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# Students and Clinical Teachers' Experiences About Productive Feedback Practices in the Clinical Workplace from a Sociocultural Perspective

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**Abstract:** For feedback to be productive, it relies on the interactions of participants, design elements, and resources. Yet, complexities in clinical education pose challenges for feedback practices in students and teachers, and efforts to improve feedback often ignore the influence of culture and context. A recent sociocultural approach to feedback practices recognized three layers to understand the complexity of productive feedback: the encounter layer, the design layer, and the knowledge layer. This study explores the sociocultural factors that influence productive feedback practices in clinical settings from the clinical teacher–student dyad perspective. A cross-sectional qualitative study in a physiotherapy clerkship involved semi-structured interviews with ten students and eight clinical educators. Convenience sampling was used, and participation was voluntary. Employing thematic analysis from a sociocultural perspective, this study examined feedback practices across the three layers of feedback practices. The analysis yielded different elements along the three layers that enable productive feedback practices in the clinical workplace: (1) the feedback encounter layer: dyadic relationships, mutual trust, continuity of supervision, and dialogue; (2) the feedback design layer: enabled learning opportunities and feedback scaffolding; (3) the knowledge domain layer in the clinical culture: Growing clinical experience and accountability. In the context of undergraduate clinical education, productive feedback practices are shaped by social–cultural factors. Designing feedback practices should consciously integrate these components, such as cultivating relationships, fostering guidance, enhancing feedback agency, and enabling supervised autonomy to promote productive feedback.

**Keywords:** feedback; clinical education; sociocultural; clerkships

## 1. Introduction

Well-designed feedback practices are critical for learning and performance in the clinical context. Motivation, opportunities for learning, and the means to act on feedback are paramount components of these practices [1]. For feedback to be productive, students not only need to receive feedback but also need to understand it, accept it, and act upon it

as proactive learners [2]. Educators need to align the curriculum and assessment design to facilitate the incorporation of feedback into students' learning experiences [3]. In addition, in line with the view of learning as a socially mediated process, feedback is not merely an individualized exchange of information and is influenced by social and cultural factors [4]. Productive feedback practices occur when the actions of the participants, the components of the feedback design, and the resources synergize effectively [5]. However, these synergies can be challenging for students and teachers in complex educational contexts, such as the clinical learning environment.

The clinical workplace-based learning context has a unique culture, and it is an integral and essential component in health professions education training. In this context, students have opportunities to learn from experience with real patients. Moreover, understanding feedback practices within clinical learning environments requires acknowledging both the sociocultural mechanisms that shape these practices and the individual as essential components, as working and learning, are understood as an integrated experience [6,7].

In recent years, there has been a tendency to identify the features of feedback practices that influence the understanding, acceptance, and use of feedback. However, efforts to enhance productive feedback practices in clinical learning often target universal or context-free aspects, for example, the characteristics of the feedback message itself, neglecting the impact of the learning context and culture [8]. Without integration into a supportive learning culture, feedback is unproductive, regardless of quality [8]. Studies using a sociocultural perspective on feedback in clinical education identified, for example, that teacher and student characteristics, interpersonal dynamics, and factors like observation, feedback receptivity, and feedback-seeking behavior can either facilitate or hinder the use of feedback [9].

A contemporary approach to feedback practices in higher education, employing a socio-cultural perspective, has delineated epistemic relations (how knowledge is organized) and social relations (how interactions are structured) across three interconnected layers [10]. The first is the feedback encounter layer, where feedback practices are shaped by the interplay among participants and knowledge resources. The second is the (course) design layer, which entails arranging teaching and learning elements to create feedback opportunities as a framework for feedback implementation. The third is the knowledge domain layer, which elucidates the connections between cultural tools, social conventions, and contexts, influencing feedback opportunities [10]. Each layer encompasses a range of mechanisms explained by epistemic and social relations, elucidating how feedback practices are productive (Figure 1).

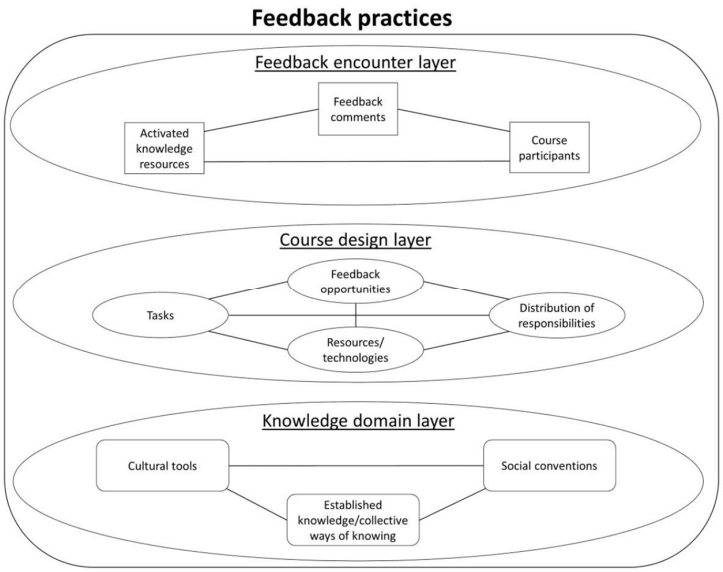


**Figure 1.** The three-layer descriptive model of the constitutive relations of productive feedback practices. Reproduced with permission [10].

The present qualitative study explored sociocultural influences on productive feedback practices in clinical workplace-based contexts, focusing on their effects on students and clinical educators. This study seeks to address two research gaps. Firstly, in understanding sociocultural perspectives on the impact of feedback practices in clinical workplace-based learning environments [11]. Secondly, in addressing the need for more research on feedback encounters involving the student–teacher dyad in situ [12]. This study builds on the recent approach of the sociocultural theory of learning of Esterhazy (2018) to comprehend feedback practices and use that approach to understand the complexity of feedback in the clinical workplace [10]. Additionally, it describes design factors that enable productive feedback practices. Therefore, the research question is: Which sociocultural factors influence productive feedback practices within the clinical workplace from the experience of students and clinical educators?

## 2. Materials and Methods

### *2.1. Study Design and Setting*

A cross-sectional qualitative study was conducted in the context of the fifth year of the undergraduate physiotherapy program, corresponding to the clinical clerkship in a five-year program. The clerkship lasts one year, during which students must rotate through different clinical placements every six or seven weeks. The present study used a pragmatic qualitative approach to describe and understand the experiences of clerkship students and clinical educators regarding feedback practices within clinical settings. A pragmatic approach focuses on practicality and aims to comprehend and describe a phenomenon, process, or perspective of individuals [13].

### *2.2. Participants*

All clerkship students and clinical educators from the Physiotherapy Program at the Pontificia Universidad Católica de Chile were invited to participate in this study by email. Convenience sampling was used. Participation was voluntary. All participants signed an informed consent detailing the project's purpose, the type of information to be collected, procedures, confidentiality protection, and the option to revoke consent without the need for explanations.

### *2.3. Data Collection*

Semi-structured interviews were conducted with students and clinical educators to capture lived experiences and gain an understanding of their perspectives regarding feedback practices within the clinical context. We chose individual interviews because they allow a deeper exploration of personal experiences and cultural nuances.

An interview scheme was developed with open-ended questions, to encourage participants to share their personal experiences related to feedback experiences during clerkships and to provide successful feedback examples. Some of the questions were: "I want you to recall a moment when you felt that the feedback experience with a student was effective for their learning. How was this experience? What made this feedback effective, that is useful for future action and improvement? Can you remember any other examples?" "Can you describe a clerkship where you had a good experience with feedback and felt that feedback was effective for your learning?" "How would you describe the influence relationships on the effectiveness of feedback within the clerkships?" "Can you tell me how feedback usually occurs during clinical practice?".

Two researchers conducted the interviews remotely, using the Zoom® platform during June–October of 2022. Student interviews were conducted by J.O., who did not know or had any relationship with students, and I.V. conducted clinical educator interviews. The interviews were audio-recorded for subsequent verbatim transcription by a research assistant. All interviews were conducted in Spanish.

### *2.4. Data Analysis*

A thematic analysis was conducted, enabling the description and interpretation of collected information [14]. After conducting interviews, the transcripts were reviewed by two readers to gain familiarity with the data. Then, initial open codes were generated with the first two transcripts and then discussed within the team, who agreed on a list of codes based on the three-layer model that was used to analyze all transcripts. Two authors coded all transcripts separately. The data analysis involved the entire research team to discuss and refine the results. Codes were organized into potential themes, using the three-layer sociocultural approach to feedback practice by Estrehazy et al. as a sensitizing lens [10]. The authors used ATLAS. ti V9 to manage data throughout the analysis.

### *2.5. Reflexivity*

All authors ongoing a reflexive process consistently examined how our backgrounds, assumptions, and experiences might shape the data collection and analysis. Reflexivity enabled us to navigate the complexities of interpersonal dynamics and ensured a more nuanced and empathetic understanding of the participants' experiences and narratives.

This study was approved by ID 210326003 and submitted for approval to the Social Sciences, Arts, and Humanities Ethics Committee of the Pontificia Universidad Católica de Chile. The authors used the Standards for Reporting Qualitative Research (SRQR) [15] and the Consolidated Criteria for Reporting Qualitative Research (COREQ) [16] to improve the quality of reported qualitative results.

## 3. Results

A total of ten clerkship students (5 female, M = 23.5 years, SD = 0.9) and eight clinical educators (5 female, M = 38.3 years, SD = 8.9) participated in this study. Interviews lasted approximately 45 min.

The analysis yielded different elements along the three layers that contribute to productive feedback practices in the clinical workplace [10]. In the feedback encounter layer, the dyadic relationship, mutual trust, continuity of supervision, and dialogue are crucial components of productive feedback practices. In the feedback design layer, elements such as enabled learning opportunities and feedback scaffolding enhance productive feedback. In the knowledge domain layer, the growing clinical experience and accountability are aspects that influence feedback practices. Formative workplace-based assessments, dialogue, and continuity of supervision are intertwined in more than one layer of feedback practices (Figure 2). Results are presented with illustrative quotes and encompass the variety of participants of this study.

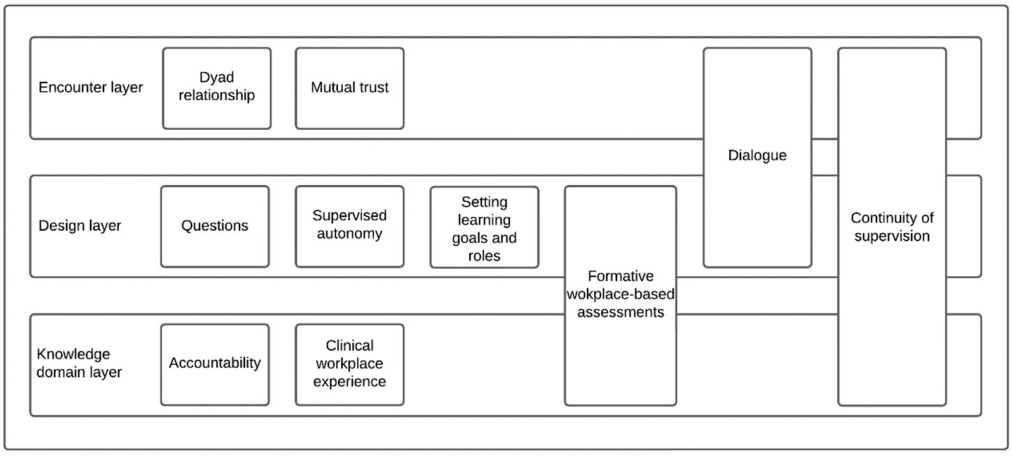


**Figure 2.** The three layers that are involved in feedback practices in clinical education.

### *3.1. The Feedback Encounter Layer: Dyadic Relationship, Mutual Trust, Continuity of Supervision, and Dialogue*

Cultivating a dyadic relationship significantly influences productive feedback practices. From the student's perspective, a close relationship enables clinical teachers to understand them, and therefore, the supervisor knows "what to say and how to say it" (Student 2). Mutual trust is based on the dyadic relationship, and it is a crucial aspect of building a continuity of guidance and supervision during clerkships.

> *"Building this trust that lasts for six weeks is what makes feedback effective. I think the presence of the teacher, communication, and establishing bridges of trust make feedback effective."* (Clinical Teacher 1).

Continuity of supervision and guidance are key factors for productive feedback because they enable feedback uptake. To confirm that feedback impacts performance, teachers emphasize the need to guide students to repeat tasks or expose them to similar situations to demonstrate improvements.

> *"As I mentioned, if they [students] lacked something in a previous opportunity, you provided feedback, and you expect them to do better next time. So, it's a constant process of exposing them to certain tasks, always striving for improvement and mastery of certain aspects."* (Clinical Teacher 5).

Both clinical teachers and students recognize dialogue as a crucial factor influencing productive feedback encounters. In conversations, there is a two-way communication that promotes connection, trust, and reflection. Creating time for conversation allows for establishing a relationship, enabling a two-way feedback exchange and improving feedback responsiveness. The supervisor's willingness to engage in dialogues is crucial and impacts the ability of students to deal with feedback.

> *"The openness of the clinical teacher to dialogue is crucial. Some clinical teachers may not engage in conversations, making it challenging to establish a good relationship from the beginning. When a clinical teacher provides feedback, but I don't feel comfortable or trust them, it hinders my ability to respond to the feedback. On the other hand, if it's a clinical teacher with whom I have already had positive conversations and established a good rapport, receiving constructive feedback becomes easier."* (Student 7).

Conversations that blend clinical-related topics with more everyday aspects allow bonding and are highly valued by students and clinical teachers.

> *"The best feedback I received was during the clerkship where I had a closer and more personal relationship with my clinical teacher. This allowed us to connect more on a daily basis, especially regarding feedback. I think that was the best feedback experience I had this year."* (Student 3).

### *3.2. The Feedback Design Layer: Enabled Learning Opportunities and Feedback Scaffolding*

The clinical setting offers countless opportunities for feedback, some of which are organized by the study program and recognized by both teachers and students. Direct observation, case presentations, questions, assessments, and self-assessments are highlighted as feedback opportunities by participants in this study. Questions are a recognizable learning opportunity. Participants recognize two different types of questions, and both enhance feedback conversations. The first type refers to questions regarding the disciplinary knowledge that are used to clarify concepts or make clinical decisions, named here as disciplinary questions. The second type includes questions about performance or feedback questions. Disciplinary questions enable learning opportunities by enhancing dialogue and reflection because "When a student asks something, that question leads to a very engaging conversation." (Clinical Teacher 2). For students, asking disciplinary and feedback questions demonstrates being proactive and an opportunity to reaffirm and better understand certain concepts.

> *"I ask questions like 'How should I put my hands?' or 'What would you recommend with this patient?' it already counts as feedback. I feel that by asking such questions, you instantly receive feedback on how to do things correctly."* (Student 8).

Repeatedly, the participating teachers mentioned starting conversations with a feedback question that encourages self-assessment and reflection, which, in their experience, has a positive effect on integration and learning during the rotation.

> *"When I ask a student, how do you think you performed? the student goes through that reflective process based on their skills, the things that can be improved, it's different when it comes from the person themselves than me imposing what they need to improve in a way. It's more meaningful if the person is able to recognize in which aspects they are weaker, and then I also tell them what I believe they can improve on, and we agree on that. It will have a better effect on the student than if I were to say, 'I think you should improve these aspects.' It's like the difference between imposing and reaching a consensus."* (Clinical Teacher 8).

From the teachers' perspective, assessments are a feedback opportunity for learning and reflection. Still, for students, assessment feedback is not useful if there are no opportunities for improvement after the assessment.

> *"If they [clinical teachers] are evaluating something you have already done, and you can't change it at the moment, feedback does not work. It's a snapshot."* (Student 9).

The feedback provided at the end of a clinical rotation or after a summative assessment does not significantly impact students' learning. Feeling unable to improve because "it's already done" (Student 2) is frustrating for some participants. The organization of a mid-rotation assessment feedback as part of the program is well perceived by students since enough time has passed to detect aspects to improve, but at the same time, there is still time to demonstrate changes.

> *"I do like mid-clerkship assessment feedback because that's when you can know how you're doing and what to improve. It's at that point when you finally feel like you can make a change in the setting or with the patients. . .it happened to me in the sports rotation, for example. They gave me feedback halfway through, and it did help me take on more responsibilities in the following weeks."* (Student 8).

Productive feedback practices were defined as having shared learning goals and open dialogues where norms are established, learning goals are outlined, and there is also an opportunity for students to express their personal learning needs.

> *"In essence, on the first day, the teacher sat me down in the hall, explained various things, and said something like, 'These are the patients, this is what we're going to see, this is what we need to do, and I'll guide you through it. If you have any questions, just let me know.' That conversation was very important to me. . .I knew what the boundaries were, and I understood how to behave and essentially what I needed to do."* (Student 1).

To facilitate productive feedback practices in clinical practice, students need to know what the expected performance is. Therefore, productive feedback practices require the establishment of roles and goals.

> *"He told me [clinical teacher]: 'During the first few weeks, I found you to be not proactive, not doing much with the patients.' He said, 'I let you be, and then you started to change a bit.' And I think he judged me without knowing me. Maybe I wasn't the most proactive person in the world because when you arrive in a new place, you must adapt to a new supervisor. . . Obviously, I expect the supervisor to give me guidance at the beginning. . . He never showed me what we were supposed to do. . . I'm generally very proactive, but I can't guess what my role is."* (Student 10).

Delegating patient care to a student motivates continuous improvement, enhancing the student's self-efficacy. Supervised autonomy is a phenomenon acknowledged by the

students and clinical teachers, having the opportunity to be autonomous but with the security of being able to count on the supervisor.

> *"In all my clerkships, which have been six weeks long, my personal goal is to see patients on my own by the third week. This shows that my clinical teacher already trusts me and trusts the work I have been doing and what I have demonstrated. Ultimately, it means that I am capable and prepared to take charge of patients on my own, which is the objective of the clerkship. Because in the future, when I start working, I won't have a clinical teacher by my side telling me what to do or correcting me."* (Student 3).

For clinical teachers, progressive supervised autonomy requires scaffolding to achieve the expected full autonomy at the end of all rotations. This clinical teacher explained:

> *"Well, as I mentioned, I go through the entire evaluation and treatment process with a student from the beginning of the clerkship, with continuous development. Generally, I encourage students to get hands-on experience from the start, so initially, it's more observational, and we have conversations along the way. I ask questions and engage in discussions with the students, gradually letting them show me how they would prescribe an exercise, for example. I provide feedback and corrections, and eventually, I say, 'Now, you do it,' and I step back a bit to observe how they do it. I might say, 'You did this part well, but you could improve here and here.'"* (Clinical Teacher 5).

### *3.3. The Knowledge Domain Layer in the Clinical Culture: Growing Clinical Experience and Accountability*

Participants highlighted the significance of gaining experience in clinical practice, which becomes increasingly valuable as they advance through their rotations. This growing experience required sufficient time at the clinical workplace, which empowers them to handle feedback more effectively. For instance, it enables students to engage in constructive discussions with their supervisors when they have differing opinions regarding their performance. Additionally, it helps them develop the ability to receive criticism without feeling personally attacked.

> *"You don't take feedback the same way on the first rotation as you do on the last one. In other words, at the last rotation, I already had a lot of experience under my belt, so how you receive it [the feedback] in the end, you absorb it much more. In the first rotations, there were times when I felt attacked, many times. Then, as time went on, you started to develop the criteria you had to have in the placement, and you received it better."* (Student 1).

For feedback to be productive, encounters in the specific physiotherapy context rely on students' understanding of both feedback concepts and the underlying physiotherapy knowledge domain. Moreover, participants acknowledge the crucial role of feedback in fostering their sense of accountability as physiotherapists, emphasizing the significance of engaging in personal reflections. One participant stated, "Reflecting on my strengths and areas for improvement is essential because we bear the responsibility of caring for patients." (Student 3). When students receive constructive criticism regarding their performance or knowledge, it prompts them to contemplate their duties and obligations in providing care to others.

> *"The feedback not only makes me responsible for tasks but also accountable for myself and the knowledge I possess. I believe that feedback allows us to approach the intersection between theory, practice, and the human aspect. The responsibility lies within that intersection, which we as healthcare professionals have towards our patients. In the end, the ultimate goal of the profession is to make a real person feel better. So, personally, I think through feedback, we develop a sense of accountability towards our patients and ourselves as well."* (Student 7).

For students, the responsibility of having someone else in their care promotes their feedback literacy and self-efficacy. Also, clinical improvement of patients in their care is a significant incentive for students, fostering their motivation and learning.

> *"But what truly opened my eyes was seeing the positive impact I could have on patients. As I started to grasp the underlying logic of the field, I noticed a significant improvement in the well-being of the patients. They would often mention how much they appreciated being heard and understood. This realization fuelled my motivation, and I eagerly looked forward to each new week, excited to engage with people and learn from my clinical teachers."* (Student 5).

Students who recognize themselves as able to regulate their emotions are often more effective in dealing with and using feedback because their goal is the patient's well-being and their own learning. The following quote reflects this idea:

> *"If the teacher is telling you something good, it means you should maintain it. Essentially, they are boosting a quality or acknowledging that you're doing something well, and you should maintain it. And if they point out something that needs improvement, I think one should be mature enough to accept it and commit to making changes. It will benefit the patient or enhance your learning."* (Student 10).

Importantly, if students show accountability, this also positively affects clinical teacher engagement, creating a positive loop of active participation and mentorship. Several of the interviewed teachers share their views on the importance of student engagement and feedback literacy, emphasizing their role in seeking feedback to improve their performance during their clinical practice. This becomes tangible when they see that the student takes advantage of and applies the feedback they receive.

> *"The student bears a lot of responsibility. I think it's a fifty-fifty situation. Obviously, how the clinical teacher delivers this, how they guide and orient, is important. But active listening, willingness, an open attitude towards criticism and feedback, and appreciating 'okay, this is my supervisor, they probably know more than I do, so I should follow about 95% of what they say and try to incorporate it.' The student's disposition is key to the effectiveness of the feedback."* (Clinical Teacher 3).

## 4. Discussion

The goal of our study was to understand the sociocultural factors that influence productive feedback practices in clinical contexts. We used the three-layer descriptive model of the constitutive relations of feedback practices to understand aspects of feedback encounter, feedback design, and knowledge domain that influence productive feedback practices in clinical contexts [10]. In the feedback encounter layer, the factors influencing productive feedback are dyadic relationships strengthened by mutual trust, dialogue, and continuity of supervision. At the feedback design layer, designing feedback questions and promoting supervised autonomy enable productive feedback and lead to the development of self-efficacy and accountability among learners. In the discipline knowledge domain layer, productive feedback practices in clinical contexts were supported by allowing students to become aware of their responsibility when dealing with patients. Moreover, with growing clinical experience, the students were better able to manage the relational dimension knowledge of how feedback is managed in specific contexts.

From a sociocultural perspective, feedback can be conceptualized as a social practice that deepens the relational dimension of feedback [17]. Therefore, the interactions between participants and the context are essential. These interactions are elucidated in the feedback encounter layer and encompass the dynamics within the dyadic relationship, which is strengthened through mutual trust, dialogue, and continuity of supervision and guidance. Our research showed that consistency in guidance enables students to effectively incorporate and use the feedback. This aligns with the findings of Lee and Ross (2020), who emphasized the importance of a supportive learning environment, which is greatly enhanced by continuous supervision, in nurturing the student–teacher relationship [18].

Continuity allows students to feel confident in asking questions, being observed, and becoming more at ease with making mistakes. From the teacher's perspective, continuity fosters a better understanding of the student and allows for smoother progress through challenging tasks. Some studies have also highlighted the significance of continuous supervision in clinical learning as it helps build trust among learners, patients, and supervisors [19,20]. For students, productive feedback practices require consistent, ongoing guidance from clinical teachers, grounded in trust and open dialogue, which together foster safe, supportive spaces within clinical clerkships [21]. Furthermore, dialogue is essential for the collaborative development of improvement strategies [22]. Supporting this, strategies such as longitudinal integrated clerkships contribute to an effective educational alliance that fosters the development and demonstration of competence [18]. Therefore, one practical implication is that clinical rotations should have a sufficient length of time to allow students and supervisors to cultivate a relationship that supports effective feedback practices [23,24].

Concerning the dyadic relationship as a pre-requisite for productive feedback practices aligns with the findings of Telio et al. (2015), who suggested the educational alliance to promote rich relationships and feedback uptake [25]. Moreover, our study revealed that students who have trust in their clinical teachers are more inclined to seek feedback. This finding is consistent with recent research indicating that positive relationships between students and teachers contribute to increased feedback-seeking behavior [23,26]. Additionally, when students have trust in their teachers, they feel more assured in both asking and answering questions [23].

Within the design layer, using feedback questions, dialogue, formative assessments, and supervised autonomy were important factors leading to productive feedback practices because they promoted self-monitoring, fostered internal dialogue, and encouraged meaningful conversations. From the student perspective, our results showed that they felt empowered to ask questions, demonstrating proactive behaviors that foster interaction. Moreover, students used feedback questions as an opportunity to reaffirm and better understand concepts. Feedback questions enhance dialogue and promote self-regulatory behaviors in students through reflection and self-monitoring, which can improve the integration of learning during the rotation. Previous studies have also recognized feedback questions, such as "What do you think I have improved?" and "Can you give me feedback on my performance? must be asked by students to obtain feedback information about their performance [26,27]. Furthermore, a recent paper proposed an instructional model that offers a set of prompts or questions that can be integrated into learning activities or used to guide students in processing feedback to explicitly teach, scaffold, and communicate to students how to engage with feedback [28]. From the clinical teacher's perspective in this study, feedback questions were used to encourage self-assessment and reflection.

Including mid-rotation or more continuous assessment feedback as part of the program is valued by students, as it allows sufficient time for reflection and improvement before the rotation concludes, an aspect that is acknowledged in previous literature [29]. This contrasts with end-of-rotation feedback, which, while informative, may lead to frustration as students feel unable to apply suggestions to their current experience, limiting its impact on learning [30].

Supervised autonomy led to the development of self-efficacy and accountability in students. Supervised autonomy is a scaffolded feedback-based process in which the ultimate goal is a confident, autonomous performance. This process requires the commitment of the dyad and a supportive environment and culture. Supervised autonomy facilitates the evolution of novices into independent practitioners [31], and the support of student autonomy fosters the internalization of professional values and norms, shaping integrated regulation of their behaviors [32]. Such regulation not only leads to better performance but also promotes self-regulated learning skills. Our study also identified that in the feedback design layer, establishing learning goals and roles were important for productive feedback

practices. When students are clear about their roles in the clinical workplace, it strengthens the dyadic relationship [33].

In a clinical setting, feedback is shaped by disciplinary knowledge, making it inseparable from the epistemological content of the discipline and the cultural context in which the clinical practice occurs. For feedback to be productive in physiotherapy, students must understand both feedback concepts and disciplinary knowledge. This study found that this knowledge influences feedback practices in clinical contexts, highlighting its key role in fostering professional accountability and personal reflection among participants. How feedback is delivered has a direct impact on how it is received and acted upon. This process is the result of collaborative efforts between teachers and students. Positive feedback, for example, not only influences student feedback uptake but also enhances their feedback self-efficacy and increases their awareness of the responsibilities involved in patient care. Furthermore, the nurturing of this responsibility fosters the students' own agency. According to clinical educators' experiences, McGinness et al. (2023) recently reported that the delivery style of feedback affects student attributes such as emotional resilience and self-confidence [23].

The development of clinical skills is closely tied to students' increasing experience during their rotations. Longitudinal relationships foster meaningful interactions, promoting psychological safety, trust, and familiarity with supervisors, peer students, and professionals from other disciplines [18,34,35]. The continuity and availability of sufficient time to process and utilize feedback will improve feedback uptake.

*Strengths and Limitations*

This study benefitted from employing a sociocultural theoretical perspective, and findings could be applicable and valuable to other healthcare professions. Our examination of the learning dyad—composed of both clinical teachers and students—within the clinical context, added depth to our findings.

Despite its strengths, this study is not without limitations. Data collection took place during the COVID-19 pandemic, potentially affecting the clinical learning experiences of participants. However, this study was conducted in clinical settings that continuously received students, despite the pandemic. Social distancing reduced face-to-face interactions, and high demands on healthcare staff might impact feedback processes. Further research is needed to explore how feedback dynamics may vary in post-COVID settings. Additionally, the generalizability of the findings may be limited to our study sample due to the sole focus on one university for the research.

Given that sociocultural settings vary significantly across regions, the findings from a Chilean context may not be directly applicable or yield similar outcomes in other settings with different cultural dynamics, especially regarding the importance of close relationships between students and clinical teachers. For instance, cultural beliefs and customs that emphasize strict hierarchy may limit bonding between students and supervisors. Additionally, in some cultures, boundaries between professional and personal lives are strongly maintained, which may prevent the development of a closer relationship based on day-to-day rapport.

## 5. Conclusions

In the context of undergraduate clinical education, productive feedback practices are shaped by social–cultural factors. Designing feedback practices should consciously integrate sociocultural components, such as cultivating relationships, fostering guidance, enhancing feedback agency, and enabling supervised autonomy to promote productive feedback. Further research should delve into the practical application of feedback and how feedback design encourages feedback use. The sociocultural dimension of feedback offers valuable insights into clinical learning and reasoning by fostering meaningful relationships and facilitating feedback uptake. Further studies could focus on the understanding of how the relational aspect of the feedback process influences its efficacy in the learning

processes of healthcare students and expand on this by including a broader range of sociocultural elements to capture a more comprehensive picture of feedback dynamics across diverse settings.

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**Data Availability Statement:** All data are available under request.

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