(Re)considering Motivational Scaffolding: A Mixed-Method Study on Turkish Students' Perspectives on Online Learning Before and During the Pandemic

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ABSTRACT

Motivational scaffolding is of key importance in online learning since online learners are isolated alone. Recently, this need has doubled with the educational disruption because of the COVID-19 pandemic, which moved classroom learning to entirely online. However, little research has been particularly conducted to explore the perceptions of online learning before and during the pandemic. Therefore, this study empirically investigated 26 university-level Turkish students' experiences in learning online before the pandemic and teacher support in the time of crisis. Data were collected through a mixed-method research design conducting a questionnaire and interviewing via dialogue journals and essay writing. The data were analysed through descriptive statistics and coding themes based on deductive and inductive approaches. The findings from quantitative data analysis revealed that students believed the advantages of online learning resources (OLRs) for their own learning but still needed teacher support. Furthermore, the results from the qualitative data analysis demonstrated that students needed teacher-student interaction most and favoured motivational scaffolding in this regard. The study shed light on the role of caring for learning as motivational scaffolding and calls for an institutional development for the integration of pedagogy of care into online education.

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INTRODUCTION

Deriving from a Latin root, motivation is described as "to move" (Eccles et al., 1998, p. 1017). It is an essential factor that influences students' performance and academic grades through "some interventions [which] can be implemented to foster their motivations, thus preventing their dropping out of class" (Lee, 2015, p. 63). However, just motivation is not enough in a learning environment. Learners should be scaffolded or supported to sustain their motivation not only in classroom but also online (Belland et al., 2013). Motivational scaffolding (Azevedo et al., 2003) has been regarded as feedback given by a tutor, "such as noticing a person's accomplishment (i.e., giving praise), joking, and being optimistic" (Mackiewicz & Thompson, 2013, p. 42). Such scaffolding can work beyond itself, particularly in time of crisis, when integrated within appropriate teaching methods. For example, Zembylas (2012) revived the relationship between emotional aspects and pedagogical outcomes, especially posttraumatic situations. It discussed the troubled knowledge in three aspects, "the significance of pedagogic discomfort, the pedagogical principle of mutual vulnerability, and the value of compassion and strategic empathy" (p. 176) and suggested reconsidering new pedagogical resources in order for these tasks to empower critical pedagogy. On the other side, the outbreak of the COVID-19 pandemic changed the face of education, by which online education used to be seen as a supplementary to face-to-face education (Newhouse, 2016) but since the time of crisis, as a solution to be integrated into education entirely. This situation necessitated pedagogy of care in that teachers care their students' learning concerning their emotions and morals.

Although a number of studies have looked at online learning and teaching during the pandemic, the existing literature is still lacking how care for learning can be adopted in a global crisis in some contexts. As education moved to entirely online learning, learners who first experienced or were less experienced in this new type of learning potentially needed support for the continuity of learning. Turkish students were also among these students since totally online learning had not been a common mode of learning before the pandemic. Therefore, the purpose of this study was to explore inexperienced online learners' learning in the Turkish context during the COVID-19 pandemic. To achieve its aim, it asks the following research questions:

1. What are university-level Turkish students' perceptions about online learning before the pandemic?
2. What are university-level Turkish students' beliefs about student-teacher interaction during the COVID-19 pandemic?
3. What are university-level Turkish students' views on support in the crisis?

LITERATURE REVIEW

The key concepts in the conceptual framework are scaffolding, motivation, pedagogy of care and online learning underpinning this study as detailed in the coming subsections.

SCAFFOLDING TO MOTIVATE ONLINE LEARNERS

Azevedo et al. (2003) classified scaffolding into three types, such as cognitive, metacognitive and motivational scaffolding. Cognitive and metacognitive scaffolds are hints, support and assistance given about contents, techniques and tools for problem solving and learning management. Motivational scaffolds are methods to increase motivation, for instance, by attributional feedback. Even a visually-formed planning tool can be a motivational scaffold (Low & Robinson, 2015). However, just as characteristics of scaffolding in online learning settings have evolved (Puntambekar & Hubscher, 2005), so too motivational scaffolding needs changing in online learning environments (Belland et al., 2013). For example, in online settings, a shared understanding is provided through authentic tasks to motivate learners, whereas, in classrooms, the providers are experts or teachers. Assistance from tools is stable and permanent, while support from classrooms fades eventually. Calling the attention to the importance of scaffolding in computer-assisted learning, Belland et al. (2013) designed a six-goal scaffold for motivation and engagement: (1) "establish task value", (2) "promote mastery goals", (3) "promote belonging", (4) "promote emotion regulation", (5) "promote expectancy for success", (6) "promote autonomy" (p. 248). They suggested integrating these

goals into teacher scaffolds, by which a teacher gives a prompt and attributional feedback when students do not or cannot accomplish a task. Despite a considerable amount of studies on online motivational scaffolding, some focused on this type of scaffolding in online learning tools where a human teacher is absent. Meri-Yilan's (2017) study demonstrated that feedback in online learning resources (OLRs) could act as motivational scaffolding as understood from students' sayings: "I am happy!", "I am good!" or "Congratulations!" (p. 145) but may not be enough to sustain their motivation.

PEDAGOGY OF CARE AND ONLINE TEACHING

Heidegger (1990) argued that the human existence is connected or "being-with" (p. 136), by which people care for not just their own selves but also others. Noddings (2013) related the notion of caring with "motivational displacement" (p. 16), "motivational shift" (p. 33), or "motivational energy" (p. 50) that transfers from one to another. As discussed by Zygmunt et al. (2018), teachers who received "authentic caring within the space of supportive relationships" (p. 127) could apply caring skills in more authentic ways. Busteed (2019) noted that in all learning environments, student success was proportionate to emotional engagement. Yet, in online settings, learning characteristics change since educational disadvantages increase (Fox, 2018), as some online learners can access to OLRs, others cannot. In Marx's (2011) study, students in online courses thought that caring was provided through on-time feedback and individual, positive comments. However, Hall (2010) indicated that learning environment did not have an impact on learners' views on their lecturers' caring. Furthermore, a study by Kim and Schallert (2011) found that caring relationships through online posts between a teacher and three students were personal, for example, one student mentioned about trusting the teacher first to allow this relationship. Another one stated that just in an online environment she could receive better caring, whereas others found it unnecessary causing misunderstanding. On the other hand, an analysis of Rose and Adams (2014) demonstrated that online teachers did not just emphasise the need for caring students all the time; they also narrated their apprehension about balancing their life while caring them and their own selves. A very recent study conducted by Burke and Larmar (2021) before the pandemic contended that Noddings's (2010) framework suited online pedagogy of care with its four components, such as modelling, dialogues, practice and confirmation. Based on the caring relations, modelling refers to educators' behaviours to show that they are caring students but not telling this to them. Dialogue recognises educators' engagement with their students in discussions but in an understanding manner. Practice allows each student to apply their cared learning in a friendly environment. Confirmation occurs through "a caring relationship cultivated between the teacher and student" (Burke & Larmar, 2021, p. 606). By this, students can engage with their learning cycle positively.

EXISTING RESEARCH ON MOTIVATIONAL SCAFFOLDS AND PEDAGOGY OF CARE IN EMERGENCY ONLINE TEACHING

With the outbreak and fast spreading of the pandemic, not only have health departments (Rubin et al., 2020) called for an urgent need of care for people's physiological and psychological manners, but existing literature in investigating learning and teaching also has focused on reconsideration of a pedagogy of care and further support (Bali, 2020; Bozkurt et al., 2020; Concerned Academics, 2020; Karakaya, 2021; Koseoglu, 2020; Moorhouse & Tiet, 2021; Myers, 2020; Robinson et al., 2020) for a better learning space and experience. Although scholars have linked this issue of caring for learning with the existing literature, they all agreed that learning in the pandemic is different from online learning (Bozkurt & Sharma, 2020). Online learning needs a well-planned and organized design and is supported with theoretical frameworks, whereas emergency online learning is a temporarily changed education to sustain learning and teaching at a time of a crisis, such as disasters, wars etc. (Bozkurt et al., 2020; Hodges et al., 2020).

In consistence with hooks (2003), Koseoglu (2020) related the term, pedagogy of care, with feminist pedagogy, which "calls attentive ways of looking into structuring educational services, methods, policies, and legislations that create an inclusive learning space not just for women, but for all students who are disadvantaged in their education" (p. 277). As a matter of fact, the characteristics of pedagogy of care are based on considering each learner as individual (Bali, 2020), so practices and strategies implemented by course lecturers and designers should reflect on facilitating learning experiences. In line with Noddings (2010), a study by Robinson

et al. (2020) also found that "a climate of care" (p. 99) can be established through including and responding to all learners' needs. These needs are, in fact, emotional and psychological during the time of crisis. Indeed, support should be not just one-way, but mutual, not just physiological but affectionate (Bali, 2020; Concerned Academic, 2020; Robinson et al., 2020). Myers (2020) emphasised the role and provision of feedback for a successful pedagogy of care. For example, teachers can discuss with students for useful feedback and make students feel confident with and unbiased towards the provided feedback. Hence, the input from the students can help the teachers contemplate that their students are part of their teaching. Although these practices such as giving feedback are identifiable, students can also recognize unidentifiable ones such as that they are cared (Burke et al., 2022). This way of practice can also ensure each practitioner to focus on student equity (Baice et al., 2021).

Furthermore, Rodés et al. (2021) looked at the design of an online course through an approach of pedagogy of care. Based on this approach, variables can be counted as human interaction, empathy, commitment and simplicity. From the technological aspect, an online learning setting should consider digital and ethical rights. Moorhouse and Tiet (2021) addressed that teachers should maintain this pedagogical praxis of care from the start till the end of their teaching. Meanwhile, they should share their power with students through co-creating solutions and a community of care (Mehrotra, 2021).

MATERIAL AND METHODS

RESEARCH DESIGN

To investigate Turkish students' experiences before and during the COVID-19 pandemic, this research used a mixed-methods research design (Creswell, 2013). It started with a quantitative research design in order to see their views on online learning prior to the pandemic. This design was followed by a qualitative one to deeply understand their learning during the pandemic. With this, a questionnaire was conducted to give a general picture on their online learning before the pandemic and then interviewing took place to address issues raised during the pandemic when learning in an entirely online mode.

THE SAMPLING

The sample consisted of twenty-six students who were studying English in a preparatory class in a state university in Turkey. Twenty-one (81%) of them were female and five (19%) were male. Their ages were ranged between 16 and 22. They had been learning English for more than two years and had pre-intermediate level of English language proficiency according to the programme they were taught. Until the pandemic, they had been attending classroom courses and had never taken any online courses. They were using a learning management system (LMS) for language learning but not obligatorily. In other words, doing activities in LMS was optional. Moreover, in classroom learning, they were introduced to some known OLRs to use voluntarily. However, from the outbreak of the pandemic in the country, March, to the end of the academic year, June, they took all of their courses online, as regulated by the country's higher education institution.

The students were chosen based on a purposive sampling method. The criteria were that they had not been taught entirely online before but introduced some OLRs and that they were taking online courses during the pandemic. The other criterion was that they had filled out a questionnaire about their perspectives of learning online just one month before the pandemic, as part of another study that could not be finalized due to the pandemic.

The researcher of the present study was their lecturer for a Reading and Writing course who had been teaching English for nearly a decade and experienced in online education with her PhD degree abroad. She contacted the participants online to ask them to take part in the study voluntarily. It was, however, ensured that the study was conducted without any bias, by recruiting a second reviewer from an external institution to review the ethics of the study and by making the participation voluntary, by which the trustworthiness of the study was aimed to be realised.

DATA COLLECTION PROCEDURES

The study collected data through qualitative and quantitative research methods (see Table 1). As a quantitative research method, a questionnaire was designed based on the related literature (Land & Bayne, 2011; Stodel et al., 2006) to ask their views on online learning. It was divided into three sections: (1) demographic information (i.e. gender, age and length of English language learning); (2) technology use (possession of a smartphone and other digital devices, and use of and access to the Internet); (3) students' views on online learning. Each of 13 items in the third section of the questionnaire (see Table 2) was rated according to a 6-Likert scale: Strongly Agree (SA), Agree (A), Neutral (N), Not Applicable (NA), Disagree (D), Strongly Disagree (SD). In addition, one open-ended question was included to enable the participants to further express their perceptions on online learning. The questionnaire was validated through checking the internal consistency. It calculated the Cronbach alpha reliability rating as 0.88. Twenty-six participants filled the questionnaire online in a Google Form in February, just before the outbreak of the COVID-19 pandemic. The aim of conducting the questionnaire was to see their perceptions on online learning before experiencing it.

NUMBER OF PARTICIPANTS	RESEARCH INSTRUMENT	DATA COLLECTION TIME	GOAL
26	Questionnaire	February 2020	To see their views on online learning before the pandemic
24	Interviewing via dialogue journals	March 2020	To understand student-teacher interaction in time of crisis
26	Interviewing via essay writing	June 2020	To investigate their perceptions on support in time of crisis

Table 1 Details of Data Collection Procedures.

As a qualitative research method, interviewing via dialogue journals and essay writing took place. The aim of conducting in this way was to make the participants feel comfortable when expressing ideas on their online learning experiences. After the outbreak of the pandemic, March, in the country, education transited from classroom to online. Besides technical troubles such as digital device and Internet access, psychological burden impacted students, as expressed to the lecturer personally by some students. In order to ensure the continuity of interaction with students, the lecturer had a Zoom meeting informally on the first online teaching day even though Adobe Connect was provided by the institution. The reason for the Zoom meeting was to make them feel comfortable and secure to tell their views and prepared for coming online classes based on Noddings's (2010) framework. The lecturer asked them to send an email about any worry or perceptions about the new learning type. Except from two male students, twenty-four students sent an email, dialogue journal, to her in March. In this context, modelling was created through the Zoom meeting, dialogue occurred through sending emails back and forth between students and their lecturer. The objective of conducting dialogue journal was to create an online learning environment with students and in turn understand student-teacher interaction during the crisis. After these email exchanges, the lecturer asked them to reply the following interview question: What do you think of student-teacher interaction during the pandemic?

Between March and June, the lecturer continued to teach online. She aimed to implement practice in a cared learning way. To look at their views on support throughout online teaching, the lecturer asked them to answer the following essay question in June: How do you feel about support during the pandemic? All of twenty-six students sent their answers through their essays to her.

DATA ANALYSIS

Data from the quantitative research were analysed through descriptive statistics (i.e. percentages and frequencies of the participants' thoughts about each item) done in the Google Form. Data from interviewing (i.e. dialogue journals and essays) were analysed through deductive and inductive approaches (Hesse-Biber & Leavy, 2011). Pre-defined codes derived from the purpose of the research are favour of support, disfavour of support, favour of interaction and disfavour

of interaction. Other issues raised in dialogue journals and essays were categorised as eye contact and gestures, student concerns, student problems, and teacher support. Two expert researchers reviewed coded texts and assessed codes. The agreement was found 97%.

ETHICAL CONSIDERATIONS

The participants signed the consent form to part in the study before giving their responses. They were also informed that they could withdraw from the study at any step of data collection. Also, the researcher ensured the security and anonymity of the participants' responses. Each participant was coded with a number and data was stored in a password-required file. Additionally, the study was approved by the research ethics committee of the Institutional review board.

RESULTS

PARTICIPANTS' TECHNOLOGY USES AND PERSPECTIVES OF ONLINE LEARNING BEFORE THE PANDEMIC

Data from the questionnaire show participants' technology use before taking entirely online courses because of the pandemic. All of them stated that they had a smartphone and mobile Internet access as well as broadband at home, university and/or dormitory. However, eleven of them (42%) always used the Internet, whereas others did on some occasions.

Also, data from the questionnaire demonstrate that their views on online learning differed (see Table 2).

Table 2 Participants' perspectives of online learning before the pandemic.

Note: Frequency (F); Percentage (P); Strongly Agree (SA); Agree (A); Neutral (N); Not Applicable (NA); Disagree (D); Strongly Disagree (SD).

ITEMS	F & P	SA	A	N	NA	D	SD
1. Online education is very useful.	F	5	11	6	1	3	0
	P	19,2%	42,3%	23,1%	3,8%	11,5%	
2. I prefer online education rather than classroom learning.	F	2	5	6	2	11	0
	P	7,7%	19,2%	23,1%	7,7%	42,3%	
3. I frequently do activities online.	F	3	10	8	3	2	0
	P	11,5%	38,5%	30,8%	11,5%	7,7%	
4. I enjoy doing activities online.	F	4	15	6	0	1	0
	P	15,4%	57,7%	23,1%		3,8%	
5. I believe I can improve my English through online learning.	F	7	10	7	0	2	0
	P	26,9%	38,5%	26,9%		7,7%	
6. I think classroom learning is enough to improve my English.	F	1	8	3	0	12	2
	P	3,8%	30,8%	11,5%		46,2%	7,7%
7. I know a number of online learning resources (OLRs) to learn English.	F	4	12	8	2	0	0
	P	15,4%	46,2%	30,8%	7,7%		
8. I would like to use OLRs to improve my English.	F	7	16	2	1	0	0
	P	26,9%	61,5%	7,7%	3,8%		
9. I cannot find any suitable OLRs to improve my English.	F	1	4	3	1	12	5
	P	3,8%	15,4%	11,5%	3,8%	46,2%	19,2%
10. If I knew OLRs, I could improve my English more.	F	4	18	1	0	3	0
	P	15,4%	69,2%	3,8%		11,5%	
11. My teachers use OLRs in the classroom.	F	2	12	5	2	5	0
	P	7,7%	46,2%	19,2%	7,7%	19,2%	
12. I prefer my teachers to use OLRs in the classroom.	F	6	12	6	0	2	0
	P	23,1%	46,2%	23,1%		7,7%	
13. I like OLRs.	F	6	15	4	1	0	0
	P	23,1%	57,7%	15,4%	3,8%		

More than half of the participants (62%) found online education useful, whereas less than one-third (27%) chose neutral and not applicable. However, just a few of them (27%) preferred online education rather than classroom learning. Nearly half of them (42%) disagreed with this view. Also, having not experienced online learning before, one-third of them (30%) did

not express any thoughts. On the other side, half of them indicated that they frequently did activities online, while approximately half of them (42%) were not involved within online activities. Similarly, they thought they enjoyed doing activities online. This also seems to have affected their belief in English language proficiency because more than half of them (65%) believed they could improve English through online learning, whereas nearly one-third (29%) did not agree with this. Slightly more than half of them (54%) did not find classroom learning enough to improve English, but one-third (35%) did. More than half of them (62%) stated that they knew a number of OLRs to learn English, while others were not aware of these resources. Most of them (88%) rated that they would like to use OLRs to improve their English, but others were neutral. More than half of them (65%) agreed that they could find any suitable online resource to improve their English, but nearly one-fifth (19%) did not. Almost all of them (85%) agreed that they could have improved their English more if they had known OLRs. Half of them indicated that their teachers used OLRs in the classroom, whereas others were neutral and disagreed. More than two-third (69%) preferred their teachers to use OLRs in the classroom. Almost all of them (90%) indicated that they liked OLRs.

All in all, data from the Likert-style items in the questionnaire show that the participants had favour in OLRs on the one hand and required classroom learning on the other. Their responses to the open question at the end of the questionnaire demonstrate that they required classroom teaching because they did not know reliable OLRs and could not access to the support whenever needed.

STUDENT-TEACHER INTERACTION IN THE BEGINNING OF THE PANDEMIC

Data from twenty-four dialogue journals or online letters sent back and forth between students and their teacher demonstrate that students were happy to interact with their teacher in an informal way (i.e. talking with their teacher through Zoom before meeting via Adobe Connect for content learning) and regarded this interaction as "morale booster". On the other hand, they expressed two issues they were concerned about, one for their own trouble, the other for their friends' trouble. Twelve of them wrote that their peers might or could not access to the Internet, or any device for the access. Others just looked at the issue of access on their Internet access, clarifying that they could not access to microphone and had slow running Internet, in order to prevent any misunderstanding. In a reply to these statements, their teacher indicated that she could understand them very well and reassured that she would upload all documents and record teaching for them to watch asynchronously. In their emails, all of the participants first expressed their thanks. Eighteen of them (75%) included their anxiety and worry about support in online learning. Some showed their belief and confidence in their teacher's experience. Student 1 narrated in his email as follows:

> *Thanks for supporting us in this important situation. In the same way, we will continue to support you. The concept of teacher and student is an inseparable whole. You are our valuable teachers who provide information and help with our learning demands. Online education has a system established to keep us from falling behind in education and learning. We are very pleased that you, too, strive on this path and offer opportunities for us. Of course, although it is not as useful as face to face, we, as students, will strive to make the best use of this opportunity, because we are in a compulsory situation. Your efforts in this process, I hope, we will not leave them unanswered. Thank you for thinking of us and boosting our morale.*

Similarly, Student 2 supported his friend's saying by writing that:

> *Frankly, I support this system more, rather than face-to-face training, it is more efficient to keep up with new technologies, to study in this way, to use these devices in the best way and to do homework. In my opinion, education that one student can always access is better than an education that fits in the limited time. I know you are experienced in this field and that means we can easily get through this difficult process.*

Student 3 believed that the homework and assignments given by their teacher helped them feel engaged in his learning. Furthermore, students expressed their awareness of taking responsibility for their own learning during emergency remote education. Student 4 indicated

her feeling by writing "I don't think there's anything we can't handle if we want.", while another one stated in her email "… while the system is like this, you can help us to some extent, so we have to be patient and study hard for the final exam at the end of the year."

PARTICIPANTS' WRITINGS ABOUT SUPPORT DURING EMERGENCY REMOTE TEACHING

Data from twenty-six participants' essay writings show that all of them required teacher support and engagement with their classmates whilst learning online. Half of them also indicated that they needed eye contact and gestures to sustain learning. Student 5 stated:

> For example, I can learn more easily while exchanging information with my teachers and classmates in the class. Also, making eye contact and gestures makes me understand the topic in a breeze. Compared to that, online education does not give that to me.

Student 6 wrote that she felt "incomplete and insecure" without this kind of interaction as follows:

> Firstly, communication between student and teacher is very important in education. Making eye contact during the course adapts the student to the lesson and becomes more efficient. Unfortunately, because this cannot happen in online education, the student lacks the knowledge that he/she will receive through gestures and gestures that he/she will obtain from the teacher. For example, I try to make eye contact with the teacher in every course I've ever been in. If I can't make eye contact, I feel incomplete and insecure.

Student 7 defined this interaction as an "unnatural communication way" and "limited social interaction". Likewise, one student mentioned that the trust and support of the teacher could not be provided through any internet connection. Furthermore, one student defined this online learning environment without interaction as "an unhealthy platform".

However, nearly half of them (46%) noted that support from their teachers had benefited their online learning and enabled them to complete their education "in this challenging education process." Student 8 acknowledged "In this process, even if we encountered a lot of problems as students, our educators were very altruistic for us and tried to find solutions to our problems." Student 9 stated "My teachers perform everything to make online learning useful." Overall, teachers' support was regarded as caring for their learning, giving prompt feedback, providing OLRs and documents and tolerating them. Additionally, just one student, Student 10, related her learning improvement to both teacher support and the benefit of online learning. She indicated that her shy character was a challenge for her in classroom learning, but she did not worry about this in online learning, as she could access to resources anytime, anywhere, as follows:

> First of all, one of the best aspects was that I got away from the stress that occurred in the classroom. I realized that as a shy person, as far as I experienced in the classroom, I could not express myself and express my thoughts comfortably. Apart from that, I didn't need to ask my friends for a note. Because later I was able to listen to the records of the lessons I missed. Also, the homework given helped me improve myself. For example, the sound recordings I made or the videos I shot helped me find the words I pronounced incorrectly. The last and most important benefit for me was that it did not take as much time as traditional education. So I was able to do other things comfortably.

DISCUSSION

In this study looking at students' learning before and during the disrupted education, some key issues emerged from Results based on research questions as follows:

The first issue links with students' perspectives about online learning before the pandemic. According to data from the questionnaire, nearly all of the participants (90%) favoured use of online learning resources for language learning. Furthermore, half of them were unsure that

OLRs were integrated into their classroom learning. This suggests that there is a gap between their perceptions about online learning and OLRs and the actual OLRS practice in the classroom before the pandemic. Also, they mostly preferred classroom learning rather than online learning. This aligns with the suggestion of Kim and Frick (2011) in that their illiteracy in digital learning caused them to have negative feelings about e-learning as stated by them they needed help.

The second issue emerges based on data from dialogue journals in that the lecturer interacted with her students in the pandemic by providing motivational scaffolding. The participants wrote not only their confidence and beliefs about their teacher's ability to handle emergency online teaching as "morale booster" but also the need of taking responsibility for their learning on their own through given tasks and homework. This corroborates existing studies on co-creating support (Bali, 2020; Concerned Academic, 2020; Mehrotra, 2021; Moorhouse & Tiet, 2021; Myers, 2020; Robinson et al., 2020) and in that teacher scaffolds should be featured with attributional feedback, which leads to developing learning strategies and autonomy (Belland et al., 2013). The analysis of this study suggests that the first interaction between students and their teacher, especially in crisis, includes caring, emotional support and engagement. This does not just assure Noddings's framework (2010) for online pedagogy of care, but also draws attention to considering the features of teacher scaffolds.

The last issue is related to students' views on support in the disrupted learning environment retrieved from the participants' essays. This study confirms Robinson et al.'s (2020) analysis and suggestion for "a climate of care" (p. 99), where teacher support is provided through sending dialogue journals back and forth and making informal meetings through digital conferencing tools, such as ZOOM. However, it indicates that online teaching cannot maintain continuity of human interaction, namely, student-teacher interaction in the context of the study since physical support through facial expressions remains lacking. As regards, this study aligns with Rodés et al. (2021) in that online learning design should focus on pedagogy of care from physical, emotional and technical aspects.

CONCLUSION AND RECOMMENDATIONS

The study in this paper explored 26 university-level Turkish students' perceptions of online learning before the pandemic and student-teacher interaction and support in the pandemic. It shows that students needed teacher support to use OLRs even before the pandemic. But, during the pandemic, this support was expected to be motivational and attributional. Therefore, this study has contributed to the current understanding of pedagogy of care in that caring for learning can be linked with motivational scaffolding, particularly during the time of crisis.

However, there can be some challenges of online learning such as technology access, possession of devices and human interaction through facial expressions. Hence, this study offers some implications for the integration of pedagogy of care and other features into online education. First and foremost, institutions should be involved in encouraging and framing the provision of motivational scaffolding. In any case of the participants' digital illiteracy, teachers should enhance students' digital literacy skills. Additionally, there is a need to give scaffolding based on student characteristics, for example, a shy student (Student 10) in the case of the present study.

The study also informs future research. As this study is limited to data from one questionnaire and students' writings, future studies may include in-depth interviewing of students and also look at teachers' thoughts. Moreover, online pedagogy of care that can be given as motivational scaffolding is important; however, this necessitates administrative and institutional support to equip users with digital tools and systems. Therefore, future research may explore roles of administrators and institutions in online education.

COMPETING INTERESTS

The author has no competing interests to declare.

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