

University Teachers' Relational Competence in Online Teaching: A Microscopic Relational Analysis

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Abstract

Universities have strengthened their capacity to conduct teaching online since the COVID-19 pandemic, yet online teaching poses new challenges for teacher-student relationships (TSR). International research emphasizes the significance of TSR for learning, but there is a lack of research on how TSR is built in digital classrooms. This paper discusses teachers' relational competence as manifested in online teaching. Microscopic Relational Analysis (MRA) was used to explore a university teacher's relational competence, focusing on nonverbal communication. The analysis shows how changeable and vulnerable the TSR can be. This is a characteristic of TSR in teaching face-to-face, but it is hardly expected of TSR in online teaching. In addition, the study indicates that teachers' nonverbal communication is an important feature in this context. The MRA suggests that a teacher's sensitivity to detecting a student's subtle cues is crucial for successful online TSR. Further, it is suggested that teachers' relational competence is manifested along five patterns, where respectful communication during the student's turn is essential. Overall, the study suggests the importance of teachers' relational competence in fostering a positive and supportive digital learning environment and highlights the need for teacher training

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and professional development programs to enhance teachers' relational competence in online teaching.

Keywords: Higher education; Microscopic relational analysis (MRA); Online teaching; social bond; Teacher-student relationship (TSR); Teacher's relational competence

Introduction

Since the COVID-19 pandemic, online teaching has become an increasingly important element of most educational programs in higher education (Vega Matuszczyk et al., 2020). In Sweden, for example, universities have significantly strengthened their capacity to conduct teaching online (Östbring, 2023). In parallel, the need for in-depth knowledge about the teacher-student relationship (TSR) in online teaching has grown significantly. Research shows that the quality of TSR is important for students' learning and development in school (Roorda et al., 2017) and in higher education (Hagenauer & Volet, 2014), including in online teaching (Carillo & Flores, 2020). Research also reveals that 'relational competence' is an important component of teacher professionalism (Nordenbo et al., 2008) and in online teaching (Wiklund-Engblom, 2018). However, there is a lack of in-depth research on how TSR and teachers' relational competencies are manifested in social interactions and different educational contexts (Aspelin & Eklöf, 2022). This is unfortunate since an in-depth understanding of online teaching as a relational and temporal phenomenon will be helpful for practitioners to develop a more qualitative and productive learning environment. The overall purpose of this article is to microscopically examine a university teacher's relational competence as manifested during interactions in online teaching.

One approach for analyzing the qualities of TSR is Microscopic Relational Analysis (MRA) (Aspelin, 2022). MRA implies a situated and contextual understanding of TSR as manifested in verbal and nonverbal communication. Research suggests that nonverbal communication is an essential feature of teaching in general (Bunglowala & Bunglowala, 2015; Zeki, 2009) but plays a limited role in digital classrooms (Song et al., 2016; Vagos & Carvalhais, 2022). This article focuses on relational competence as manifested in nonverbal communication. The concept of nonverbal communication includes aspects such as body position, gestures, facial expressions and movements, gaze orientations, and tone of voice. In this article we focus on visible gestures, such as face- and body movements. The following research question is raised: How is a university teacher's relational competence manifested in and through interaction, especially nonverbal, in an online teaching setting?

Literature Review

Research on TSR has emerged over the past thirty years. Based on different theoretical and methodological approaches, studies have demonstrated that TSR is a decisive factor behind students' social and emotional development, their well-being at school, and their academic performance (Fabris et al., 2022; Martin & Dowson, 2009; Roorda et al., 2017; Wubbels et al., 2012). In Scandinavia, the concept of relational competence is often used for a teacher's ability to build positive and supportive TSRs. Relational competence should not—at least not primarily—be understood in terms of theoretical knowledge, rather as a skill that is manifested in practice, and in social interaction. A research review by Nordenbo et al. (2009) influenced education in Denmark and other Scandinavian countries by recognizing the importance of teachers' abilities to enhance positive, supportive relationships. The review emphasizes that relational competence and didactic and leadership competence are fundamental to teacher professionalism. Scandinavian research on teachers' relational competence often has pragmatic purposes; however, the critical question here is not only what TSR means for the quality of teaching but also how teachers can go about developing positive, supportive relationships and how such teaching skills can be integrated into

professional programs (Aspelin et al., 2021; Jensen et al., 2015; Klinge, 2016; Skibsted & Matthiesen, 2016). In a study of teachers' relational competence in school, Klinge (2016) identified that much knowledge shows that TSR is important and what in TSR matters, yet little research has focused on how TSR is built in practice.

A teacher's ability to build positive and supportive TSR in regular teaching can be difficult to transfer to the digital classroom (Song et al., 2016). A research review conducted by Vagos and Carvalhais (2022) highlights that teacher-student interactions in online environments are more restricted than in face-to-face settings, more non-authentic and distant, less spontaneous, and less emotional. Song et al. (2016) discuss conditions for TSR that are specific to online teaching and, for instance, state that nonverbal communication plays a relatively limited role in this context. Their findings suggest that teachers tend to develop other ways of personalizing teaching to promote TSR, such as revealing personal information about themselves to students, often called 'self-disclosure.' Wiklund-Engblom (2018, with support from Rimm-Kaufman et al., 2003), has developed the term "digital relational competence," which labels "a teacher's sensitivity to detecting immediate needs in the distance-learning situation, as well as the responsiveness to take action to assist students in accordance with the needs that are identified" (p. 192). In line with previous research, Wiklund-Engblom (2018) indicates that some teachers lack access to nonverbal signs from students and, therefore, seek indications of relational qualities in other ways. For example, one teacher in Wiklund-Engblom's study stated, "her intuition tells her that something might be wrong when there is a slight change in communication or activity from a specific student" (p. 194).

In a review of TSR in higher education, Hagenauer and Volet (2014) presented factors that characterize TSR in this context, compared to the school context. For example: (1) TSR in higher education is built between adults, which implies that the care aspect is toned down; (2) the number of teaching sessions between teachers and students tends to be fewer and less frequent; (3) teacher-student interactions often take place in large groups; (4) teachers and students rarely talk about issues that are not course-related; (5) conversations often have a formal, impersonal character. For higher education teachers—unlike teachers in general—teaching is an activity among many others and part of an organization where research has a higher status than teaching. Further, Hagenauer and Volet (2014) present research showing that caring is an important aspect of TSR in higher education; however, in this context, TSR is expected to have clearer boundaries in the relationship. In short, TSR in higher education is characterized by a higher degree of distance than TSR in school contexts. In addition, Hagenauer and Volet (2014) state that the field requires further research regarding both the theoretical and methodological approaches: "One of the greatest challenges will be to develop shared theoretical and conceptual understandings of TSR as a precondition for meaningful scientific communication, theorizing, and conceptualization, as well as for study design. A second challenge will be to develop methods that can capture the complex dynamic and context-specific phenomena under investigation" (p. 384).

In this study, we aim to make a tentative contribution to both respects suggested by Hagenauer and Volet (2014): theory and method. Our theoretical approach is based on Scheff's (1990) social psychology, together with a model for analyzing relational competence, and the method focuses on microscopic analysis of TSR (Aspelin, 2022).

In a previous study (Segerby & Aspelin, 2023), we investigated social interactions between university teachers and students in video-recorded online teaching. The educational context was

special education teacher training. We aimed to explore how the teachers' relational competence was manifested in their pedagogical practice. The findings indicate that the competence was manifested along the following five themes:

- (1) Open-ended questions: teachers ask questions that invite dialogue and show interest in students' ideas and experiences.
- (2) Respectful communication: teachers use verbal and nonverbal responses to convey respect for students, both during and after the students' turns.
- (3) Personal connection: teachers address students by name and relate topics of study to the teachers' own experiences.
- (4) Social framing: teachers offer explicit reasoning on how seminars should be framed, thereby facilitating relationship building.
- (5) Humor: teachers lighten up interactions through humor, smiles, and laughter.

Contradictory to previous research, these findings suggest that teachers' nonverbal communication is an important feature of relational competence in this context. This conclusion encourages us to go deeper into studying university teachers' relational competence, focusing on nonverbal aspects. Our theoretical and methodological approach is presented below.

Theory

Research on TSR often focuses on quantities regarding teacher-student interactions—for example, showing how common such interactions are—but seldom notices the qualities of relationships (Hagenauer & Volet, 2014). In the present study, we select a theoretical approach that enables analysis of TSR as constructed sequence-by-sequence in ongoing interactions. We limit the analysis to interpersonal connections that arise in encounters in the here and now, a phenomenon that Scheff (1990) labels 'social bond.' Hence, relationships that develop over time will not be discussed (cf. the distinction between 'contact' and 'relationship' in Karpouza & Emvalotis, 2019). Our focus on social bonds is built on the assumption that interpersonal relationships are constructed in interactions. A more practical motive is that TSR in higher education often exists only occasionally, for example, when teachers encounter students during sporadic lectures or single seminars, unlike schoolteachers who can teach the same school class for many years.

Scheff (1990) assumes that the human being is a social self constantly connected to and requires interactions with other people and the world. The maintenance of social bonds is an essential motive for social conduct. Social bonds are primarily built in interactions, where nonverbal aspects play a primary role. This bond is an invisible force that connects individuals and includes a balance between closeness and distance in relationships. Social bonds also include emotions, which act as immediate signals to the self and others about the state of the bond. The bonds are tested continuously, so one can never be sure they will have a certain quality. Secure social bonds are built when individuals are 'attuned'—that is, understand each other and show each other due respect—while unsecured bonds arise when individuals do not understand or respect one another. Based on Scheff's (1990) theory and empirical studies of classroom interactions (Aspelin, 2022), we have conceptualized relational competence in the following model, labeled RCM (relational competence model). The model includes three sub-competences:

- Communicative competence: Teachers' skills in achieving a high degree of attunement in verbal and nonverbal communication with students.
- Differentiation competence: Teachers' skills in regulating the degree of closeness and distance in relation to students.
- Socio-emotional competence: Teachers' skills in coping with the emotional indicators of ongoing relationships, including their own and students' emotions (Aspelin et al., 2021).

In this study, we focus on communicative competence, as it emerged in the analysis as the clearly most relevant sub-competency for understanding the episode.

Method

As indicated previously, this article aims to contribute to the in-depth knowledge of teacher's relational competence in online teaching in higher education. We explore how relational competence is manifested in the complex reality of interpersonal encounters between teachers and students. This purpose motivates a methodological approach focusing on details of interactions in situated contexts.

Microscopic Relational Analysis (MRA)

Data for the analysis have been collected by video documentation of online teaching. Video documentation is generally considered the most appropriate data collection method for studying social interaction and interpersonal relationships (Scheff, 1990). Using video recordings, nonverbal aspects such as gestures, gaze, and facial expressions can be examined (Derry et al., 2010; Goodwin, 1981; Jordan & Henderson, 1995). A participant's nonverbal communication affects the speaker (Goodwin, 1981) and is particularly important when examining interpersonal relationships (Scheff, 1990).

Movements in the microworld are often subtle and quick, which, according to Scheff (1990), require special techniques to explore it: "Observing the microworld requires a microscope – video- and audiotapes, or at least verbatim texts, which provide the data for discourse analysis" (p. 27-28). Scheff (1990) states that a connected social order exists beneath the surface of communication, built up by many behavioral signs and individual experiences. He shows that the microworld is available for research, provided that the researcher "shift[s] mental gears, to relinquish, for the time being, the attitude of everyday life..." (p. 27). Scheff's (1990, 1997) theory and methodology suggest educational research aims for detailed, meticulous descriptions and interpretations of teacher-student interaction and its implications for TSR. What he labels 'microsociology' could complement qualitative exploration and quantitative verification (Scheff, 1990, 1997).

MRA (Aspelin, 2022) is a method of exploring TSR largely inspired by Scheff's methodology and theory. MRA includes the following five themes:

- (1) A relational framework: MRA understands TSR as a dynamic phenomenon, a social bond that exists and continuously changes in interactions.
- (2) TSR and the microworld: MRA relates TSR to the subtle flow of behaviors beneath the surface of classroom interactions.

(3) Parts and wholes: MRA includes meticulous transcriptions and interpretations of interactions, as well as conclusions about implications for social bonds; the researcher moves back and forth between microscopic details and their social context, for example, the present TSR.

(4) Individuals' perspective: MRA acknowledges teachers' and students' subjective experiences, intentions, motives, emotions, and strategies; the researcher thus takes the perspectives of both parties in interpretations of their interactions.

(5) Video and TSR: MRA sees video observation as the most appropriate method for collecting data on TSR, enabling detailed transcriptions and interpretations of relationships developed in interactions.

MRA can be used to examine relational patterns detected through qualitative exploration or to generate hypotheses about relational patterns that are then tested quantitatively. MRA can also be conducted separately, aiming for a close, thorough analysis of single cases, for example, a TSR in a school lesson. As mentioned, the MRA presented below is based on a previous study of the same data material, in which five teachers' relational competence patterns emerged. We will return to these patterns in the analysis.

Sample

The research was situated in the context of special education teacher training in Sweden. Two university programs for special educators are offered in special education in Sweden: one for special needs coordinators ("specialpedagoger") and one for special needs teachers ("speciallärare"). These programs are supplemental courses for educators with at least three years of pedagogical experience.

Data collection originates from one of three online seminars in a course for special needs teachers during their second year when their specialization is in focus. The three online seminars involved special needs teachers with a focus on (1) mathematics, (2) developmental disabilities, and (3) language, writing, and reading development. The episode analyzed below considers teaching in the specialization of developmental disabilities. The video-recorded lecture is 2 hours and 42 minutes long and was conducted over two sessions (1.07.45 and 1.34.11). The subject was aesthetic perspectives on inclusive education. Twelve out of 17 students were approved to participate in the study, and the teacher is a university lecturer in aesthetics.

Procedure

Before each seminar, students in the different specializations were informed both orally and in written format about the purpose of the study. Those wanting to participate completed a consent letter. During the seminars, Zoom was used. Zoom is a video communication tool that can be used to create meeting rooms and participate in real-time with audio and video in meetings, seminars, and conferences. It offers features such as screen sharing, breakout rooms for group discussions, chat, and meeting recording. The teacher was always visible, with students interacting using their video cameras. Students' nonverbal body language and facial expressions were therefore visible to the teacher, and eye contact between the teacher and the students was possible. Sometimes, the teacher shared a PowerPoint presentation, showing their upper body in a small box. In parallel, all students were shown in small boxes. This arrangement allowed the teacher and the students to observe verbal and nonverbal behavior.

Ethics

Ethical guidelines for the Humanities and Social Sciences set out by the Swedish Research Council were followed (Vetenskapsrådet, 2017). An ethical review was not required in accordance with local legislation and institutional requirements. All subjects were informed about the purpose of the research, that their participation was voluntary, and that they could interrupt their participation at any time. Written consent was given by all subjects in accordance with the Declaration of Helsinki. The five students who did not want to participate in the study did not have their cameras and microphones turned on.

Analysis

The purpose of the MRA is to create a thorough, situated understanding of how a teacher's relational competence is manifested in relation to a student. Considering the five patterns that emerged in our previous study (Segerby & Aspelin, 2023), the MRA focuses on the teacher's relational competence in a very brief time. MRA should provide deep insight into the events that build up relational patterns (Aspelin, 2022). Since the number of behavioral signs during a lesson is enormous, the researcher needs to select certain episodes that fit the study's purpose. The episode analyzed below was selected for being the longest in the data material where a teacher and a student interact and are in a 'state of talk' (Goffman, 1982), that is: "...have declared themselves officially open to one another for purposes of spoken communication and guarantee together to maintain a flow of words" (p. 34). Many students are active in the video-recorded lesson, and the researchers are unable to represent all social behaviors (even from brief episodes). Therefore, the MRA concentrates on connections between the teacher and a student for short passages. Video data were analyzed using the following steps, which were conducted by the researchers separately as well as jointly in order to strengthen the reliability of interpretations:

- (1) All verbal interactions in the episode were transcribed in detail.
- (2) All nonverbal expressions in the episode were noted in detail.
- (3) Verbal and nonverbal interactions were interpreted with a focus on the quality of TSR.
- (4) Based on the interpretations in step 3, the episode was divided into three excerpts (see Findings).
- (5) The interaction was analyzed in terms of 'social bonds' and 'attunement' (Scheff, 1990) to explore how TSR is built at each stage. In addition, the concept of 'state of talk' (Goffman, 1982) was applied (see Findings). Specifically, we alternated between observing behavioral signs in ongoing interactions and interpreting their implications for TSR.
- (6) Interactions were re-analyzed in terms of teachers' relational competence, where patterns found in our previous analysis (Segerby & Aspelin, 2023) were considered (see Findings).

The three selected excerpts were chronologically structured and thematized as follows: (1) the building of a social bond begins; (2) the bond is threatened; (3) the bond is stabilized. The MRA is presented sequentially below. Each excerpt is organized into five-column transcripts (cf. Jordan and Henderson, 1995), where the first column indicates the turn, the second column is the time of the recording, the third column is the participants, the fourth column is the participants' verbal utterances, and the fifth column is nonverbal expression. What takes place in the fifth column is of

main interest for this study. Transcriptions are followed by our interpretations, presented in italics, where the concepts of 'social bond' and 'attunement' (Scheff, 1990) and the concept of 'state of talk' (Goffman, 1982) are applied. This presentation is followed by a concluding analysis of the social bond and an analysis of teachers' relational competence, where we adopt the patterns found in our previous analysis (Segerby & Aspelin, 2023).

Findings

The local context

Initially, the teacher discusses aesthetics, what it is, and what knowledge the pre-service special educators need to teach the subject. Next, the students perform several exercises related to aesthetics. They construct images and a design while following the teacher's instructions. Then, the teacher discusses the pedagogical aspects of aesthetic learning processes.

The selected episode takes place 9 minutes and 53 seconds into the second lesson session after the teacher summarized an exercise the pre-service special educators performed earlier. The whole episode lasts 1 minute and 22 seconds. The first selected excerpt is about 4 seconds long, the second 13 seconds, and the third 13 seconds. What occurs in the 45 seconds between the excerpts (9.57-10.41, and 10.54-11.01) is summarized.

The teacher asks: "What skills in image and form do you need?" One of the pre-service special educators answers by relating to what the children need. The teacher replies: "Not what the children need. You already have knowledge regarding the children. You know how to make educational arrangements. You know how to choose didactically, and you can respond to teaching situations and other situations that arise. But what do you really need in aesthetics for yourselves? What abilities do you need to develop to make these choices?" (Please note: bold words mean the words are emphasized.)

Analysis of the social bond in the episode

Turn	Recording time	Participant	Verbal utterances	Nonverbal utterances
1	9.53	Teacher	There's no point in raising your hands.	The teacher smiles a bit. The student holds her hand up.
<p><i>The teacher shows with her smile that she is open to students' responses. Annie, the student in focus, raises her hand, indicating that she wants to answer. Some conditions for 'attunement' (Scheff, 1990) thus exist, but the teacher has not identified the student, so they are not in a 'state of talk' (Goffman, 1982). Therefore, building a 'social bond' (Scheff, 1990) has not been initiated.</i></p>				
2	9.54	Teacher	Because I only see five of you right now. But I see Annie has her hand up, so you can speak right out now.	The teacher smiles a bit at first, then she smiles more and then laughs. The student has her arm up at first, then takes it down after the teacher's word "up." She smiles and laughs after "Annie."
<p><i>The teacher identifies the student and, verbally and non-verbally, welcomes the student to the conversation. The student smiles, laughs, and seems ready to answer. Smiles and laughter appear to transfer between the two participants. The teacher invites the student to a 'state of talk' (Goffman, 1982), but since the student has not replied verbally at this point, building a social bond (Scheff, 1990) has not started.</i></p>				
3	9.56	Student	Yes, I do. And I just thought that you need courage.	The teacher continues to laugh. The student smiles. The student speaks with a neutral face.
<p><i>The student makes her first verbal statement, thereby confirming that she and the teacher have identified each other and declared themselves open to one another for spoken communication, that is, they are in a 'state of talk' (Goffman, 1982). In other words, building a 'social bond' (Scheff, 1990) has been initiated. Through her answer to the teacher's question, the student verbally shows that she has understood the teacher's question ("you" in 9.56 is related to the teacher's sentence before: "What abilities do you need.") The teacher smiles and confirms the student's answer.</i></p>				

Excerpt 1 – The building of a social bond begins.

The following occurs during the next 45 seconds (between 9.57-10.41): the student develops her answer around the ten-second mark. In parallel, the teacher supports the student through nonverbal responses, such as nods and smiles. The student's argument is a little cryptic, but the

teacher responds as if she understands. We interpret this interaction as stabilization of the 'social bond' (Scheff, 1990). However, between 10.11-10.41, the bond is put at risk, and it has to do with technical problems: the student's image and sound "lag," and, shortly after, her image freezes. Therefore, the student's speech and mouth movements are not synchronized, which prevents the teacher from reading the student's body language. Even so, the teacher responds with smiles and nods, as if the two participants were 'attuned' (Scheff, 1990). Next, the student continues to develop her answer.

Turn	Recording time	Participant	Verbal utterances	Nonverbal utterances
1	10.41	Student	And then we got some kind of picture of, Aha, this is what the children can do, they understand this, and this is what they want when they see these little cubes.	The image of the student is frozen. The teacher nods with a neutral facial expression.
<p><i>The student's (somewhat cryptic) explanation continues, and her image is frozen. The teacher quickly shifts from a big smile in the previous turn to a neutral facial expression, which we interpret as the first sign of a threatened 'social bond' (Scheff, 1990).</i></p>				
2	10.51	Teacher	Mmm	The teacher's lips are tightened, and she lowers her head.
<p><i>The teacher's nonverbal utterance deviates from how she has acted during the past 50 seconds. Her gestures signal impatience, indicating that she experiences a lack of connection with the student. Her verbal confirmation ("mmm") suggests that a connection still exists, but this is the moment in the episode where the 'social bond' (Scheff, 1990) is most fragile.</i></p>				

Excerpt 2- The bond is threatened.

During the next seven seconds, between 10.54-11.01, the student continues her reasoning, and her image is still frozen. At 10.56, the teacher moves her body back and forth, which we interpret as impatience, but she still nods in time with the student's speech. At 10.59, the teacher verbally confirms the student's speech (by saying "No") while her facial expression remains neutral. At 11.00, the student sums up her argument, and the teacher responds by nodding several times.

Turn	Recording time	Participant	Verbal utterances	Nonverbal utterances
1	11.02	Teacher	Yes, here you mention two things. If I try to catch what you're proposing. It's about daring, and I would say it's also about seeing possibilities in the material.	The teacher raises her hands in each direction, as accompaniment to the verbal expressions. After the word "two," the picture of the student is no longer frozen. The teacher moves her hands aside several times, as an accompaniment to the verbal expressions. She puts her hands together when she says, "the material." The student's facial expression is at first neutral, but after the teacher says "material," the student turns her head to the left and nods several times.

Immediately after the student's action, the teacher validates it, showing that she finds it valuable. The technical barrier has disappeared, and the 'social bond' (Scheff, 1990) is about to be repaired. The teacher then confirms the student's action, partly by connecting to the verbal message and partly by nonverbal signs of engagement (how she moves her hands). The teacher emphasizes the word "daring," which the student used earlier ("dare"), and thereby strengthens the student's message. The fact that the student nods several times—the first time during the episode—indicates that she feels respected by the teacher; at the same time, she shows the teacher respect. This sequence is the clearest example of a high degree of 'attunement' (Scheff, 1990). Various signs indicate the 'social bond' (Scheff, 1990) has been repaired and stabilized.

Excerpt 3 – The bond is stabilized.

Concluding analysis of the changing state of the bond

The analysis depicts a series of events between the teacher and the student during which their 'social bond' (Scheff, 1990) is initiated, built, put at risk, threatened, and stabilized. The status of the bond fluctuates within the highlighted 1 minute and 22 seconds. Building a bond is initiated as the teacher and the student declare themselves open to a 'state of talk' (Goffman, 1982). They show each other understanding and respect through verbal and nonverbal utterances (e.g., coordinated smiles and laughter). Next, the bond is put at risk, primarily due to technical problems

and the student's somewhat cryptic reasoning. The freezing of the student's image hinders the teacher from interpreting the student's body language. In her responses, the teacher must rely on the student's spoken words and how she talks (i.e., paralinguistic cues, which, for example, relate to the emphasis of words). This lack of information threatens the bond, visible in the teacher's strained demeanor. Finally, the bond is stabilized, visible in that the teacher reconnects verbally to what the student said before and that the student responds by confirming nods.

The MRA demonstrates how changeable and vulnerable the TSR can be and how the character of social bonds can shift in the blink of an eye, depending on unpredictable events and subtle nuances during interactions. Indeed, this is a characteristic of TSR in teaching face-to-face, but it is probably not expected of TSR in online teaching.

Analysis in terms of relational competence

The interpretation above underscores the significance of the teacher's manner, her way of communicating for 'attunement' and for building a 'social bond' (Scheff, 1990). Below, we re-analyze the episode considering the five patterns of teachers' relational competence in online teaching found in the previous study (Segerby & Aspelin, 2023).

Regarding the theme of open questions, the teacher starts with the questions: "But what do you really need in aesthetics for yourselves? What abilities do you need to develop to make these choices?" These questions invite students to engage in dialogues where their personal views and experiences are acknowledged.

The theme of respectful communication is prevalent throughout the process, and the MRA indicates that this is the clearest example of relational competence in the episode. The analysis shows that the teacher gives the student ample space to speak and consistently shows the student respect when she speaks. According to the MRA, the teacher's short responses during the student's turns are particularly important regarding the teacher's respectful communication. These responses are verbal (e.g., "Mmm" at 10.51) but essentially nonverbal (e.g., nods and smiles). The teacher's respectful communication is also shown in her responses after the student's last turn. In excerpt 3, turn 2, the teacher begins by saying, "If I try to catch what you're proposing," and then she proceeds by emphasizing a word that the student just used ("daring"). When the student nods, she implicitly confirms that she feels respected. Also, the teacher shows respect for the student's actions when the picture freezes; she responds non-verbally so that the communicative flow—and thereby the lesson—can continue without tangible interruptions.

As for the theme of personal connection, there are no examples in the excerpts of the teacher's self-disclosure or where the teacher relates the content to her own experiences (patterns that, however, appear in other situations in the lesson). Even so, this theme is reflected in the episode when the teacher addresses the student by name: "But I see Annie has her hand up, so you can speak right out now" (in excerpt 1, turn 2).

The theme of social framing is more prominent in other parts of the lesson—where the teacher explicitly discusses the design of the online seminar—but it also slightly appears in excerpt 1, turns 1 and 2, when the teacher says: "There's no point in raising your hands." Here, the teacher addresses an aspect of social framing that she mentioned earlier—that the physical raising of hands is not recommended.

Finally, regarding the theme of humor, hardly any interaction in the episode can be described as particularly humorous. However, there are several subtle examples of the teacher lightening up

the interaction with smiles and laughter. An example of this is in excerpt 1, turns 1-2, where the teacher says: "There's no point in raising your hands," the student lowers her hand, and the teacher, in the next moment, allows the student to speak. In this brief exchange, the participants laugh or smile, suggesting they find the situation humorous. The teacher's laughter may help the student to mitigate feelings of embarrassment from raising her hand.

The MRA is not a crystal-clear example of teachers' relational competence as described in the previous study (Segerby & Aspelin, 2023); however, we find it remarkable that all five patterns apply to this extremely brief episode. The teacher's nonverbal responses during the student's turn are particularly important in the analysis. This could be understood as 'communicative competence' (Aspelin et al., 2021). Initially (9.54), the teacher welcomes the student through smiles and laughter, immediately positively affecting the student's response (9.56). Throughout the student's reasoning, the teacher confirms her actions by nonverbal utterances, primarily through nods and smiles. When the picture freezes (10.41), the bond is threatened; however, informed by the student's speech, tone of voice, and so on, the teacher creates an impression of the two individuals being 'attuned' (Scheff, 1990). The teacher seems to oscillate between interpreting the student's verbal and nonverbal signs and responding in ways that maintain the TSR. After the student's turns, the teacher quickly reconnects to the student's argument and, with various gestures, shows that she finds the student's exposition valuable. Therefore, we propose that the teacher's relational competence in the episode is characterized by communicative actions that contribute to the building of TSR and that nonverbal aspects are significant in these respects. This statement will be discussed further below.

Discussion

Contribution

This study aimed to discuss university teachers' relational competence as manifested in interactions in online teaching and, more specifically, to use MRA to focus on nonverbal aspects. The study provides insights into the dynamics of TSR in online teaching, emphasizing the situated nature of these relationships. The MRA illustrates that teachers' relational competence is closely connected to a changeable and vulnerable 'social bond' (Scheff, 1990). By applying MRA to focus on nonverbal aspects, the study sheds light on how educators can develop high-quality TSR in the digital classroom. The findings contribute to theoretical and methodological approaches to studying TSR in higher education, aligning with the call for further research in this field (Hagenauer & Volet, 2014). Previous research shows that the quality of TSR is important in online teaching (Carillo & Flores, 2020; Song et al., 2016). The present study provides a small stepping stone toward enhancing online teaching, which is an educational landscape that has rapidly evolved over the last decade, not least during and since the COVID-19 pandemic (Vega Matuszczyk et al., 2020; Östbring, 2023).

The concept of "digital relational competence" (Wiklund-Engblom, 2018) provides a framework for understanding TSR in online teaching. This concept focuses on teachers' capabilities to detect students' immediate needs in distance-learning situations and respond to them accordingly. Digital relational competence acknowledges the unique challenges and opportunities of online teaching and the necessity of adapting traditional relational skills to the digital realm. The MRA in this study portrays a dynamic interplay between a teacher and a student within the online

teaching environment. The teacher's ability to develop a 'social bond' (Scheff, 1990) in the ongoing interaction points to the essence of digital relational competence. The MRA suggests that a teacher's sensitivity to detecting a student's subtle cues and immediate needs is crucial for successful online TSR. Previous research studies (Vagos & Carvalhais, 2022; Song et al., 2016) state that nonverbal communication might play a limited role in digital classrooms. This study, however, indicates that nonverbal cues, such as smiles, laughter, nods, and other gestural cues, can also be significant for TSR in this context. Together with our previous study (Segerby & Aspelin, 2023), this study suggests that nonverbal communication is a critical component of digital relational competence.

The purpose of this study was not to provide a comprehensive picture of nonverbal aspects of online teaching. It is easy to note other kinds of nonverbal actions that can promote TSR online, such as "thumbs up" after students talk and "silent applause." Correspondingly, it is easy to come up with different kinds of obstacles to TSR online when compared to regular teaching, such as lack of physical contact, the amount of verbal support, such as "hmm" and "mmm" being restricted, and time delays hamper opportunities for quick turns and interactions. All such factors can hinder a teacher's ability to time and act sensitively and responsively in relation to individual students. However, the MRA suggests significance in a teacher's respectful communication during a student's turn—a feature we interpreted as 'communicative competence' (Aspelin et al., 2021). Not least, teachers' nonverbal responses, such as nods and smiles, emerge as important features of teachers' communicative competence.

The MRA supports findings from our previous research on online teaching (Segerby & Aspelin, 2023), suggesting that teachers' relational competence is manifested along with five relational patterns. This connection makes it reasonable to discuss the relevance of the MRA outside of the single case. By asking open-ended questions, teachers can gain a deeper insight into students' perspectives, which can be particularly valuable in an online environment where other forms of feedback may be limited. Respectful verbal and nonverbal communication shows students that their opinions are valuable and appreciated, as feeling seen and heard is crucial for their motivation and engagement. In a digital setting, students can easily feel isolated, and personal connections can promote students' bonding with teachers and other students. Teachers being personal contrasts with the typically formal and impersonal interactions observed between teachers and students in higher education (Hagenauer & Volet, 2014). Social framing involves guiding students on how to structure interactions. By clarifying such expectations, students are better prepared to engage actively in discussions. In online classrooms, which often risk being remote or overly formal, the integration of humor is a valuable tool. Not only can it introduce a sense of relaxation, but it could also mitigate potential conflicts, fostering a positive and cohesive virtual classroom atmosphere.

Limitations and suggestions for further research

Hagenauer and Volet (2014) state that research on TSR in higher education should "develop methods that can capture the complex dynamic and context-specific phenomena under investigation" (p. 384). We have shown that MRA can contribute to this respect. The field of online teaching in higher education lacks detailed and meticulous studies of how TSR is developed at each stage of an interaction, which makes the present study a contribution. However, the study has important limitations, which should be considered when discussing the findings. First, the sample is small, so we certainly cannot extend our claims to online teaching in general. Second,

expressions occurring in the social world are ambiguous, which implies that the interpretations made in the MRA are approximations and should not be regarded as facts. Third, based on observations, the present MRA includes the individual perspective in ongoing interactions but lacks the individuals' voices. MRAs could be supplemented with participants' versions of what occurred to strengthen the analysis. Fourth, space limitations lead to an apparent risk of neglecting factors concerning the institutional context when focusing on the microworld. MRA is primarily an approach to studying TSR in situated contexts, but one could relate the microworld to larger contexts to strengthen the analysis.

Implications for practice

The findings have practical implications for educators and institutions engaged in online teaching. As demonstrated in the episode, teachers' relational competence illustrates the importance of creating a supportive and positive learning environment for students in the digital classroom. Further, the study suggests that teachers can benefit from understanding different dimensions of relational competence, not least its nonverbal aspects, for maintaining and enhancing TSR in this context. The study emphasizes the need for teacher training and professional development programs to equip educators with the skills to navigate the complex process of building secure social bonds (Scheff, 1990) in online teaching. Moreover, the study contributes to ongoing discussions about developing shared theoretical understandings of TSR in higher education, as highlighted by Hagenauer and Volet (2014).

Furthermore, the study highlights the need for teacher training and professional development programs to enhance teachers' relational competence in online teaching. The results suggest that educators engaged in online teaching develop digital relational competence (Wiklund-Engblom, 2018). As shown through the MRA, this includes developing the capability of sensitive interpretation and respectfully responding to students' nonverbal actions. Pre-service students should be trained to navigate the unique challenges of online teaching, where the absence of physical presence requires a heightened sensitivity to other nonverbal cues. Incorporating digital relational competence into teacher training and professional development programs can be helpful for teachers to develop their nonverbal communication and, overall, foster stronger TSRs in the online classroom.

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