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Breaking The Feedback Barrier In Nursing Education: A Qualitative Study Of A Virtual Role-Play Workshop Using The ADAPT Technique

Marina Driemeier Cardoso
Hospital Israelita Albert Einstein
Patricia Luciana Moreira Dias
Hospital Israelita Albert Einstein
Mariana Lucas Rocha Cunha
Hospital Israelita Albert Einstein
Andrea Gomes Costa Mohallem
Hospital Israelita Albert Einstein
Livia Almeida Dutra
livia.dutra@einstein.br

Hospital Israelita Albert Einstein

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Abstract

Background: Feedback is an essential component of health professions education; however, both students and faculty frequently experience discomfort when giving or receiving feedback. Structured educational interventions that address both technical and socioemotional dimensions of feedback remain limited in nursing education. The ADAPT technique is a structured feedback approach that remains underexplored in this context.

Design: Qualitative study based on Kolb's Experiential Learning Theory. Methods: Nursing faculty and students from a private Brazilian nursing school participated in a 90-minute virtual workshop combining theoretical discussion and role-play activities using the ADAPT technique. Ten weeks later, participants attended focus groups exploring their perceptions and experiences after the intervention. The workshop was designed according to Kolb's experiential learning cycle. Data were analyzed using thematic content analysis.

Results: Two central themes emerged: "From Discomfort to the Discovery of Feedback Potential" and "From Challenge to Empathy." Participants reported increased confidence in giving and receiving feedback, improved communication skills, and greater awareness of the emotional and relational dimensions involved in feedback interactions. The ADAPT technique helped reduce anxiety and provided participants with a structured approach for difficult conversations. Participants also described transferring these communication skills to personal and professional contexts beyond academic settings.

Conclusions: A virtual experiential workshop using role-play and the ADAPT technique may improve feedback literacy, communication skills, and relational awareness among nursing students and faculty. Structured feedback training may help foster psychologically safer learning environments in health professions education. Further studies should explore its long-term impact and adaptability across diverse cultural and educational contexts.

1. Introduction

Feedback is a cornerstone of health professions education and plays a critical role in the development of clinical competence, reflective practice, and socioemotional skills. In healthcare training environments, feedback supports performance improvement, professional identity formation, and the development of effective communication skills. Nevertheless, despite its recognized educational importance, feedback is frequently perceived by both students and faculty as emotionally challenging, inconsistent, or insufficiently constructive [1–3].

Previous studies have demonstrated that students often describe feedback as vague, infrequent, or excessively focused on criticism, which may generate feelings of insecurity, unfairness, and anxiety [1–3]. Faculty members, in turn, frequently report discomfort in delivering constructive feedback due to fear of negatively affecting learners' emotions or damaging interpersonal relationships [1]. In our previous

qualitative study involving nursing students and faculty from the same institution, participants associated feedback with emotionally negative experiences and described significant discomfort in both giving and receiving feedback [4]. These findings reinforce the understanding that feedback is not merely a technical educational activity, but also a sociocultural and relational process influenced by emotions, communication patterns, hierarchy, and previous experiences [2, 4].

A growing body of literature suggests that feedback skills can be taught and improved through structured educational interventions [5, 6], although its socioemotional dimension can be challenging to teach. Recent literature has increasingly conceptualized effective engagement with feedback as "feedback literacy," which involves learners' ability to interpret, process, and use feedback constructively within relational learning environments [7–9]. Effective feedback typically involves goal clarification, performance appraisal, reflection, and collaborative planning for improvement [5, 10]. Consequently, several structured approaches have been developed to facilitate feedback conversations, including the sandwich method, R2C2, and the ADAPT technique [5, 11, 12]. Although some of these approaches provide useful structures, limitations remain. For example, sandwich feedback has been criticized for reducing authenticity and creating perceptions of insincerity Von Bergen CW, Bressler MS, Campbell K. The sandwich feedback method: Not very tasty. J Behav Stud Bus 2014;7:1–13.. Similarly, the R2C2 model offers a robust coaching-oriented structure but may be more time-consuming and primarily focused on residency education [12–14].

The ADAPT technique was developed to operationalize structured and dialogic feedback practices for healthcare learners [5]. The acronym represents sequential stages designed to facilitate feedback conversations: Ask the learner to self-assess, Discuss performance in relation to established goals, Ask again for clarification or remaining concerns, and Plan Together future actions and support strategies [5, 15–17]. Unlike traditional unidirectional feedback models, the ADAPT technique promotes collaboration, reflection, learner engagement, and shared responsibility throughout the feedback process [5]. In line with contemporary educational theories, feedback is increasingly conceptualized as a dialogic and collaborative interaction rather than a one-way transmission of information [18, 19]. Structured approaches such as ADAPT may also reduce anxiety and improve learners' receptiveness by reframing feedback as a supportive and growth-oriented dialogue rather than a judgmental interaction [5].

Because feedback involves communication, emotional regulation, reflection, and interpersonal interaction, educational strategies grounded in experiential learning may be particularly effective for feedback training. Kolb's Experiential Learning Theory conceptualizes learning as a cyclical process integrating experience, reflection, conceptual understanding, and experimentation [20, 21]. The model proposes four interconnected stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation Kolb DA. Experiential Learning: Experience as the Source of Learning and Development. Englewood Cliffs, NJ: Prentice-Hall; 1984.. This framework has been widely applied in healthcare education to support the development of communication and socioemotional skills through immersive and reflective learning experiences [20, 22–24].

Role-play and small-group discussions are recognized as effective strategies for fostering communication skills, empathy, and reflective learning in healthcare education [25]. Therefore, we designed a virtual workshop integrating role-play activities, the ADAPT technique, and Kolb's Experiential Learning Theory to support feedback training among nursing students and faculty members at a Brazilian nursing school. This study aimed to explore how nursing students and faculty perceived a virtual feedback training workshop grounded in experiential learning and structured feedback techniques, with particular attention to relational, emotional, and communicative dimensions of feedback interactions. Specifically, we sought to investigate how the intervention influenced participants' perceptions, emotional responses, and experiences related to giving and receiving feedback.

2. Material and methods

2.1. Setting and Design

This study was conducted at a private nursing school in São Paulo, Brazil, established in 1989, and currently has a faculty of 22 members. The school operates on a four-year curriculum, admitting 120 nursing students annually. Over the last three years, the school has actively incorporated formative evaluation into the curriculum and has begun implementing entrustable professional activities. Our preliminary study on feedback perception among students and faculty from the same institution revealed that their beliefs regarding feedback were mostly negative. These perceptions were influenced by past negative personal experiences and shaped by the sociocultural context of a developing country, where honest feedback is often perceived as criticism rather than an opportunity for growth [4]. The narratives also highlighted how relational dynamics influenced behaviors and attitudes, promoting the development of social skills and learning [4]. After analyzing the participants' narratives, we designed a qualitative study to explore whether virtual training focused on conceptual knowledge and practical guidance on feedback would change their perceptions.

This was a qualitative exploratory study informed by Kolb's Experiential Learning Theory. Kolb's stages (abstract conceptualization, active experimentation, concrete experience, reflective observation) were accomplished using variable teaching strategies at different moments: abstract conceptualization was achieved with virtual interactive sessions on basic feedback concepts. Concrete experience consisted of a virtual role-play activity during the online session, where the ADAPT technique was practiced in pairs. Active experimentation occurred during a 10-week interval, when participants applied the acquired knowledge to their daily activities, and reflective observation was achieved with virtual focus groups after 10 weeks, when they shared their personal experiences and reflections. Focus group narratives were interpreted using thematic content analysis. Figure 1 summarizes how educational strategies were integrated into Kolb's Experiential Learning Model.

2.2 Ethical considerations

Ethical approval

for the study was granted by Hospital Israelita Albert Einstein Institutional Review Board (number 4932038). All participants were consented and informed about the study's objectives, procedures, potential risks, and benefits. This consent also included video recording permission. Participation was entirely voluntary. Questionnaire data were anonymized, and the video recordings were securely stored in cloud accounts within the Hospital Israelita Albert Einstein database, with access limited to the research team.

2.3. Participants and data collection

This study used a convenience sample of faculty and students from Albert Einstein Nursing School, selected by the Dean's Office and invited to participate via email. All participants were invited to a 90-minute online workshop on feedback, followed by a ten-week interval and subsequent virtual focus groups. The sample was divided into three groups: one faculty group (n = 5) and two student groups (n = 4 and n = 8). All participants provided consent through electronic questionnaires, and additional demographic information, such as age, gender, and educational background, was also collected (questionnaire available in supplementary file). Since the study was conducted during the COVID-19 pandemic, all sessions were held virtually.

The student's group consisted of 9 participants being 7 females, with ages ranging from 18 to 21, with an outlier of 51 years of age. All faculty were white and hold master's degrees, while three hold PhD. Ages in this group ranged from 27 to 51. Among the faculty, there was a male predominance consisting of 60% of our sample.

Table 1
Demographic information and educational background from study's participants

Category	Students n (%)	Faculty n (%)
Gender identity		
Female	7 (77,8)	2 (40)
Male	2 (22,2)	3 (60)
Age		
18–22	8 (89,9)	0 (0)
23–33	0 (0)	1 (20)
34–44	0 (0)	3 (60)
> 44	1 (11,1)	1 (20)
Ethnicity		
White	8 (89,9)	5 (100)
Black	1 (11,1)	0 (0)
Formal education		
Master Degree	0 (0)	2 (40)
PhD	0 (0)	3 (60)

2.4 Workshop on feedback

The workshop consisted of a 90-minute Zoom meeting, divided into a 60-minute interactive talk for theoretical background on feedback, followed by 30 minutes of role-play activity. Two workshop sessions were delivered by the same neutral, experienced professor, one for faculty and another for students. Language and role-play scenarios were adapted to each group of participants' environment and challenges in daily life. Our goal was to provide students and faculty with specific information and a useful technique for giving effective feedback.

The interactive talk began with a discussion on feedback definition, its influential factors, its relevance for the development of socioemotional competences, and how it co-modulates the learning environment. This phase enabled interactive discussions, facilitating the assimilation of new concepts by both students and faculty. During the talk, the ADAPT technique was presented to the participants. We selected the ADAPT technique because it offers two clear, distinct steps, the discussion and plan together, providing engagement and reflection, and also because of its mnemonic acronym.

The role-play activity was designed as follows: students were paired and sent to breakout rooms with two narrative vignettes, and they enacted feedback using the ADAPT technique. They had time for two

rounds during which they alternated roles as feedback providers. Faculty received a single vignette, and a dyad enacted the professor-student scenario for the group, which then provided comments on their performance. All narrative vignettes are available in the Supplementary file.

Following the workshops, students and faculty were encouraged to apply the knowledge gained in real-life settings. Due to the individualized nature of this application period, extensive data collection was not feasible. Notably, at Albert Einstein Nursing School, regular feedback sessions are held every four weeks. This institutional schedule allowed participants to implement the newly acquired techniques at least twice before participating in the focus groups.

2.5 Focus groups

After 10 weeks, all participants were invited to attend an online focus group session. One session was held for faculty members (n = 5), while two sessions were conducted for students (n = 12 in total). All focus groups were facilitated by the same experienced qualitative researcher and lasted approximately 30 minutes each. During the sessions, both students and faculty had the opportunity to share their experiences and reflect on how they had integrated the ADAPT technique into their daily lives. Approximately 48% of participants attended the post-training focus groups.

The following questions were explored in all focus groups: What did you learn from the feedback training? How has your experience been in giving and receiving feedback after the training? Were there any noticeable behavioral changes? If so, please describe them. Did the training have any impact beyond your academic life?

Data collection continued until thematic sufficiency was achieved, with no substantially new interpretive insights emerging from subsequent focus group discussions. This approach was guided by the understanding that further interviews were unlikely to unveil additional information or perspectives, thus ensuring that the data collected were sufficiently rich and comprehensive for analysis Fusch PI, Ness LR. Are we there yet? Data saturation in qualitative research. Qual Rep 2015;20(9):1408–16.DOI: 10.46743/2160-3715/2015.2281.

2.6 Data analysis

The database for content analysis was extracted from the recorded focus group sessions. Recording and sessions' logbook ensured that data reflected participants' responses and prevented missing information. All focus group sessions were transcribed to text manually, and the researcher (MDC) transcribed each participant's speech in full.

The interview transcriptions were initially reviewed to organize the data, aiming to understand the context and identify fundamental units of analysis, such as words, phrases, or paragraphs. In the next phase, coding and categorization were performed, with relevant segments of the transcription being coded openly, allowing categories to emerge organically as patterns and trends became apparent in the data. The findings were then interpreted, and inferences were drawn based on these patterns. The

researchers focused on addressing the research questions and formulating conclusions about the analyzed content.

The coding process was carried out by two independent researchers (authors MLRC, PLMD), who classified and described content units, enabling new themes and categories to emerge organically from the data Bardin L. L'Analyse de contenu. Paris: Presses Universitaires de France; 1977.. Strategies to enhance trustworthiness included investigator triangulation, independent coding by two researchers, consensus meetings to resolve discrepancies, and reflexive discussions throughout data analysis. When discrepancies arose, a third researcher (AGCM) was consulted to confirm the reliability and coherence of the findings [28].

Throughout this process, the researchers' experience as faculty members and scholars in student-teacher relations played a crucial role, as subjectivity is inherent to human interaction and can serve as a valuable tool in actively co-constructing both data and results [29].

Data analysis focused on the participants’ speech; the images were not considered for analysis. Collection and analysis were carried out simultaneously.

3. Results

Students' and faculty's perceptions of feedback are revealed through two categories: From Discomfort to the Discovery of Feedback Potential, and From Challenge to Empathy. This emerged from content analysis of the focus groups.

The category “From Discomfort to the Discovery of Feedback Potential” reflects the initial concerns participants shared about their ability to provide constructive feedback and contribute to others' development. They reflect on a new perspective after training, wherein students exhibit increased openness to feedback and a more profound comprehension of its purpose. Despite persistent apprehension and reluctance regarding the reception of feedback, after training, students demonstrated greater acceptance of performance assessment and feedback. Both students and faculty reported an increased self-confidence in providing and receiving feedback, mostly attributed to a framework that provides a safe environment for discussing flaws and points needing improvement. However, some residual insecurity remains present in their speech.

"From Challenge to Empathy" regards the perception, especially among the students, of the feedback provider’s insecurities and vulnerabilities. There is also evidence of concern for feedback receivers and their state of mind, defining empathy within the feedback process. The feedback training fostered not only technical skills for giving and receiving feedback but also promoted empathetic, reflective, and trust-based communication between students and faculty, extending its impact beyond academic settings into personal and professional spheres. Participants developed a greater capacity for empathy, recognizing the emotional dynamics involved in feedback. This awareness helped shift feedback from being perceived as personal criticism to being understood as a tool for growth.

3.1 From Discomfort to the Discovery of Feedback Potential: A Look at Training

The concrete experience of training in feedback provided both students and faculty with an opportunity to reflect on how they had previously engaged in this activity. Through this reflection, they identified feelings of fear, anxiety, and the challenges associated with giving and receiving feedback, as we have previously described in our exploratory study [4].

"Many people have difficulty providing feedback due to fear of the other person's reaction. I believe I still faced this challenge because we need to deliver feedback in a professional manner, not a personal one. For example, if a person has a certain personal behavior, I might feel inclined to point that out, but instead, I should focus on their professional conduct and what they need to improve when working in a team. I find myself hesitating because I think I still need to develop the maturity to give and receive feedback effectively. Additionally, the way feedback is given to me can sometimes lead to a less-than-ideal reaction on my part."

(2nd-year student)

After feedback training, students and faculty were encouraged to connect concepts of effective communication, the importance of constructive discourse, and strategies for managing feedback with their practical experiences and were prompted to engage in structured thinking. Students highlighted how structured feedback and a useful acronym helped them to better communicate.

"I remember there was a useful acronym to help structure feedback, and I think it really helped in organizing what you want to say to the person. You don’t have to stress about 'Oh my God, how do I say this? How do I bring up this topic?' I think having this structure helps a lot in composing what we want to say. That’s really beneficial as well."

(1st-year student)

One of the aspects that the training significantly improved was approaching feedback with a more open mind, both in giving and receiving it. (...) I realized that I used to give feedback that was a bit too brief or didn’t fully explain things, and I think being more open-minded about how you give feedback, considering how the person will respond and how they might understand it, has helped a lot.

(2nd-year student)

Participants’ perceptions of the training revealed that the workshop improved both their verbal communication skills and their confidence in giving feedback. Another interesting aspect noted by some students was that, by gaining a better understanding of the stages and importance of feedback, they felt more at ease in receiving feedback as well.

"I participated in some training sessions that emphasized highlighting effort, opportunities, and so on. It never really made sense to me, but after the training, I truly understood why I need to evaluate myself and recognize changes within myself. (...) Incorporating all of this into daily practice is an excellent strategy to help us truly understand that feedback brings confidence in comments, confidence in relationships. It fosters an empathy that, in my opinion, is often lacking, and even brings a degree of maturity."

(2nd-year student)

"I experienced significant improvement and much greater confidence in giving feedback. I'm still somewhat hesitant about receiving it, but I managed to express myself passively, actively, and deliver feedback coherently to the other person, and I now feel very secure."

(2nd-year student)

For faculty, the training helped systematize important aspects, such as awareness, understanding of others, and the need to individualize part of the feedback provided to students. After the training, faculty felt more confident, although concerns about the individualization of the process remain. They hold themselves accountable for offering feedback that can genuinely lead to significant change for the student, fostering a positive expectation regarding the impact of this action. However, even after the training, they still feel uncertain about the possibility of making mistakes during the process.

I gained more confidence in giving feedback because this was a significant concern of mine. On one hand, I feel secure, but on the other hand, I am somewhat apprehensive about giving feedback... (...) that is the same for everyone. A stamp. Something very homogeneous... Because I have chosen, from my perspective, these items as priority items in a specific discipline. So I keep wondering: is this the best approach? So… while I feel more secure, I also think, "Is this effective?

(Faculty member)

I keep wondering, "Am I managing to individualize this feedback?" Because I believe the importance of this feedback to us is clear and how much it impacts the student's life. Therefore, we are cautious about making it homogeneous for everyone. [...] I do feel more secure with this training, but I also end up demanding more from myself to focus increasingly and add something extra for the student.

(Faculty member)

3.3 From Challenge to Empathy: the transformation of the self

In addition to increasing confidence in one's ability to give and receive feedback, the training developed communication skills between students and faculty that extend beyond the feedback process, with potential applications in other areas of professional life. The systematization of feedback delivery

allowed students to feel comfortable addressing both criticism and praise with their peers appropriately. Feeling understood is crucial for those providing feedback, removing the perception that the message is personal, which also contributes to a greater sense of security in the process.

A particularly important point is recognizing that by highlighting an area for improvement in a peer's feedback, one is affirming their potential to achieve a higher level of performance. From this abstraction of the purpose of feedback, the student feels part of the other's growth process.

...because even if it's something negative or positive, there must be a way to communicate it. I found this is important and it helped me a lot in formative assessment, even in approaching others and speaking in a certain way, ensuring they understand what we are saying and recognizing that we are not trying to offend. However, it would also be important for the other person to receive training so they can convey feedback in this manner as well... (...) making communications clearer. So, I feel that sometimes a lack of communication is quite problematic.

(1st-year student)

What changed with the training was my understanding that, when I am providing constructive criticism or suggesting improvements, it helps to make it clear to the person that I am not doing this out of malice. It's not about "I don't like you, so I will speak poorly of you in my feedback." It's not about that. I see potential in you and believe you are someone who can achieve things, and that's why I'm giving you this feedback so you can improve.

(1st-year student)

Students recognized that practicing empathy in this process is essential after training on feedback. Moreover, they understood that the training is a means to learn how to give and receive feedback. However, they also acknowledge that the process remains challenging, given that although they have undergone the training, students are not always prepared for this activity.

It's about trying to put myself in the position of the person giving the feedback. Perhaps they... due to lacking the experience we have, might not know how to convey it to someone else. I believe everyone should undergo feedback training. Let's organize one and include everyone! Everyone needs to have it!

(2nd-year student)

I think there is still some apprehension or fear about bringing up negative points to the people I'm providing feedback to. Because, you see, I've gone through the training, I know what I'm thinking, I know what the right thing to do is, and I know my true intentions, but the other person doesn't. They might think I'm speaking to offend them, you know? So, I don't know how the person will receive the feedback, even though I know my intentions are correct and that I'm trying to do everything right.

(1st-year student)

The training experience allowed students to recognize the emotions involved in feedback, and through these reflections, they were able to observe and intellectually organize the actions and reactions that emerge from the process with others. The intentionality and validation of different perceptions in giving and receiving feedback led students to reflect on their own emotions and interaction experiences, aligning theory with practice, and allowing them to explore new situations grounded in empathy.

I have managed to develop a bit more empathy towards others. I believe the training could be expanded, as it would greatly help [with emphasis] in this regard. Bringing in a bit more empathy and placing oneself in the other's shoes is important. Not everyone is having a great day, and I shouldn't just say, "Wow, you were really rude to me," right? I have been able to apply this extensively in my daily life, not only at university and in the workplace but also in my personal sphere. I think this is very... very valuable... it gives me some hope that better days are coming. Because I am doing my part, and knowing that others have also undergone the training, including people from my own class, comforts me (...) it brings me some comfort and hope for change.

(2nd-year student)

For faculty, the training had similar effects by promoting a systematic understanding of the feedback process. They also recognized that this learning could extend beyond the formative assessment or feedback process itself. Learning strategies to improve the feedback process made them more specific in this action, expanded their perception of the relationships established, and possibly enhanced the trust relationship with students, turning this process into a two-way street of giving and receiving feedback.

"You take this into your daily life and end up trying to have more effective communication and provide more direct feedback in your personal life as well. What I've noticed is that when we start giving more specific feedback, students feel more comfortable providing feedback to us as well. Because when you give feedback, you position yourself as part of the knowledge-building process, they feel comfortable giving feedback too. It moves away from the authoritative model of "the professor commands and I obey, the professor speaks and we follow." It's not like that. So they end up engaging more and evaluating themselves as well."

(Faculty member)

I believe I am applying this to personal relationships and other types of interactions. Consequently, we end up communicating much more effectively, using a gentle and empathetic language, which yields positive results in responses and understanding, especially when addressing issues or conflicts. I find this to be a highly relevant experience that extends beyond the classroom. We are transforming relationships in general, not just those within the classroom.

(Faculty member)

4. Discussion

In this study, we found that participants' perceptions of feedback shifted significantly after attending a structured training workshop grounded in Kolb's Experiential Learning Theory [21–23]. The integration of the ADAPT feedback technique within the workshop appeared to enhance both students' and faculty members' comfort, confidence, and competence in giving and receiving feedback. Feedback is frequently associated with emotions such as fear, judgment, unfairness, and insecurity [4], which may negatively influence learners' engagement with the process. In this context, the transition from discomfort to greater acceptance observed among participants highlights the potential of targeted educational interventions to reshape deeply rooted attitudes and behaviors related to feedback in healthcare education. These findings are particularly relevant because feedback is inherently a sociocultural phenomenon, and prior personal and educational experiences may strongly influence how both students and faculty perceive and engage in feedback interactions [4]. Our findings further suggest that the online workshop, which combined theoretical instruction with role-play activities, provided an effective experiential learning environment that facilitated both conceptual understanding and practical application. Additionally, the structured nature of the ADAPT technique may have contributed to psychologically safer feedback interactions by reducing ambiguity and minimizing interpersonal threat, findings that align with previous literature on psychological safety in healthcare education [4, 6, 10, 11, 31–36]

An important contribution of this study is its focus on training individuals in feedback skills, an area that remains relatively underexplored in health professions education. Traditionally considered a soft skill, feedback is increasingly recognized as an essential competence for professional development, particularly in fostering social-emotional skills crucial for healthcare professionals [6, 10, 11]. The ADAPT technique proved particularly beneficial for participants, especially students [5]. They found that its structured format reduced anxiety and facilitated feedback, promoting effective communication and reflection. Fears and misconceptions surrounding feedback often led to psychologically maladaptive behaviors [4, 32]. In workplace settings, supervisors may hesitate to provide feedback due to concerns about negative reactions, such as stonewalling, anger, or emotional distress Sargeant J, Lockyer JM, Mann K, Armson H, Warren A, Zetkulic M, et al. The R2C2 model in residency education: How does it foster coaching and promote feedback use? Acad Med 2018;93:1055–63.. Training in feedback techniques has the potential to disrupt these entrenched patterns by equipping individuals with the ability to acknowledge and manage negative emotions, reframe fear and criticism constructively, set achievable goals, build support networks, and implement self-reward mechanisms—key elements contributing to the success of the ADAPT approach Sargeant J, Lockyer JM, Mann K, Armson H, Warren A, Zetkulic M, et al. The R2C2 model in residency education: How does it foster coaching and promote feedback use? Acad Med 2018;93:1055–63.DOI: 10.1097/ACM.0000000000002131.

We also found that students better understood the multidimensionality of feedback and developed an appraisal for the process of giving and receiving feedback, a deeper understanding of its purpose, alongside increased acceptance of performance evaluations. Students also emphasized the importance

of empathy within the feedback process, recognizing feedback not merely as criticism but as an opportunity for development, changing previous perceptions. Although the training increased their confidence, students continued to perceive the process as difficult and felt inadequately prepared for demanding situations, highlighting that feedback learning must be a continuous process.

One particularly interesting finding of this study was the application of Kolb's Experiential Learning Theory to the design of a virtual training program combining role-play activities with subsequent online focus groups. Kolb's model encourages reflection on the dynamic and experiential nature of learning and feedback processes [21, 24] and has previously been applied as a theoretical framework in virtual educational interventions [36]. Within this context, participants appeared to develop elements of feedback literacy, particularly greater engagement in feedback conversations, improved emotional regulation, and an increased ability to interpret and use feedback constructively [7, 39, 40]. Although the fully virtual format may have contributed to a lower number of participants in the later stages of the program—a challenge commonly described in virtual courses and MOOCs, particularly following the educational shifts observed during the COVID-19 pandemic—we believe the narratives obtained remained rich and meaningful, demonstrating that virtual educational experiences can effectively influence attitudes and behaviors [41–43]. Furthermore, our findings suggest that online role-play using realistic simulated scenarios may provide an effective repertoire for developing socioemotional and communication skills, supporting its use as an initial strategy for feedback training in healthcare education.

Faculty training on feedback, as described in the literature, highlights workshops as an effective method for improving skills and creating a healthy learning environment Kim B, Rajagopalan A, Tabasky EM, Reddy SS, Topor DR. Sharing perspectives on feedback: a combined resident-faculty workshop. BMC Med Educ 2022;22:188.. Faculty often report inadequate training and an incomplete understanding of best practices for providing feedback, despite the availability of practical guides Moroz A, King A, Kim B, Fusco H, Carmody K. Constructing a shared mental model for feedback conversations: Faculty workshop using video vignettes developed by residents. MedEdPORTAL 2019;15:10821.. This study provides a more complete and detailed approach on faculty training and perception and highlights some concerns after training, such as how to individualize feedback for students. We believe that training both faculty and students using the same structured technique may have facilitated mutual understanding of expectations during feedback interactions, distinguishing this intervention from previous studies in the literature. Nonetheless, we acknowledge that feedback is a tango [44] that should be danced together, and everyone needs to balance structured frameworks with flexibility, ensuring feedback remains specific and meaningful.DOI: 10.15766/mep_2374-8265.10821.

One of the major challenges in feedback, particularly in health education, is the ability to engage participants meaningfully and stimulate reflection, especially when conducted in virtual settings [17]. The interactive role-play activities, combined with structured phases of reflection and planning, were a way to break through the challenge of the virtual approach, allowing participants to engage deeply with the feedback process. By using the ADAPT technique, they reported an increased sense of responsibility

for their learning and a greater capacity to reflect on feedback critically. This suggests that a well-structured and intentional virtual format can effectively promote engagement and reflection. Future research could include a comparative study with in-person feedback training sessions.

Several limitations of this study should be acknowledged. The sample size was relatively small, with only five faculty members and nine students participating, limiting the generalizability of the findings. Furthermore, the homogeneity of the participants, all from a single nursing school, limits the study's applicability to other contexts or disciplines within healthcare education. It is important to note that the focus groups, conducted after only ten weeks, may not fully capture the long-term effects of the feedback training, as the skills participants developed were still being refined at that time. The long-term sustainability of the changes observed remains an open question. Finally, the cultural context of Brazil, where feedback may be perceived as criticism rather than constructive, could also influence the results [4]. Future research could explore how feedback training is perceived in different cultural settings and among a more diverse group of healthcare professionals.

5. Conclusion:

In conclusion, this study highlights the potential of structured feedback training, such as the ADAPT technique, to improve how feedback is perceived, interpreted, and delivered in health professions education. By reducing anxiety, fostering empathy, and providing clear frameworks for feedback, these workshops can help build a more supportive and effective learning environment. Future studies involving larger and more diverse samples, along with extended follow-up periods, are essential to comprehensively assess the long-term impact of such interventions on healthcare education and professional practice.

Declarations

Declarations

6.1 Ethics approval and consent to participate

Ethical approval for the study was granted by Hospital Israelita Albert Einstein Institutional Review Board (number 4932038). All participants were consented and informed about the study's objectives, procedures, potential risks, and benefits. This consent also included video recording permission. Participation was entirely voluntary.

6.2 Consent for publication

Not applicable

6.5 Funding

The authors declare no funding source

Author Contribution

Marina Driemeier Cardoso: Conceptualization, Methodology, Investigation, Data Curation, Writing - Original Draft, Visualization, Project administration; Patrícia Luciana Moreira: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Data Curation, Writing - Review & Editing; Mariana Lucas da Rocha Cunha: Conceptualization, Methodology, Validation, Formal analysis, Writing - Review & Editing, Supervision; Andrea Mohallem: Methodology, Writing - Review & Editing, Supervision; Lívia Almeida Dutra: Conceptualization, Methodology, Validation, Writing - Review & Editing, Visualization, Supervision, Project administration.

6.7 Acknowledgements

Not applicable.

Data Availability

The datasets generated and analysed during the current study are not publicly available due to risk of compromising privacy and identity of the subjects but are available from the corresponding author on reasonable request.

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45. Final editorial review. references and in-text citations were checked for consistency. Remaining suggested refinements focused primarily on academic fluency, conceptual precision, and deeper integration of feedback literacy, dialogic feedback, and psychological safety concepts.

Figures

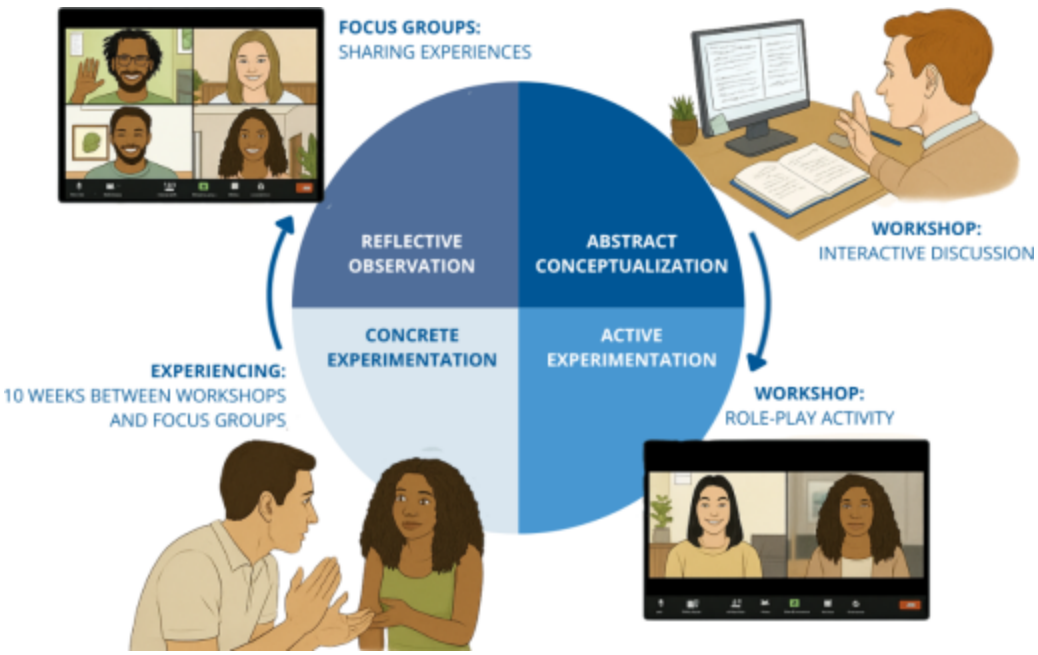


Figure 1

Kolb's Experiential Learning Model applied to the study

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