.v9i2.1931>.
2. Lynch A. Simulation-based acquisition of non-technical skills to improve patient safety. *Semin Pediatr Surg*. 2020;29(2):150906. <https://doi.org/10.1016/j.sempedsurg.2020.150906>
3. Suarez R, Pinzón F. Neuroliderazgo: Simulación de un escenario como parte del proceso de Selección Organizacional. *Rev Esp*. 2020;41(8):17. <https://www.revistaespacios.com/a20v41n08/20410817.html>
4. Navarro O, Ibáñez V, Bofill I. *Enfermeras invisibles*. 2nd Ed. Barcelona: Ediciones B; c2021. Chapter 1, Angélique Marquerite Le Bousier du Coudray: diseñadora del primer maniquí obstétrico; p. 10-15
5. Neri-Vela R. El origen del uso de simuladores en Medicina. *Rev Fac Med UNAM*. 2017;60(Suppl: 1):21-27. <https://www.medigraphic.com/pdfs/facmed/un-2017/uns171c.pdf>
6. Maestre JM, Rudolph JW. Teorías y estilos de debriefing: el método con buen juicio como herramienta de evaluación formativa en salud. *Rev Espanola Cardiol*. 2015;68(4):282-5. <https://doi.org/10.1016/j.recesp.2014.05.018>
7. Moore P, Leighton MI, Alvarado C, Bralic C. Simulated patients in health care training: the human side of simulation. *Rev. méd. Chile*. 2016; 144(5):617-625. <http://dx.doi.org/10.4067/S0034-98872016000500010>.
8. Lopreiato J, Downing D, Gammon W, Lioce L, Sittner B, Slot V, Spain A, editors. *Healthcare Simulation Dictionary* [Internet]. 2nd ed. Rockville: Agency for Healthcare Research and Quality; c2016 [citado 2024 Abr 8]. 50 p. Disponible en: <https://www.ahrq.gov/sites/default/files/publications/files/sim-dictionary.pdf>

9. Lewis, K.L, Bohnert, C.A, Gammon, W.L. et al. Los estándares de mejores prácticas (SOBP) de la Asociación de Educadores de Pacientes Estandarizados (ASPE) *Rev Adv Simul.* 2017;2(10). <https://doi.org/10.1186/s41077-017-0043-4>
10. Comité de estándares INACSL. Estándares de Mejores Prácticas de INACSL: Simulación SM Diseño de Simulación. *Rev Clín Sim Nur.* 2016;12(5):5-12. <https://www.inacsl.org/healthcare-simulation-standards-ql>
11. Navarro F, González S, Gabrielli M. Assessment of non-technical skills in surgery. *Rev. cir.* 2019;71(4):359-365. <http://dx.doi.org/10.4067/S2452-45492019000400359>.
12. Moore P, Gómez G, Kurt S, Vargas A. La comunicación médico paciente: ¿Cuáles son las habilidades efectivas? *Rev méd Chil.* 2010;138(8):1047-1054. <http://dx.doi.org/10.4067/S0034-98872010000800016>.
13. González-Molina M.G, Enciso-Galindo B.V, Arciniegas-Hurtado L.F, Tovar-Arévalo P.A, Bonza-Forero P.I, Arévalo-Peña L.P. Importancia de las habilidades blandas para la empleabilidad y sostenibilidad del personal en las organizaciones. *Rev Enc Sem.* 2021;2(2). <https://doi.org/10.15765/es.v2i2.2646>.
14. Leal-Costa C. El papel de la simulación clínica en el desarrollo de las habilidades de comunicación en los profesionales sanitarios. *Rev Esp Comun Salud.* 2022;13(1):6-8. <https://doi.org/10.20318/recs.2022.6962>
15. Carvalho EC. A glance at the non-technical skills of nurses: simulation contributions. *Rev Lat Am Enferm.* 2016;24. <https://doi.org/10.1590/1518-8345.0000.2791>
16. O’Keeffe DA, Losty M, Traynor O, Doherty EM. Objective assessment of surgical trainees’ non-technical skills: Improved performance following a two-year program of instruction. *Am J Surg.* 2020;220(6):1566-71. <https://doi.org/10.1016/j.amjsurg.2020.04.039>
17. Henao-Castaño AM, Vergara-Escobar OJ, Gómez-Ramírez OJ. Humanización de la atención en salud: análisis del concepto. *Rev Cienc Cuid.* 2021;18(3):74-85. <https://doi.org/10.22463/17949831.2791>
18. Cerdeña E. L, Moya M.E. La retroalimentación como estrategia de mejoramiento del proceso formativo de los educandos. *Rev Atla.* 2019. <https://www.eumed.net/rev/atlante/2019/08/retroalimentacion-educandos.html>
19. García-Jiménez E. La evaluación del aprendizaje: de la retroalimentación a la autorregulación. El papel de las tecnologías. *RELIEVE.* 2015;21(2). <https://doi.org/10.7203/relieve.21.2.7546>
20. Morosini E. Apuntes de Psicología: Una breve expedición a las bases elementales de la Ciencia Psicológica. Sf. <https://psicologiaingresouna.wordpress.com/contenidos/conducta-motivada-y-emocional/emociones/>