Teachers' experiences of developing the teacher-student relationships during COVID-19 in China

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ABSTRACT

The purpose of this study was to express middle school teachers' experiences of developing teacher-student relationships (TSRs) in online teaching during COVID-19 in China. The study used a qualitative phenomenological design to offer an in-depth description of the experience's teachers perceive as strategies to develop TSRs. Participants (N=6) were from several middle schools in Nanning, GuangXi, China. Information was collected with semi-structured interviews and analyzed using a five-step phenomenological method in mental research. Data analysis revealed five general themes about teachers' experiences. The study found that teachers' proactively initiating dialogues, responding to student needs, emotion-based information exchange, treating students with respect, and expressing motivation and expectations for students were the strategies to develop TSRs. The results of this study can be used in middle school to create positive interventions to enhance educators' understanding of strategies associated with TSRs.

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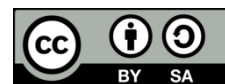
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1. INTRODUCTION

The emotional dimension of teaching is reflected in a relationship, defined as a state of connectedness between people, especially an emotional connection [1]. According to Poling *et al.* [2], a teacher-student relationship (TSRs) can be described as the emotional bond student and teacher share with each other, where the quality of the relationship is determined by how strong the bond is. The existing studies on TSRs encompass numerous quantitative studies measuring the effects of relationship quality on student outcomes. The vast majority of studies show that TSRs significantly predict individual student academic performance, which can be expressed as: the better the TSRs, the better the academic performance; the poorer the TSRs, the poorer the academic performance of the student.

Several researchers [3], [4] described the volume of these effectiveness studies in a meta-analysis. Roorda *et al.* [3] took a meta-analytic approach to investigate whether students' engagement acts as a mediator in the association between affective teacher-student relationships and students' achievement. Sample consisted of 189 studies (249,198 students in total) that included students from preschool to high school. Another review conducted by Garrido, Moya, and Morancho [4] analyzed 111 journal articles focused on young people, and found in ten relevant databases. Both reviews strongly link positive TSRs, student participation in class, and academic transcript.

Further, quantitative research conducted by Brinkworth *et al.* [5] found a strong correlation between TSRs and students' academic, behavioral and motivational outcomes. In addition, McCormick *et al.* [6] conducted research on teachers and students using a multilevel propensity score model approach. They found significant effects of high-quality TSRs on first-grade math achievement. Similarly, a study of 1,667 grade 5 students in Central China conducted by Zhou *et al.* [7] showed that the TSRs in fifth grade positively impacted students' mathematical problem-solving skills. Cui *et al.* [8] examined the relationship between TSRs, academic self-confidence, and students' performance in language, mathematics, and English subjects in Chinese high school students. This study suggested that a good TSRs is conducive to enhancing students' self-confidence in learning, which positively impacts academic achievement [8]. Based on these studies, there is no doubt that there is a strong link between TSRs and students' academic performance.

Also, many previous studies showed that a good TSRs greatly impacts students' social and emotional school experiences. A World Health Organization (WHO) policy paper sets out: "a positive psycho-social environment at school can affect the mental health and well-being of young people" [9]. Adolescence is an important stage of emotional development, and this critical period of growth is also more prone to mental health issues [10]. Teachers strive to support students through the social and emotional functions of the classroom and by actively promoting interaction between teachers, students, and pupils, which is a critical element of effective classroom practice [11]. According to Roorda *et al.* [12], TSR is a very complex relationship established between teachers and students in teaching activities, which reflects both the authority relationship and the emotional relationship between teachers and students. Teacher authority can create a positive or negative school experience for students in TSR [13].

Krane *et al.* [9] conducted a literature review about TSRs and student mental health. Several studies [14], [15] found that a strong TSR connection can function as a buffer and is especially helpful for kids who are academically and socially at risk and who have mental health issues. For example, Colarossi and Eccles through quantitative research [16], examined the "differential effects" of the parent, school, and peer social support on depression and self-esteem. They used the teacher support scale to measure social support, the symptom checklist [17] to measure depression, and the Likert type scale to measure self-esteem. The finding indicated that self-esteem was positively correlated with teacher support for both boys and girls. In contrast, depression negatively correlated with teacher support for girls but not boys. Finally, they conclude that social support, especially from peers and teachers, is likely to affect students' mental health. This is supported by similar findings in McLaughlin and Clarke's [18] review of 133 papers examining the emotional well-being of early adolescents (10-14 years), which concluded that TSRs are particularly effective for emotionally vulnerable students.

A bad teacher-student connection, on the other hand, may be a risk factor for students' mental health by diminishing self-esteem and promoting sadness. A research, for instance, investigated the relationship between school connection, teacher support, and depression symptoms in a weighted sample of 11,852 teenagers from 132 schools [19]. The findings suggest that decreased teacher support is associated with worse self-esteem and depression. Another example from Dods research [20] showed that building a caring relationship with teachers is critical to the health and well-being of students. Based on these studies, there is no doubt that positive TSRs play a key role in students' mental health.

As mentioned, most research has shown the importance of a good student-teacher relationship to high academic achievement. However, COVID-19 has disrupted daily life, created a sense of isolation, and challenged student-teacher relationships in online instruction. Many studies have demonstrated that disasters produce children's emotional, cognitive, interpersonal, and physical problems [21]–[24]. Barrett, Ausbrooks, and Martinez-Cosio [25] conducted a study of 46 middle and high school students across six months, demonstrating that teachers can play a vital role in traumatized young people's academic and emotional well-being. According to Picou and Marshal [23], student recovery can begin when schools and teachers can create a safe and supportive learning environment. According to Schwartz [26], developing healthy relationships through positive connections will ultimately impact the learner's family, community, and future generations. Sudden public health events severely challenge people's physical and mental health, especially school students who are sensitive to all kinds of information. Therefore, building relationships and connectedness with students should be prioritized. The challenge for schools and teachers is to help students recover and succeed in the current academic environment.

A significant amount of research examines the importance of a good student-teacher relationship to high academic achievement and healthy emotions [27]. Still, there is limited study on what teachers can do in distance learning to build positive relationships with students. Therefore, this study focuses on middle schools and gives a voice to science, technology, engineering, and mathematics (STEM) teachers in middle school. This study aims to explore their experience of developing TSRs in online teaching during COVID-19 in China.

2.   RESEARCH METHOD

This qualitative study was conducted to analyze the phenomena in its natural environment and to acquire a comprehensive grasp of the middle school teachers' perspectives and experiences [28]. By using a phenomenological method, we intended to focus on the substance of the middle educators' lived experiences and to capture the meanings and essences of their encounters with the phenomena [28]. The objective of phenomenological techniques is to describe the lived experiences and perceived reality of a specific set of individuals in a certain situation. According to the goal of the study, which was to uncover and characterize the middle school teachers' lived experience, the researcher examined their personal experiences, perceived realities, and functions in relation to the problem.

2.1. Participants and context

The study was conducted at several middle schools in GuangXi, China. These schools are representative of the GuangXi Zhuang Autonomous Region and can provide a large number of teacher resources. A purposive sampling method was used to select teachers who teach STEM at middle schools. Because different disciplines may influence teachers' perceptions, participants were drawn from STEM majors to ensure diversity in their perceptions and experiences. The sampling continued until data saturation was obtained with six teachers. The research literature on teaching expertise [29] influenced the categorization of middle school instructors according to their expertise (beginning: 0–3 years; experienced: >3 years). The demographics of participants are shown in Table 1.

Table 1. Teacher participants' demographics

	Ages		Teaching experience		Education background	Gender	
	25-35	>35	≤3years	>3years	PhD	Male	Female
Lecturer	3	3	3	3	6	3	3

2.2. Procedure and data collection

First, we gained the necessary consent from the respondents by describing the study's method and sending them letters with study-related material. Then, we picked interested middle school teachers according to our criteria, which included science, technology, engineering, arts, and mathematics (STEAM) majors, a variety of years of experience, and sexual identity. The interviews were conducted with middle school teachers after completing their daily classes in the school. Each participant's interview lasted around 45 minutes till the saturation threshold was reached. We implemented the recorded files and assessed the data upon completion.

2.3. Data analysis

The process of analysis began after the initial interview and even during transcribing. During the interview, the participants' expressed meanings were validated, evaluated, and presented in order to establish the trustworthiness of the findings. We followed a five-step approach proposed by Giorgi and Giorgi [30] these steps include: i) Reviewing the text message to obtain a feeling of the entire and also minimizing information; ii) Determining as well as uncovering styles without analyst prejudice; iii) Breaking down the message into indicating devices and also the decline of suggesting throughout situations; iv) Improving the indicating devices right into mentally delicate claims of their lived-meanings through providing taken for granted variables specific; and v) Manufacturing the drawn out suggesting systems located on the mental framework of the expertise. The analyst presumed the mindset of the phenomenological emotional decline, which indicates that the things shown in the summaries were concerned to be sensations provided to the mindset of the experience.

3.   RESULTS AND DISCUSSION

The purpose of this study is to explore middle school teachers' experiences in developing TSRs in online teaching during COVID-19. The interview questions were designed to facilitate discussions of middle school teachers' lived experiences in building TSRs. Any credible theme or findings related to TSRs development presented itself in most participant interviews.

3.1. Proactively initiating conversations

The main form of educational interaction between teachers and students is dialogue, through which genuine communication and exchange are formed, and mutual emotions are promoted [23]. Student-teacher interaction is a crucial component of the teacher-student connection. Also, it is the most convenient and very

straightforward method for trainees and instructors to understand one another. Individuals conceded that really good interaction helps trainees cultivate adoration and count on instructors, which consequently activates pupils' interest rate and assists educators in instructing pupils depending on their various scenarios. Boosting teacher-student interaction implies a necessary strategy to construct an excellent teacher-student partnership. An example, Lily gave was noticing that we can understand students' inner thoughts and psychological needs through communication. Lily encourages students to express their ideas actively and boldly and creates opportunities for students to express themselves in teaching. When teachers and students get to know each other well enough, they can avoid unnecessary mistakes and truly realize the heart-to-heart relationship between teachers and students.

Participants stated this is a great way to give students validation and feedback. Yang shared,

> "*I try to make sure that I am in tune with them and always listening, so I can address concerns as they arise.*"

Similarly, Lily said when a "*student gets stuck, I give them help. We break it down and start again.*" Lisa shared that she is always encouraging students to try. Lisa says she tells the students,

> "*You can do this; you can introduce the components of the human body.*"

Lina also shared that she asks the students to help her because "*they are great at this concept.*" Shawn shared that when a student is struggling, she reminds the student, "*you just don't know it yet.*"

3.2. Responding to student needs

All participants shared the importance of greeting students, understanding their students, and being responsive to their individual needs. Lisa shared how she sets aside time in each class to say hello to each student, "*How are you doing? It's good to see you.*"

Similarly, Yang shared that she always does a sign-in after a remote area, asking:

> "*How are you feeling? Did you have any difficulty in doing your homework?*"

Zheng shared that when students have questions or concerns,

> "*I always stop and answer before I continue and encourage other students to ask questions whenever they want.*"

Lily shared that she always wants students to "*feel like they own the class.*" When she sees a student who is struggling, she always tries to solve the problem. Lina shared that it may be as simple as acknowledging the student as an individual and "*asking permission to share their paper with the class.*" Ms. Jung shared that on a remote day, one of her students left her an audio message. "*He sounded earnest and sullen.*" He said, "*How much he missed me and life at school and that he couldn't do it anymore.*" Zheng shared that she was completely heartbroken and reached out to her mom, but also spoke directly to her student upon his return. She told him that she "*loved the messages he sent and that he could always send her a message when he was happy, sad, anxious or angry.*"

3.3. Emotion-based information exchange

Emotion-driven online teaching makes it easier to build and form harmonious and good TSRs [24]. The respondents believed teachers should effectively infuse emotional education to understand students' deep-seated emotional needs. Especially during the COVID-19 epidemic, students' emotions are affected to a certain extent when faced with a sudden disaster [21]. Almost all middle school teachers build a WeChat group for each class and often encourage students in the social group. Participants emphasized the need for teachers to establish themselves as humane educators rather than mere porters of knowledge. Teaching without emotion can lead to students misunderstanding online teaching as a process of moving offline classes online. Therefore, instructors should build a harmonious TSRs based on emotional information interaction to ensure students have a good learning experience and feeling in online teaching.

3.4. Treating students with respect

Teachers need to see students as people of value and dignity who are equal to themselves. First, respect can be shown by praising the student. For example, participant Shawn often said to students, "*You

expressed your opinion on this issue very well." Second, appreciating students' differing opinions, Lily indicated that when confronted with a student's differing opinion, she often did not dismiss the student but rather said, "*Although I don't feel that way about this, I can see why you feel that way.*" or "*I may not agree with you, but you have the right to think that way.*" In addition, most participants believed that teachers should learn the skills of positive regard and respect for students. For example, Lina indicated that she often asks herself, "*Can I recognize and be equal to my students as a person?*" or "*Can I affirm and praise my students?*" and "*Can I appreciate disagreement?*". Respect is the foundation of TSRs, and teachers who respect their students develop better relationships with them.

3.5. Expressing motivation and expectations for students

According to the famous "Rosenthal effect," it is easy to see how different teacher behaviors can hugely impact students. Most participants said they always trust their students and believe that every student is capable of positive growth, progress and improvement, and success. In the interview, Shawn indicated that he focused more on encouraging students during online classes than in offline classes because students may encounter many difficulties in online classes, and encouraging students is good for students to actively participate in class. On the contrary, if students are always blamed, they will get tired of communicating with the teacher or even just do not participate in class. Most participants agreed that students should be given super-weighted encouragement. For example, Lisa believes that every student has strengths and weaknesses and that we should build on our students' strengths and "build on their strengths." She says that she takes every opportunity she can in the classroom to praise students and show what is expected of them. In such a classroom, students feel proud of themselves, their confidence is built, and the TSRs is more harmonious. According to Zheng and Yang, they always use rubrics to motivate students. For example, they often write "*You are the best, I believe you can do it*" to students.

4. CONCLUSION

The present study sought to gain a deep understanding of teachers' experiences in developing TSRs in varied instructional models during COVID-19. The study's findings were based on the lived experiences of middle school teachers who were teaching online in the 2020-2021 school year during COVID-19. All six participants interviewed shared various ways in which they developed TSRs in the online course. Their lived experiences were themed by: initiating dialogues, responding to student needs, emotion-based information exchange, treating students with respect, and expressing motivation and expectations for students. Each of these themes was reported by at least five of the six participants. The participants in this study engage in relational teaching strategies as a way to build TSRs. These relationships serve as a means to address students' academic, emotional, and social needs.

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