The effect of space (Proxemic) on teachers-students’ interaction in the classroom

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Abstract:
This study explains the effect of space (proxemic) on teacher-student interaction in the classroom. To collect the required data to inform the paper, a questionnaire was designed. The sample of the study comprised 50 English language teachers at Sudanese Secondary schools, most of them are B.A holders and some of them are M.A. holders. Quite good results have been drawn from this study. The first result stressed the idea that space and seating arrangement can’t be separated from the learner’s culture as it is a part of it, and it can affect teachers–students’ space to a great extent. When we interact with students, we consider the language with its culture and its body language. The second outcome is the fact that there was a great effect of teachers’ space on teachers-students’ interaction in the classroom. The types of space used in the classroom depend on gender differences in the classroom. Thirdly, space has a great effect on teachers–students’ interaction in the classroom and it enhances communication. Gender differences can change the types of space use in the classroom. Therefore, gender difference requires from the teachers to use a specific type of space such as public or social and excluded intimate space. Putting the gender differences, students culture and interaction required into teachers’ consideration leads to more successful interaction between teachers and students in the classroom. These
findings have evidently confirmed the effect of space on teachers – students' interaction in the classroom.

Key words: Proxemic, Gender differences, Interaction

INTRODUCTION

Language is a means of communication between people. Communication takes different shapes in the classroom either verbal or nonverbal communication. The more perceive communication between people is verbal communication. According to Albert Mehrabian, a professor of Psychology, estimates that 55% of the impact of a message, which reaches the listener, is through the nonverbal mode. With his experiments he suggests, "Total impact (in the listener) = (0.07 verbal + 0.38 Vocal + 0.55 Non-Verbal) of the speaker" (p 53).

Proxemics, as a type of nonverbal communication, refers to communication through space or describes the way a person uses space in communication. Communication takes different shapes and styles. So when we communicate, the distance between communicators shows the relation, the status and the power between them. Moreover, space and the distance influence how people communicate and behave in their situation.

Proxemics is culturally specific, which makes it different from one culture, gender and context to another. In this case, we need to show the useful of proxemics use in academic situations from Sudanese and Arab perspectives.

However, the amount of space that a person desires depends on many characteristics, such as gender, age and situation. Interaction with friends/relatives is not like conducting casual business, lesson/lecture. For example, when you communicate with your friend you use informal signs and gestures, but when you communicate with students you use formal signs and gestures. Communication between males
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differs from that between females. Communication between children is not like that of adults. Communication at home/streets is not like communication at schools/hospitals.

Communication through space is different from culture to another and there is no agreement between cultures in the use of space in communication. For examples, communication in the Arabs world is different from western culture. “In spite of over two thousand years of contact Westerners and Arabs still do not understand each other”, (T, Edward, 1990, p154).

Arabs differ in the use of space from western in their behaviour in public, the concept of privacy, personal distance, involvement, boundaries and feeling about enclosed space, so their use of space in all cases is different from the western culture. In Arab context/world there are no specific rules for the use of space and sometimes they overlap between types of space and they do not keep their distance in communication either in formal or informal situations. “Like everyone else in the world, Arabs are unable to formulate specific rules for their informal behaviour patterns” (T, Edward, 1990, p159).

Sudanese, as part of the Arab culture, use the space in their communication; in formal places, they sometimes keep distance in communication especially in the academic setting as in higher institutions of learning such as universities, schools and institutes and sometimes overlap between the types of space in their communication. In universities communication through space takes three shapes. Firstly, between teacher – teacher, secondly between student – student, thirdly between student – teacher, in each shape they use different distance/space for many reasons such as the power between student and teacher or teacher and teacher. Secondly, the gender of the teacher and student also takes another shape of space in communication, for example, the communication between males and females is not like between males and males/females and females. From all the above the relation
between student and teacher, gender and culture have a great influence on space/distance when people communicate.

From teaching experiences, the researchers have found that social/public space is a critical issue which concerns Sudanese English language teachers in the teaching process. Social/public space used in the classroom seems to be problematic to the majority of Sudanese English language teachers who teach English as a foreign language in the classroom. As a part of their teaching process, it is important to use it to facilitate interaction between their students but they rarely use it in their classroom and if they use it, they use intimate space in the classroom. This study is carried out with the intention of some finding theoretical and empirical evidence to effective of the space in the classroom to improve teachers-students’ interaction and to develop students’ performance in learning English in the classroom.

LITERATURE REVIEW

Space (Proxemic)
Proxemics is the study of one's perception and use of space. The term Proxemics - denoting, “The study of how human beings communicate through their use of space”- was coined by E.T.Hall, an Anthropologist by profession. He defines the term as, “The spatial dimension of nonverbal behavior” (Hall 1963; p 122). According to Manninen and Kujanpaa (2002, p.3), spatial behavior is the “physical distance we place between ourselves and others” (Helmer and Eddy, 2003, p.43), which indicates whether the relationship among the interlocutors is intimate, personal, social or public?

Blyth, an expert in the proxemics filed, while talking about Proxemics states that, “Hall sets forth a theory about how people react to others at various distances from their own bodies, indicating thereby a sense of territoriality, similar to that shown
by animals or birds and develops a notation for this purpose.” (Blyth 1976; p 117).

There are four fundamental areas of space communication which are public, social, personal and intimate.

**Fig. (1)**

![Diagram of Proxemic Zones]

1. **Public**
The public zone refers to space from twelve feet and more away from the body of the teachers or speakers, and the communication that typically occurs in this zone are the formal and informal places or situations. The public space starts about twelve feet from a person and extends out from there. This zone is used for many reasons; to engage the speaker in general discussion, and to let the audience observe the speaker fully. In addition to that, it is used for the safety and security of the speaker and also to show his power or status.

The drawbacks of this zone do not always allow speakers to go into a deep discussion in the classroom, and also it does not provide the speakers (teachers) with close space, which makes listeners (students) feel comfortable (promote emotional closeness) in the classroom environment. From this, the entire public zone it is not always good in educational fields because the learning environment which includes teachers and students need close space to create a good interaction or conversation.
environment between both teachers and students to complete the learning process.

2. **Social**
The social zone refers to space from four up to twelve feet away from the teachers (speakers) and the listeners (students). The communication that occurs in this zone is a formal communication.

This distance is preferred in the educational field because it gives teachers and students more time for discussion and reduces the suspicion of any impropriety. The social zone is referred to as safe a distance because the possibility for intentional or unintentional touching does not exist. For this reason, we use much time in education, students in large lecture classes should consider sitting within the social zone of the professor, since students who sit within this zone are more likely to be remembered by the professor, be acknowledged in class, and retain more information or knowledge because they are close enough to take part in important nonverbal and visual cues that help them to expose themselves.

3. **Personal**
The personal zone starts at our physical body and extends four feet. This zones is more used between friends, lovers and close acquaintances, and significant. Even though we get closer to the physical body of another person, we may use verbal communication at this point to signal that our presence in this zone is friendly and not intimate. Even people who know each other could be uncomfortable spending too much time in this zone unnecessarily.

“*Personal distance* is the term originally used by Hedgier to designate the distance consistently separating the members of non-contact species.” (T, Edward, 1966, p119).

This zone is broken up into two subzones, which helps us negotiate close interactions with people we may not be close to
interpersonally. This zone is better for students in intergrading, beginner, and secondary school but not suitable for university level and if a teacher uses it in a lecture hall it may teach a negative impression on students. In this subzone, we can easily touch the other person as we talk to them; briefly placing a hand on his or her arm or engaging in other light social touching that facilitates conversation, self-disclosure, and feelings of closeness, but we use it with another level to make students feel psychologically relaxed and in high or deep conversation with the teacher.

4. Intimate
This zone starts from the skin of the body up to eighteen inches. This zone is only used for the interaction between the closest friends, family, and romantic/intimate partners. In this zone, all speaker characteristics are clearer for the speaker, the sounds, body, face muscles and even his breath. In the Arab life, they sometimes use it, especially in crowded places.

We rely on this zone in education especially when we interact with kindergarten students because teachers in this level play the role of fathers and mothers, which is totally refused at the university level because there is no reason to use it with mature students.

“At the intimate distance, the presence of the other person is unmistakable and may at times be overwhelming because of the greatly stepped-up sensory inputs” (T, Edward, 1966, p116).

There is a strong relation between space and culture, so space is associated with cultural values. A good example of the link between the use of space and culture can be seen in the values of individualism and collectivism. Each culture uses a different pattern of space according to the pattern of space they use either individualism or collectivism. Cultures that stress individualism and privacy are England, United States, Sweden and etc. They generally demand more space than collective
cultures. Cultures that stress collectivism are Arabs, Latin Americans, and etc.

In Sudanese context people sometimes use space in all cases and situations similarly, they sometimes use it with purposes and reasons, so Sudanese people are divided into three users according to the use of space. The first users who use it with purposes often are teachers and their percentage is (25%). The second users who use it for purposes of power, those are the half of Sudanese which is (50%). The third users who they do not care about space in their communication, those are last quarter which is (25%).

According to the level in Education, Sudanese teachers are divided into four levels, kindergarten teachers, primary teachers, secondary teachers and tertiary teachers. In each level, teachers need to use different zones of space that suit students' level, for example, it is inappropriate to use close intimate phase with tertiary level, but we use it when the situation or the action needs it such as in primary or kindergarten. The variation of level needs a variation of space use. Teachers need to determine which zones of space that need to use.

The space between students in the classroom help them communication either more effectively or less effective. When the space between students is closer is prefer more that keeping away mainly in primary and kindergarten level. According to E. Harris and John C. Sherblom

"Individuals sitting across a table from each other maximise their interpersonal distance, increase their potential for sending and receiving both verbal and nonverbal messages and thus perhaps conflicting messages, and increase the likelihood of becoming competitive” (118).

From all the above, there are four points you need to consider when you are using space in education, either in classroom or lecture hall. Firstly, the culture of students whom you teach because using of space in communication depends on
culture. Secondly, the level of students you interact needs special rules and application in the situation when the learning process takes place. Thirdly, the reason behind the use of space or you should ask yourself, why I am using this space with these students or in this case. Fourthly, the types of proxemics zone that you need to use.

5. The influences of the space on communication
There are four things that affect space communication which are culture, subject matter, gender and age. People who are in the same status keep the shortest distance between themselves when they communicate but when the status is different people keep their distance in communication. People who are from collective cultures keep the distance shorter and those from individualism culture keep the distance longer when they communicate. When people discuss personal subjects, they keep shorter distance but when they discuss a public subject, they maintain longer distance. The gender also affects the communication; females always keep shorter distance in communicating not like males keep longer distance in communicating. Children keep shorter distance when they communicate not like the adults, so age has a big role in communication. From all the above, status, culture, subject matter and gender affect people distance when they communicate. The effect of space on communication either positively or negatively depends on the person you communicate with.

STATEMENT OF THE PROBLEM

English language teachers need to know the role of space and its effect on teachers- student interaction in the classroom. Awareness of this factor leads to successful interaction in the classroom. Thus, this study seeks to provide teachers with the effectiveness and importance of the space and its effect on
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teachers- student interaction. The role of space in the classroom has both positive and negative impacts on teachers – students’ interaction in the classroom.

OBJECTIVES

This study aims to examine the following:
- To examine the effect of the education level on teachers’ space in teachers – students’ interaction in the classroom.
- To investigate the impact of gender differences on the use of space in teachers – students' interaction in the classroom.

QUESTIONS

This study tries to answer the following questions:
- To what extent does the education level affect teachers’ space in teachers – students’ interaction in the classroom?
- What is the impact of gender differences on the use of space in teachers – students’ interaction in the classroom?

SIGNIFICANCE OF THE STUDY

Classroom seating arrangements have a crucial role in developing teachers – students’ interaction in the classroom. Teachers should take into their account the distance between them and every student in the classroom.

Teachers’ space and classroom seating arrangement have a great effect on teachers – students' interaction in the classroom. Public and social spaces are two different types of space that teachers need to differentiate between when they interact with students in the classroom. Investigating these
factors is of a great value for successful language teaching. Therefore, this study aims at exploring the impact of the teachers’ space in teachers–students’ interaction. The study also investigates the gender difference and its effect in the used space in the classroom. The results of this study would give insights into more successful language teaching perspective for teachers and learners, teachers’ education programs and syllabus designers.

**METHODOLOGY**

The participants in this study included 50 English language teachers at Sudanese Secondary schools, in Khartoum state who specialize in English language teaching. Their experiences are from 1-10 years in teaching at Secondary School, Khartoum State most of them are B.A. degree holders and some of them are M.A. holders.

**Questionnaire**

The questionnaire was designed for English language teachers at Sudanese Secondary schools at Khartoum State. The number of the teachers who participated in the questionnaire was 50 teachers from different schools in Khartoum State. In order to check the apparent validity and reliability of the study questionnaire and validation of its statements according to the formulation and explanation, the researcher showed the questionnaire to 3 PhD holders referees who are specialists in the study field. Some of the referees make some suggestions, and others agreed that the questionnaire is suitable. In any way, the researcher studied all suggestions, and some corrections have been done to this questionnaire.
This study aimed to investigate the role of space (Proxemic) and its effect on teachers-student interaction in the classroom. To achieve this, the questionnaire was formulated to measure the role of space and its effect on teachers-student interaction. The questionnaire included 12 questions. 4 questions for each area. The questionnaire was distributed to 50 teachers at different Sudanese Secondary schools at Khartoum State. The questionnaire was reviewed and validated for its content, style, appropriateness, and practicality by four experts in EFL teaching at Sudan University of Science and Technology.

DATA ANALYSIS AND DISCUSSION

Table (1)

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<tbody>
<tr>
<td>University</td>
<td>19</td>
<td>38%</td>
<td>10</td>
<td>20%</td>
<td>16</td>
<td>32%</td>
</tr>
<tr>
<td>Secondary</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Primary</td>
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<tr>
<td>Kindergarten</td>
<td>-</td>
<td>-</td>
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</tr>
</tbody>
</table>

* M. male       * F. female       * T. teacher   * S. student

The differences between male/female teachers and male/female students in term of interaction in the classroom in public space. It is clear from table (1) that 50 teachers (100%) agree that public space use only at university level more than in the other education levels. The table shows there was a positive relationship between teachers-students interaction when the interaction occurs between the same gender. 19 teachers with (38%) agree and prefer the interaction between male student and male teacher more than with females and also it is 32% out of 16 teachers prefer the interaction between female teachers and female students.
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Table (2)

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</thead>
<tbody>
<tr>
<td>University</td>
<td>3</td>
<td>6%</td>
<td>2</td>
<td>4%</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Secondary</td>
<td>12</td>
<td>24%</td>
<td>6</td>
<td>12%</td>
<td>16</td>
<td>32%</td>
</tr>
<tr>
<td>Primary</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

* M. male  * F. female  * T. teacher  * S. student

It is clear from the above table (2) that 84% out of 42 teachers agree that social space is use at the secondary level while (16%) show it is used at the university level. So the above approve that always teachers use social space at secondary schools. The table shows there was a positive excepted in relationship between teachers- students’ interaction when the interaction occurs between the same gender and it became negative when it takes place between different genders.

Table (3)

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</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>1</td>
<td>2%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Secondary</td>
<td>3</td>
<td>6%</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2%</td>
</tr>
<tr>
<td>Primary</td>
<td>13</td>
<td>26%</td>
<td>7</td>
<td>14%</td>
<td>15</td>
<td>30%</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>4%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* M. male  * F. female  * T. teacher  * S. student

It is clear from the above table (3) that (78%) of 39 teachers agree that personal space is use at the primary level while (12%) show it is used in Secondary Schools. So the above approve that always teachers use personal space at primary schools. The table shows there was a positive excepted in relationship between teachers- students’ interaction when the interaction occurs between the same gender, negatively when it takes place between different genders.
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Table (4)

<table>
<thead>
<tr>
<th>Education level</th>
<th>Intimate space</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M.S – M.T</td>
<td>13.472</td>
<td>82.66</td>
<td>96.13</td>
<td>101.32</td>
<td>44.22</td>
<td>45.21</td>
<td>37.01</td>
<td>37.39</td>
<td>141.71</td>
<td>140.34</td>
</tr>
</tbody>
</table>

It is clear from the above table (4) that (78%) of 39 teachers agree that intimate space use at Kindergarten level while (12%) is used in the primary level. So the above approve that always teachers use intimate space at Kindergarten level because teachers here play the role of parents more than teachers. The table shows that teachers-students interaction it in not related to gender so the interaction is positive whether the teacher is a male or a female.

Table (5)

<table>
<thead>
<tr>
<th>Factors affecting the use of space in the classroom</th>
<th>Mean Male (N=25)</th>
<th>Mean Female (N=25)</th>
<th>t-value</th>
<th>Sig.(2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom size</td>
<td>13.472</td>
<td>82.66</td>
<td>-1.673</td>
<td>.074</td>
</tr>
<tr>
<td>Gender</td>
<td>96.13</td>
<td>101.32</td>
<td>.912</td>
<td>.056</td>
</tr>
<tr>
<td>Seat arrangement</td>
<td>44.22</td>
<td>45.21</td>
<td>1.132</td>
<td>.218</td>
</tr>
<tr>
<td>Learner’s culture</td>
<td>37.01</td>
<td>37.39</td>
<td>.542</td>
<td>.541</td>
</tr>
<tr>
<td>Education level</td>
<td>141.71</td>
<td>140.34</td>
<td>-.639</td>
<td>.471</td>
</tr>
</tbody>
</table>

*Significant at P < 0.05 level of significance.

To compare the differences between factors that affect the use of space in the classroom in Sudanese Secondary Schools, Khartoum State. Levene’s “Test for Equality of Variances” was used to test the differences. The above table shows that the value of p was greater than 0.05 in all five factors. So the above factors are accepted as factors that affect the use of space in the classroom whether the teacher is a male or a female. It is concluded that there is no significant difference between male and female teachers in the use of space in the classrooms at Sudanese Secondary School, Khartoum State.
It is clear from the above table (5) and Fig (2). that most teachers agree (72%) that public space use with university level. In addition to that, most of the teachers agree that (82%) agree that social space uses with secondary level while personal space use with primary level. For the kindergarten level, most of the teachers agree that intimate space uses with kindergarten level because here the teachers play the role of parents.

CONCLUSION

This study tries to show the positive/ negative effect of space on teachers – students interaction and direct teachers attention toward the relationship between education level and use of space. The results showed that the use of space depends on the level of education such as public space at the university level, social space in the secondary level, personal space in the
primary level and intimate space in kindergarten level. Furthermore, the study finds that the use of space in the classroom is affected by many factors such as classroom size, gender, learner’s culture and education level. And also the study finds that interaction between students – teachers in the classroom is interrupted by factors such as gender and education level. Gender is the main factor that affects the use of space in the classroom, so it recommended for teachers when they interact with students need to consider gender education level and leaner’ culture. Finally, in terms of using space in the classroom, there is a significant difference between male and female teachers/ students but gender at kindergarten level does not matter in the interaction.

**IMPLICATIONS OF THE STUDY**

The findings of this research have generated a wider base of implications for teachers and teacher education programs. Since the study shows the positive impact of the use of space on classroom seating arrangement and what the best position for teachers is inside the classroom. It is recommended that English language teachers, schools administration, education program experts and English language teachers coach should be trained on the use of space in the classrooms. Such action should be considered due to the big role it plays in the classroom in rising teachers-students’ interaction. Teachers should bear in their mind the effectiveness of space and the classroom seat arrangement. Space should be included as a part of English language teaching courses at colleges of education to train teachers on using it in their classes in the future. Teachers should avoid the use of intimate closeness when they teach different gender mainly when males teach females. Space and the classroom seating arrangement use should be included in teacher evaluation as an effective part of the teaching process in the classroom. Further research also
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should be carried out in this area to measure the other part of nonverbal communication in developing teachers-students’ interaction.

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