

Teachers' Conceptual Perceptions and Thoughts about Learning Environment^{1,2}

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Abstract

The literature provides perspectives in relation to the links between student perceptions of learning environment and their cognitive and affective outcomes but falls short in qualitatively explaining what teachers' perceptions are in relation to classroom learning environment and its various characteristics. Hence, this study aimed to investigate teachers' perceptions about learning environment characteristics facilitative to students' outcomes and their conceptualizations concerning the term "learning environment". The study was designed as basic qualitative descriptive research and attempted to elicit qualitative data from eight social sciences teachers working at state secondary schools. The results revealed that teachers had a tendency to conceptualize learning environment as a physical construct at first. Some of them also mentioned the social and psychosocial connotations or dimensions of the term. Three group of factors in the learning environment (categorized as physical, social and classroom assessment-based) were reported to be facilitative to student outcomes by the participants of this study.

Keywords: *learning environment, classroom learning environment, classroom climate, qualitative descriptive research*

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² The ethical committee permission is not required in this study since the data were gathered before 2020.

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Öğretmenlerin Öğrenme Ortamına Yönelik Kavramsal Algı ve Düşünceleri

Öz

Alan yazın öğrencilerin bilişsel ve duyuşsal kazanımları ile onların öğrenme ortamına ilişkin algıları arasındaki ilişkiler bağlamında yeterli kanıtlar sunarken, öğretmenlerin sınıf öğrenme ortamına ve bu ortamı oluşturan çeşitli özelliklere yönelik düşüncelerini açıklama hususunda yetersiz kalmaktadır. Bu bağlamda, bu çalışma öğretmenlerin öğrenme ortamı kavramından ne anladıklarını ve öğrenci kazanımlarına katkı sunan öğrenme ortamı özelliklerine yönelik düşüncelerini araştırmayı amaç edinmiştir. Temel nitel betimsel araştırma deseni ile kurgulanan bu çalışmaya ait nitel veriler devlet okullarında orta öğretim düzeyinde hizmet veren sekiz sosyal bilgiler öğretmeninden elde edilmiştir. Çalışma sonuçları çoğu sosyal bilgiler öğretmenin öğrenme ortamı kavramını daha çok sınıfların fiziksel şart ve özellikleri ile ilişkilendirdiğini ve bir kısmının ise bu kavramı daha sosyal ve psiko-sosyal boyutları olan bir kavram olarak gördüğünü ortaya koymuştur. Ayrıca, bu öğretmenler sınıf öğrenme ortamlarında yer alan bir takım fiziksel, sosyal ve sınıf içi değerlendirmelere dayalı etmenlerin öğrenci kazanımlarını olumlu olarak etkileyebileceği konusunda görüş bildirmişlerdir.

Keywords: *Öğrenme ortamı, sınıf öğrenme ortamı, sınıf iklimi, nitel betimsel araştırma*

Introduction

The term “learning environment” is a broad and inclusive concept which includes all kinds of learning and teaching activities and processes. Although such individual factors as teaching materials, physical conditions, instructional methods, peer interaction or teacher communication with the students can be categorized as learning environment factors, Fraser (1994) recommends three encompassing categories which are psycho-social, social and physical in defining the term “learning environment”. For Fraser (1994), learning environment refers to all kinds of psychological, social and physical characteristics which affect students' learning, attitudes and success outcomes. Fraser's (1994) ideas above in fact dates back to Moos' (1979) theoretical framework developed to define human environment. The theoretical sub-dimensions developed by Moos (1979) have an important role in the emergence of the concept of *learning environment* and later in the birth of educational research venue called *learning environments research*. Moos (1979) mentions three basic dimensions that compose any learning environment including human in his theoretical framework and according to him, a learning environment reflects, though in different proportions and amounts, the three basic dimensions and their relevant characteristics. The three dimensions in Moos' (1979) framework are defined as a) relationships, b) personal development, and c) system management and change. As the name implies, the dimension called *relationships* refers to the verbal and non-verbal interactions taking place between human beings. The dimension called *personal development* reflects the characteristics of the environment to provide opportunities for personal development and promotion. The dimension called *system management and change* emphasizes the characteristics of the environment to become consistent and controlled as well as to become open and sensitive to change.

The above theoretical structure put forth by Moos (1979) served as a preliminary and leading source for the following studies conducted concerning learning environments. Guided by this theoretical framework, many tools for data collection were developed in order to obtain information about several learning environment characteristics (Fraser, 1981; Fraser, Treagust, & Dennis, 1986; Fisher & Fraser, 1981; Fisher & Fraser, 1990; Taylor, Fraser, & Fisher, 1997; Trickett & Moos, 1973; Walberg, 1968). That is, research data were obtained about students' perceptions of learning environment by means of these tools, scales and inventories, thereby

making it possible to investigate the relationships between the students' perceptions about the learning environment and students' cognitive and affective gains.

Investigations into the students' perceptions about classroom learning environment and several characteristics of learning environment appears to be the strongest line of research in the domain of learning environments research (Fraser, 2002; den Brok, 2018). Researchers within this domain of research have frequently sought to examine the associations between these learning environment perceptions and students' cognitive and affective outcomes, which resulted in an extensive number of studies with correlational research designs (den Brok, Brekelmans, & Wubbels, 2004; den Brok, Bergen, & Brekelmans, 2006; Fraser & Fisher, 1982; Fraser, Aldridge, & Soerjaningsih, 2010; Kim, Fisher, & Fraser, 2000; Mutlu & Yıldırım, 2019; Ovbiagbonhia, Kollöffel, & den Brok, 2019; Pamuk, 2014; Sökmen, 2019; Wei & Elias, 2011; Wubbels & Brekelmans, 1998; Yang, 2015; Yerdelen-Damar & Aydın, 2015). These associational type of research designs dominated the literature especially for the beginning period of learning environments research (den Brok, 2018; Dorman and Fraser, 2009; Fraser, 2002). The questioning of the associations brought the quantitative research methods to the forefront compared to the other research methodologies and the learning environment studies which started with Walberg's (1968) attempts appeared to follow the same quantitative trend as in the past until the millennium. As stated by den Brok (2018), different research methods have started to be included in the learning environment research field only after the year 2000. For this reason, qualitative and mixed design studies in the learning environments research agenda are few in comparison with quantitative studies. Moreover, it has been observed that most of the studies were related to secondary education science and science-related courses and were conducted with the students who took these courses or the teachers who taught these courses (Fraser, 2002). It is also important to note that there have been more surge of interest upon student perceptions concerning classroom learning environment characteristics compared to teacher perceptions and the dominance of quantitative methodologies repeats here with investigations into teacher perceptions being conducted again with quantitative or correlational research designs (Anagün, 2018; Fraser, 1982; Wei & Onsayad, 2007; Tshewang, Chandra, & Yeh, 2017). Therefore, there is a need for qualitative research studies to be conducted with teachers and students in other courses and classrooms (not science-related ones) to understand the real nature and dynamics of classroom learning environments. Based on this gap in the

literature, this study aims to investigate the perceptions of social sciences teachers working at secondary education level about the concept of learning environment. Another aim of the study is to learn about the dimensions and characteristics of the learning environment which these teachers find the most effective to promote student outcomes in their social sciences classes. In summary, the following research questions guided this study:

1. What is “learning environment” according to the participant social sciences teachers? What main elements or components does it refer to?
2. What dimensions or factors of classroom learning environment promote (facilitate) student outcomes according to the perceptions of social sciences teachers?

Method

Participants

The participants included social sciences teachers ($n = 8$) working at state middle schools in several provinces (both central and remote provinces) of İzmir, a city located in the west of Turkey. Criterion sampling was performed in the selection of participants in that those with at least a two-years-experience in the profession were invited as participants to the study. Out of these eight participants, four (50 %) participants were female and the remaining four (50 %) were male. Their ages ranged from 26 to 46. Their years of teaching experience ranged from three to 18 years. Two of the participants had completed their Master's in that one had an MA in social sciences teaching and other one in educational sciences. Table 1 shows the demographic characteristics of the participants.

Table 1

The Characteristics of the Participants

Participants	Gender	Level of Education	Age	Years of Experience
Ayşe	Female	Bachelor	28	4
Ahmet	Male	Master	26	3
Fatma	Female	Master	35	9
Mete	Male	Bachelor	34	10
Hafize	Female	Bachelor	40	15
Yağız	Male	Bachelor	46	18
Semra	Female	Bachelor	30	7
Hüseyin	Male	Bachelor	37	12

Note: Pseudonyms were given to the participants.

Research Design

This study is a qualitative descriptive research that aims to provide a straight forward description of how social sciences teachers conceptualize and manage classroom learning environments. Lambert and Lambert (2012) defines the goal of this research design as “a comprehensive summarization, in everyday terms, of specific events experienced by individuals or groups of individuals” (p. 255). It is also important to note that qualitative descriptive studies can carry other research designs’ characteristics to certain degrees depending on the researchers’ aims and expertise. In this essence, this study here is a (basic) qualitative descriptive study with light phenomenologic overtones in that especially for the RQ2, the researchers had to change their function from describing the subjective experiences of the teachers to understanding and interpreting of these teachers’ particular experiences within the classrooms to create an effective learning environment for their students. That is, for Sandelowski (2000, 2010), when researchers describe and present the participants’ ideas about something like we do using our everyday language, the design is qualitative descriptive. However, when researchers understand, get deeper into the participants’ worlds to interpret and to “re-present events in other terms”, then the design can move into the phenomenological sphere (Sandelowski, 2000, p. 336).

Data Collection Instruments and Procedures

Qualitative data for *Research Question 1* (RQ1) and *Research Question 2* (RQ2) were collected by means of semi-structured interviews and an interview schedule was prepared by the researchers. This interview schedule was composed of two main sections, that is, one section included *background and demographic questions* to be posed to the participants and the other section included *several questions concerning the main content and processes*. The first section of the interview schedule included five open-ended questions aiming to ask about such demographic information as age, years of experience and hours of teaching a week and it was designed to prepare and proceed the students to the main content questions of the interviews. The second section of the interview schedule included eight content questions designed to elicit these teachers' opinions about the term *classroom learning environment* and the dimensions of the learning environment that they consider the most facilitative to student outcomes in their classrooms. There were such questions as "What do understand from the term classroom learning environment", "What is the most important dimension of classroom learning environment in your opinion?" and "What characteristics of learning environment should be facilitated in order to contribute to students' learning?".

Prior to the main study, this interview schedule was pilot-tested with two social science teachers, one male and one female, who were master program students at the researchers' university. The participants of this piloting stage were asked to comment on the comprehensibility, clarity and basic wording of the questions. Based on their comments, two questions were re-worded in order to clarify their meanings. One content question was omitted as it was found a repetitive of another question in the draft interview schedule. Thus, the interview schedule with its five background and six content questions took its final form to be used in the main study.

Data Analysis

The qualitative data were analyzed by means of content analysis. Semi-structured interview data were first transcribed and then read by the researchers carefully. The researchers separately assigned codes to the data by marking the important vocabulary items, expressions and sentences. Inductive coding strategy was performed by the researchers when assigning the codes on the data. The researchers then compared their codes and they tried to agree on the codes that they each assigned different names and meanings in their first individual analyses.

This cooperative look at the data as a second round of analyses yielded agreed-on codes and then the researchers assigned the themes together. The research questions were also used as a guide or as a framework in the assignment and organization of the codes into themes.

Trustworthiness

The researchers aimed to achieve credibility (internal validity) by means of two main procedures, *peer debriefing* (Miles & Huberman, 1994) and *members' check* (LeCompte & Goetz, 1982). To achieve peer debriefing, a colleague who was an expert in qualitative research methods were consulted to examine the codes and themes generated by the researchers. As another procedure to achieve credibility, *member's check* procedure was performed in the way the participants were invited to read the transcribed versions of their interviews and ensure the verification of their reportings. Moreover, the researchers tried to provide *thick descriptions of the participants and data collection procedures* (Miles & Huberman, 1994) to serve the purposes of achieving transferability (external validity) in that further studies could have a detailed understanding of such procedures to make adequate comparisons with their own samples.

Ethical Issues

The ethical committee permission is not required in this study since the data were gathered before 2020.

Results

RQ1: Conceptualizations of Learning Environment

The results from the analyses of the qualitative data about how the participants make sense and conceptualize the learning environment show that there are three different outlooks to conceptualize the term (Figure 1). As is understood with the emerging themes out of the qualitative data, the teachers perceived the learning environment in three different ways: a) as

a construct in the context of physical conditions, b) as a construct in the context of social relations and lastly c) as a construct in which the teacher manages and controls the classes and the students. In the following section, these three different conceptualizations of learning environment were discussed in the light of the most appropriate quotations from the interviewees.

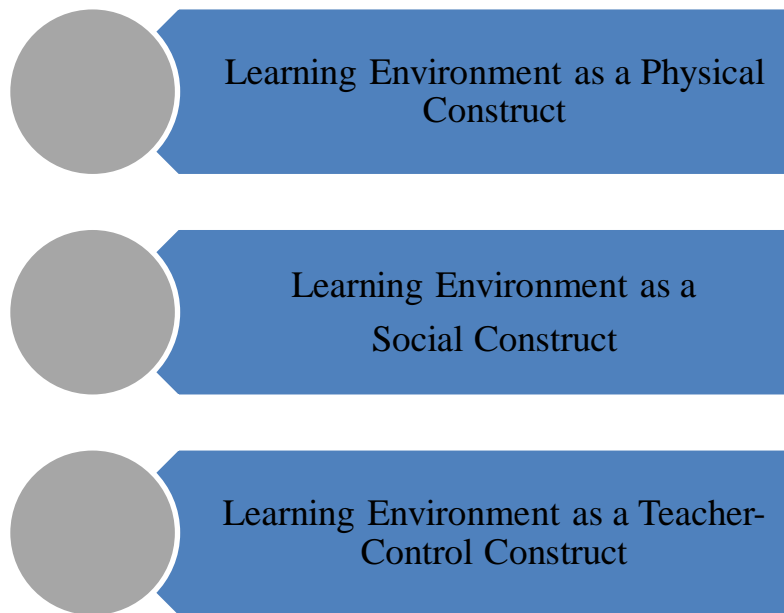


Figure 1. Conceptualizations of Learning Environment by the Social Sciences Teachers

Learning Environment as a Physical Construct

The results from the analyses of the qualitative data revealed that most teachers had a tendency to understand the term learning environment as a type of physical condition or construct. The opinions of a teacher who has associated and conceptualized the learning environment solely with physical characteristics are as follows:

“When I say learning environment, I think it is a concept that is totally related to the physical conditions of a school or a classroom. If the classroom is large and spacious, I can say that this class has a good and beautiful learning environment to support students' learning.” (Hafize)

Another social sciences teacher conceptualized the concept of learning environment with physical characteristics again; however, this teacher mentioned some other characteristics other than the size of the classrooms as related to the term learning environment. He stated his opinions as in the following:

“The concept of learning environment reminds me of the physical conditions and characteristics of my classroom. These conditions may include, for example, the lighting, temperature, walls, desks, that is, the properties of any object we can see in the classroom.” (Yağız)

Similarly, another social sciences teacher explained the term learning environments as a physical construct; but, this teacher also mentioned the technology and the technological tools in the classroom as a component of classroom learning environment. The teachers also emphasized the inevitable connotation of technology they have attached to the term “learning environments” in today’s world where students are exposed to many types of technical and technological developments.

“The first thing that comes to my mind when I think of learning environment is the physical environment. This includes many things such as the size of the classroom, the technical or technological facilities of the classroom, the lighting and the air conditioning. However, for me, technological focus of the term “learning environment” is more inevitable and important as today we live in a technology-directed world and we are exposed to more and more technology in every aspect of our lives including our lives within schools and classrooms.” (Ahmet)

Overall, most teachers stated that when they thought of the term “learning environment”, they perceived the conditions and situations such as the physical building, lighting, ceiling level, layout of the desks, size of the classrooms and the heating of the classrooms as the basic concepts expressing the term “learning environment”. Moreover, some teachers pointed out the fact that some other concepts or conceptualizations come to their minds when they think of this term. However, they first and foremost think of the physical atmosphere to define the term “learning environment” and for them this tendency may be related to the lexical meaning of the word “environment” which appears to emphasize a physical connotation.

Learning Environment as a Social Construct of Relationships

The results from the analyses of the qualitative data showed that some teachers conceptualized the term “learning environments” as something shaped by the relationships present in the

classrooms. These teachers mentioned that learning environment is the atmosphere which is formed by the mutual dialogues, interactions and communication between teachers and students and between peers. In this essence, for some of the teachers, the term “learning environment” appears to make a more social and abstract connotation compared to the above physical and concrete outlook realized in the physical classroom material environment. One of the teachers explains his ideas about the concept of learning environment as in the following:

“The term “learning environment” makes me also remember the environment prepared by the teachers for the students to learn. It includes those relationships and communication between our students or those that take place between us, the teachers, and our students. Thus, the concept of learning environment is something social or human-related in my opinion. I also said that it can be also related to the physical characteristics of the classrooms such as the size of the classrooms or its being dark or not. However, my first impression relates to all those relationships or dialogues taking place in the classrooms generally between teachers and students. The physical side is secondary to me as the relationships can compensate for the lacks in the physical conditions”. (Yağız)

The responses related to this social dimension of conceptualizations imply that the factors related to this type of conceptualizations of learning environment are not always visual, concrete and directly observable in the classroom settings because these social factors can even take place without the presence of direct words or actions. For instance, these factors making the connotations or associations about the concept of learning environment may include such non-verbal behaviors as facial expressions, smiles, noddings or bodily movements signaling positive or negative attitudes towards the lessons or towards the teachers or peers, the usual stakeholders of the classrooms. One of the interviewees explained this outlook as in the following:

“What I understand from the concept of learning environment is that it can be something related to the human beings in the classroom. It can be seen in the words or sentences uttered by the people in the classroom or it can be seen in the smile of a teacher, in the touch of a friend or the physical distance arranged between the students and teachers. The concept of learning environment is made up of all of these characteristics and if these characteristics are all positive then it can be environment for learning to take place in a real sense.” (Mete)

The results showed that for some of the teachers, the term “learning environment” refers to the teachers' interpersonal relationships with their students. For these teachers, teachers' communicative behavior and attitudes towards their students compose the main elements of

classroom learning environment. One of the teachers uttered the following words concerning this issue:

“When I say learning environment, I see it as something prepared or organized by the teachers and teachers’ attitude towards their students. If the teacher is kind, positive, has good intentions for students, then the learning environment becomes the environment for students’ learning.” (Semra)

Overall, the responses categorized into this theme showed that learning environment is human environment that includes the relationships, dialogues and interactions among all individuals in the classrooms. All these social constructs compose the main elements of the learning environment and these are seen as a sort of prerequisite for the classroom setting to turn into a place or environment for learning and other student gains to take place.

Learning Environment as a Teacher Control Construct

In some of the qualitative data, teachers were frequently reported as the main agents of the classroom learning environment with a function to maintain and manage the learning environment of the classrooms. In other words, teachers were seen as the main control mechanisms of classroom learning environments. In the previous section about the social nature of learning environments, some of the respondents also mentioned that teachers are the main components of classroom learning environments. Their focus above is on the teachers’ personal relationships or attitudes towards their students while here the focus is on the teachers’ being the sole authority or agent in the design of learning environments. One of the teachers explains her ideas about learning environment as follows:

“In my opinion, learning environment is something under the control and supervision of teachers. It is the teachers who decide the course content, the activities for the students, the order of the activities and basically the typical flow of all procedures within the classroom walls. For this reason, learning environment firstly involves teachers as the main responsible figure of everything.” (Ayşe).

Another teacher made a similar focus in her explanations; however, she also explained that behaviors or attitudes of the students towards their teachers are likely to influence teachers’ ways of managing or controlling classroom learning environment. In this sense, though it is the

teachers who were the main agents within classroom environments, students appear to have a subsidiary role. The explanations of this participant teacher are as in the following:

“I think for learning to take place in any environment, we need teachers to organize or order our learning or steps for learning. However, teachers also need students and sometimes teachers’ behaviors in organizing the classroom activities or classroom topics depend on the students’ behaviors. For this reason, I firstly emphasize the teachers’ control of learning environments by giving them the leading role in a play. However, learning environment cannot be a whole without students.” (Hafize)

Some teachers whose interview data categorized under this section appear to encourage teacher-centered classrooms. They frequently assigned dominant and traditional roles to the teachers when talking about the crucial role of teachers in composing classroom learning environments. One of the teachers explained his ideas as follows:

“Teachers are the main actors of any classroom environment. They are the leaders of this environment. They lead the students to learn in the best possible way. Without teachers, it cannot be environment for learning. It is just a physical building.” (Hüseysin)

In summary, analyses from the interview data implied that teachers’ responses related to this third dimension in the above account resulted from their perceptions or connotations concerning “learning” when defining or conceptualizing the term “learning environment”. They had a focus on students’ learning and teachers were seen as the main figures in planning or actualizing students’ level of learning in the classrooms. The overall results for RQ1 indicated that social sciences teachers perceived the concept of learning environment as a concept with more physical connotations for them and they used the word “physical” the most in their expressions by emphasizing that especially the word “environment” formed a physical perception for them. Thus, physical connotations of the term learning environment were more frequent than the other two conceptualizations emerging from the analyses of the qualitative data. It is also important to note that most of the participants gave more than one answer when conceptualizing the term learning environment with the physical conceptualizations of the term being the most recurring one.

RQ2: What factors in the learning environment facilitate student outcomes?

For the purposes of the second research question, social sciences teachers were asked about the dimensions of learning environment that they considered the most effective to promote positive student outcomes. The results showed three main learning environment factors, a) physical, b) social and c) assessment-related ones that were likely to enhance student outcomes (Figure 2).

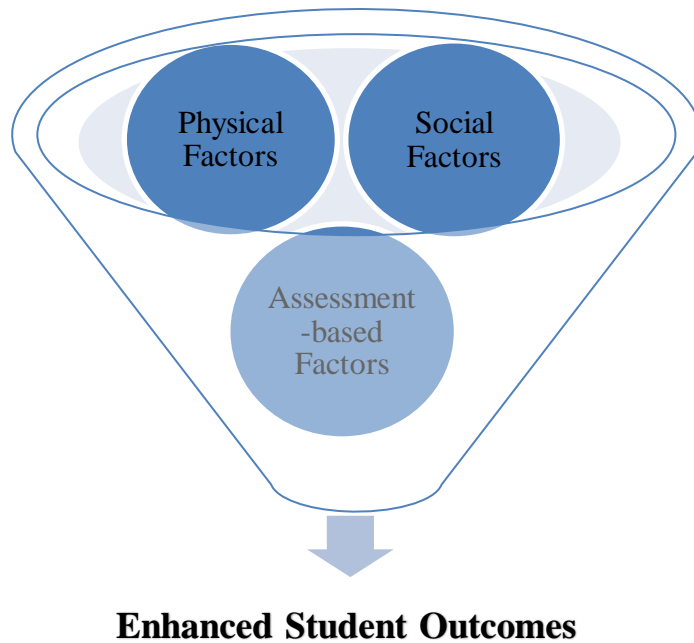


Figure 2. Learning Environment Factors Facilitating Student Outcomes

Physical Learning Environment Characteristics Facilitating Student Outcomes

The results from the analyses of the qualitative data concerning the second research question revealed that most teachers who participated in the study reported the physical characteristics and physical conditions of the classrooms as the most and preliminary dimension of the learning environment among the other dimensions. Therefore, they reported that they first and foremost try to improve the physical conditions of their classrooms in order to support and enrich learning environment of their classrooms. One of the participants stated his opinions as in the following:

“Today’s students are visual learners and they are attentive to appearances. Perhaps in the past when we were students, we did not care that much about the physical appearances and conditions. Time has changed and now these students get motivated when they have favorable physical conditions. For this reason, I think that the nice and optimal physical conditions should be provided to the students so that they pay attention to their lessons and classroom work. This should be our preliminary task as teachers. We should try our best to have neat, clean and organized atmosphere like bright and tidy classrooms, good desks and good learning tools in our classrooms”. (Yağız)

Almost all of the interviewees mentioned the significant influence of the physical characteristics upon students’ motivation and attitude towards the class. They mentioned the contribution of the physical conditions and characteristics to students’ motivation and emphasized that this motivation then contributes to their learning. In other words, not only this motivation is seen as an affective student outcome but it is also seen as a moderator influencing students’ cognitive outcomes.

“I think the most important characteristic of learning environment that will contribute to students’ learning and happiness is good physical conditions. For instance, when students sit in good desks in a bright and tidy classroom, they will feel happy and thus feel more motivated to learn. A good, properly organized classrooms, labs and gyms or school gardens will have students feel they are valuable. This positive feeling enhances their learning process in turn.” (Hafize)

Given the physical characteristics which have been reported among the most facilitative learning environment dimensions contributing to student outcomes by the interviewees, there was a particular surge of emphasize on the use of technology in the name of providing favorable physical conditions. That is, for those reporting the classroom physical characteristics as the most important dimension of the learning environment, the use of technology and technological tools was important and facilitative to positive classroom learning environment and thus to positive student outcomes. One of the teachers mentioned technology as an important sub-dimension of physical learning environment characteristics as in the following statement:

“Physical characteristics of any learning environment is the first thing to consider when we want to improve student gains. When we have no good learning sources, no good school buildings lacking technological facilities for the students, how can we expect them to learn better and further? When it comes to today’s generation and young people, the very first learning source is technology. They are born into a technological world. So, to add to their gains and for their benefits, we need to

have technologically well-equipped classrooms and good technological sources or media". (Ahmet)

In sum, most of the teachers participating in this study attached importance to the physical dimensions of classroom learning environment. That is, for most teachers, physical characteristics of their classes like brightness, cleanliness, spaciousness, comfortable desks and the use of good technological tools and media were facilitative to students' learning. Moreover, some of the teachers mentioned the contribution of such characteristics to students' motivation and happiness which in turn lead to increased levels of learning and course achievement on the part of the students.

Social Learning Environment Characteristics Facilitating Student Outcomes

Almost all of the interviewees agreed that social relationships among all stakeholders in the classrooms are important dimensions of any learning environment. Social relationships included teacher-to-student and student-to-student communication and interaction in the classrooms. They also mentioned some side characteristics adding to the social relationships and social dimensions of classroom learning environment. Given all of these characteristics categorized by the researchers as the social dimension characteristics, it is seen that teachers' communicative and interpersonal behavior was the most reported learning environment characteristic that is believed to have a significant effect on student outcomes. In this essence, one of the teachers mentioned the importance of teachers' communicative behavior towards the students as follows:

"In my opinion, it is the teacher that is making the class a real learning environment for the students. When students love their teachers, have a good communication and relationship with their teachers, then they get more attentive to and motivated for the lesson. When you have no communication and relationship with your teacher, when you feel afraid to talk to your teacher in the class, when you feel your teacher is distant to your feelings and you, how can you want to learn anything in her/his class? Does this teachers' course offer a learning environment for you?" (Mete)

Some teachers even pointed out the superiority of teacher behaviors over physical classroom conditions. That is, in contrast to the above section concerning the importance of physical characteristics of learning environment to promote student outcomes, a considerable number

of teachers emphasized the effects of positive teacher behavior, recognized as the extent to which teachers are encouraging, helpful, friendly and interested in their students, beyond the effects of favorable physical classroom conditions and characteristics. One of the teachers explained her ideas concerning this as in the following:

“In my opinion, in order to have a positive classroom environment, the teacher should be pleasant, sincere and talkative. If I need to improve my learning environment, I pay attention to it first and act accordingly. Technological disruptions and problems may be experienced in the classroom and students may tolerate this and the negative classroom environment may not be a major obstacle for the students' learning. However, if there is a smiley, grumpy teacher in their classrooms, this will adversely affect students in the name of learning and therefore students may experience a negative learning environment. In the long run, even success and attitudes towards the course may be affected. Therefore, I think that positive teacher behavior and attitude towards the students is the most important characteristic of the classroom which makes the learning environment positive.”
(Semra)

A few teachers emphasized the importance of social dialogues and communication between the students as an important asset and dimension of the classroom learning environment. When students have good relationships with their peers, they feel more relaxed and comfortable to participate in classroom work and in this way classroom atmosphere becomes open to students' learning, cooperation and involvement. Moreover, teachers should be responsible for the students' working in a friendly atmosphere and being supportive of each other. One of the interviewees explained peer relationships as an important learning environment dimension as in the following:

“Students' relationship and communication with each other is an important characteristic of the class. When they have a good, respectful and sincere relationship with each other, they can easily cooperate for classroom work, become more directed towards and involved in the course content and activities and in this way, they become much more successful in this lesson. So, interaction among the students is important and teachers should encourage students to respect and support their peers for the sake of promoting more effective and positive classroom learning environments.” (Ayşe)

A comment should be added here pertaining to the teachers' emphasis upon the provision of equity in the classroom as another factor in terms of social facets of the classroom learning environment. In this regard, a few teachers reported that in order to provide a classroom learning environment promoting students' gains, teachers should treat their students equally

with regard to their turns in asking and answering questions or other work shares in the classrooms. Moreover, they asserted that teachers should encourage and praise not only the high achievers but also those with lower proficiency levels. One of the interviewees explained this idea as in the following:

“When teachers treat equally to their all students, that is, both to those who are high achievers and to those who are low achievers, we can then say that this classroom and its learning environment gets more facilitative and contributive to students’ achievement and learning.” (Yağız)

Overall, interviewees also attached a certain degree of importance to the social atmosphere of the classrooms shaped by the mutual relationships, dialogues and communicative behaviors of the all human beings within the classrooms. Furthermore, the utilization of equal treatment and the involvement and encouragement of students by the teachers in the classrooms add to effective and positive learning environment atmosphere supportive of students’ outcomes.

Assessment-based Learning Environment Characteristics Facilitating Student Outcomes

Though this was mentioned fairly less compared to the social and physical characteristics of the classrooms mentioned earlier in the above account, course assessment methods were also found to be an important dimension in the learning environment contributing to student gains. The use of assessment systems which were never applied in the course and which did not overlap with the course routine leads to such perceptions of fear and uncertainty on the part of the students, thus resulting in the formation of a negative learning environment in the classrooms. Therefore, congruence between real classroom work and course assessment methods should be taken into consideration to create classroom learning environments that will facilitate student outcomes. One of the participants expressed her opinions about this subject as follows:

“The evaluation system of the course is a crucial element of the learning environment. In the Turkish education system, what students are most worried about the course is the assessment method of the course and the exams. For this reason, I care about the elimination of such concerns of the students for my own course. I argue that the learning environment may be more beautiful and positive when course evaluation methods are in parallel with the way the course is conducted. In fact, the more we apply transparent and open assessment systems and

the more familiar the students become with these, the more positive and beautiful the learning environment becomes.” (Fatma)

A few participants mentioned that assessment is an important and inseparable dimension of the classroom learning environment; however, this dimension is often disregarded in the Turkish education system. One of the interviewees explained his criticism about the lack of a well-organized and reliable testing system as in the following:

“Assessment and assessment methods used in the classroom are perhaps the most important dimension of the classroom learning environment. I say this because when I look back at my own period as a student years ago, I almost completely remember how I was tested in a lesson and what results I got from the tests of this course. Good, valid, reliable, well-planned course assessment systems are needed for students' benefits. Students become less stressed, happier and more successful when they have all these favorable conditions in terms of measurement and assessment. One critical point for me here is that our education system is not very good at organizing these favorable conditions. Students often feel afraid of course assessment. This fear creates a dark black chaotic and undecisive learning environment for the students.” (Ahmet)

To summarize, the lack of a valid and reliable measurement and evaluation systems in the classrooms leads to learning environments hindering for positive cognitive and affective student outcomes. In this sense, there should be an alignment between teaching and testing situations and assessment conditions should be valid and meaningful to students. Teachers should try to utilize appropriate measurement systems in order to create a positive and effective learning environment for their students.

Results and Discussion

This study is a qualitative research study conducted in line with the domain of learning environment research in terms of its main focus of investigation. The main focus of investigation was on the teachers' perceptions of learning environment and its relevant characteristics. In this sense, this study was conducted with the basic premise that teachers' perceptions and thoughts about classroom learning environment factors and conditions should be understood and learned prior to arranging, changing or utilizing these factors and conditions. In most of the literature within the domain of learning environments research, students were

asked about their perceptions pertaining to the classroom environment factors. The results of this study showed that teachers could be valuable sources of data to gain insights and information about classroom learning environment characteristics with most results aligning with the results from the quantitative studies in the literature. In this essence, when the conceptual perceptions of the teachers about the term “learning environment” were examined, it was seen that the teachers who participated in this study considered the concept of learning environment mainly or firstly as a physical construct. Although they had other concepts and connotations about learning environment in their minds, the majority of the participants emphasized that physical characteristics form more concrete and visual understandings for them. In other words, although teachers mentioned the characteristics of the learning environment that may be involved in a number of social and psychosocial dimensions, these characteristics came after the physical characteristics and conditions of the learning environment. Such conceptualizations of the teachers aligned with the literature in that the materials environment dimension or sub-scale was mentioned and included in most of the data collection instruments (i.e. in most of the learning environment scales) and these subscales appeared to generate valid and reliable data for researchers. For instance, there was a Materials Environment Subscale in the Learning Environment Inventory developed by Fraser, Anderson, and Walberg (1982). Resource Adequacy Subscale of School-Level Environment Questionnaire (Fisher & Fraser, 1990) similarly focused on the physical characteristics of the classroom learning environments. These two instruments set the foundations for further data collection instruments and research studies (Fraser, 2002).

When teacher opinions about the characteristics of the learning environment which they found effective and important to enhance positive student outcomes were taken into consideration, physical characteristics of the classrooms were frequently mentioned by the interviewees. In this context, characteristics such as lighting, temperature, organization of the desks and boards and the type of the course materials used were reported to be important by the participants. Thus, teachers from this study recommended that favorable conditions about the above conditions should be provided to the students to enhance their cognitive and affective outcomes of schooling. In this essence, it is seen that the results from this study about the facilitative roles of physical classroom characteristics upon student outcomes corroborate the conclusions suggested by Higgins, Hall, Wall, Woolner and McCaughey (2005). The participant teachers

of this study had emphasized the positive effects of good physical classroom conditions upon students' motivation and achievement. In their extensive review of the studies on school environments, Higgins and his associates (2005) similarly reported that good physical conditions promote students' comfort, attitudes towards the school and wellbeing.

Social and interpersonal relationships were also emphasized by the participant teachers in this study. Such results also align with the results in the literature gained about the teacher interpersonal behavior which is another venue of investigation for most learning environment researchers. The variable of teacher interaction or also called as teacher interpersonal behavior is another component of learning environments research that has been widely investigated by the researchers and this variable was consistently found to be a strong predictor of students' cognitive and affective outcomes (Fraser, 2002; den Brok, 2001, 2018). Therefore, it can be suggested that teacher training programs should include trainings and content related to the importance of the social and psychosocial aspects of learning environments. Teacher candidates should be trained to achieve good teacher-student relationships and to have a favorable interpersonal approach in their communication and interactions with the students. Testing and assessment practices and methods were also considered important in order to create positive learning environment and help students become more successful and happier. The links between assessment practices and student outcomes were similarly reported in the previous studies in the literature (Dorman, Fisher, & Waldrip, 2006; Koul, Fisher and Earnest, 2006; Mutlu & Yildirim, 2019).

Overall, the use of a qualitative research design has contributed to the researchers' in-depth understandings of a number of factors that might promote or hinder student outcomes. Therefore, future qualitative studies should be conducted to understand the complicated nature of classroom learning environment and the factors hindering or facilitating the student outcomes within the classrooms.

Statements of ethics and conflict of interest

“I, as the Corresponding Author, declare and undertake that in the study titled as “*Teachers' Conceptual Perceptions and Thoughts about Learning Environment*”, scientific, ethical and

citation rules were followed; Turkish Online Journal of Qualitative Inquiry Journal Editorial Board has no responsibility for all ethical violations to be encountered, that all responsibility belongs to the author/s and that this study has not been sent to any other academic publication platform for evaluation. "

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