NONVERBAL IMMEDIACY AND PERCEPTION OF LEARNING:
A CROSS-CULTURAL SURVEY IN TURKEY, USA AND CHINA

SÖZSÜZ YAKINLIK VE ÖĞRENME ALGISI:
TÜRKİYE, ABD VE ÇİN'DE KÜLTÜRLERARASI BİR ARAŞTIRMA

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ABSTRACT: This study tries to find out the effects of university instructors' nonverbal immediacy skills on the student perception of cognitive learning by using the "Nonverbal Immediacy Scale for Observers" (NIS-O) developed by Richmond, McCroskey and Johnson in 2003. The present study is the first use of 26-item NIS-O instrument in cross-cultural literature examining the relationship of "instructors' nonverbal immediacy behaviors" and "student perception of cognitive learning", which makes its findings rather important for the cross-cultural nonverbal immediacy literature. The survey was conducted with the participation of fourth year undergraduate business administration students from Turkey, USA, and China. Findings of the study showed that outstanding instructors in classroom teaching are rather competent in nonverbal immediacy skills. While American and Turkish instructors appeared to be immediate at the same level, Chinese instructors exhibited relatively low scores on immediacy scale. Findings also showed a statistically significant and positive correlation between instructors' nonverbal immediacy behaviors and perceived cognitive learning level of students in Turkey and USA.

Keywords: nonverbal immediacy, nonverbal communication, cognitive learning, higher education, instructor, cross-cultural study.

ÖZET: Bu çalışmada; üniversite öğretim elemanlarının sözsüz yakınlık becerilerinin, öğrencilerin bilişsel öğrenme algılarına etkisi, Richmond, McCroskey ve Johnson tarafından 2003 yılında geliştirilen "Sözsüz Yakınlık Gözlemci Ölçeğinin" kullanımı ile ölçülmeye çalışılmıştır. Çalışma, 26 soruluk Sözsüz Yakınlık Gözlemci Ölçeğinin alan yazınında "öğretim üyelerinin sözsüz yakınlık davranışları" ve "öğrencilerin öğrenme algıları" ilişkisini inceleyen kültürlerarası çalışmalardaki ilk kullanımını oluşturmaktadır. Bu durum, çalışma sonuçlarının kültürlerarası sözsüz yakınlık yazını açısından önemini artırmaktadır. Alan araştırması; Türkiye, ABD ve Çin'de İşletme Bölümü dördüncü sınıf öğrencilerinin katılımıyla gerçekleştirilmiştir. Çalışma bulguları, sınıfta öğretim konusunda üstün başarılı olarak algılanan öğretim elemanlarının sözsüz yakınlık becerilerinin yüksek olduğunu ortaya koymuştur. Amerikalı ve Türk öğretim elemanlarının aynı düzeyde yüksek yakınlık davranışı sergilemelerine rağmen, Çinli öğretim elemanlarının yakınlık ölçeği değerleri göreceli olarak düşük çıkmıştır. Bunlara ek olarak, bulgular Türkiye ve ABD'de, öğretim elemanlarının sözsüz yakınlık davranışları ile öğrencilerin bilişsel öğrenme algıları arasında istatistiksel olarak anlamlı ve pozitif düzeyde bir ilişkinin varlığını ortaya çıkarmıştır.

Anahtar Kelimeler: sözsüz yakınlık, sözsüz iletişim, bilişsel öğrenme, yüksek öğretim, öğretim elemanı, kültürler arası karşılaştırma çalışması.

1. INTRODUCTION

This study tries to test findings of the existing literature on nonverbal immediacy at "teaching-learning process" by the help of the most comprehensive nonverbal immediacy scale; "26-item Nonverbal Immediacy Scale for Observers (NIS-O)". NIS-O was developed by Richmond and colleagues in 2003. The first cross-cultural use of the scale was a comparative study in 2011, covering USA, Kenya and Brazil by Santilli and Miller (2011: 3-22). Although, Santilli and Miller (2011) tried to find the effects of gender and power distance on nonverbal immediacy, they did not study the relationship of nonverbal immediacy and student perception of cognitive learning. Therefore, the present study seems to be the second use of NIS-O in cross-cultural studies after Santilli and Miller

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(2011) and it is the first use of the scale in cross-cultural literature examining "the relationship of instructors' nonverbal immediacy behaviors with the student perception of cognitive learning" as of February 2013. This is again the first use of the NIS-O scale in Turkey and China, which makes its findings rather important for the nonverbal immediacy literature worldwide (further information on literature was given in the Methodology section of the study).

In the first part of the study, a literature review will be presented. In the empirical part, resting on the findings of a cross-cultural survey, effects of nonverbal immediacy behaviors are evaluated on students' perception of cognitive learning and on the teaching success of the instructors. In the discussion and conclusion parts, a comprehensive appraisal is made by comparing previous findings of the immediacy literature and those of the present study.

1.1. Effective Communication in Education: Verbal and Nonverbal Sides

Education and communication are inseparable fields, since effective teaching-learning process requires an interactional atmosphere. While curricular decisions, materials development, the organization of lectures, and the like focus primarily on the teacher's transmission of content-and student evaluation on comprehension and retention of that content-there is little disagreement that "interpersonal perceptions" and "communicative relationships" between teachers and students are central to the education process (Richmond et al. 1987: 574). Researchers have described some types of communication behaviors that are highly related to perceptions of effective teaching in the classroom. In his famous work, Nussbaum (1992: 167-180) made a comprehensive review on literature in education and communication from 1983 to 1990 relating teacher behavior to teaching effectiveness, By majorly resting on the work of Nussbaum (1992), Georgakopoulos and Guerrero (2010: 4) simplified some of those teacher behaviors and produced the following categories of teaching effectiveness; 1) nonverbal expressiveness, 2) relaxed movement, 3) in-class conversation, and 4) out-of-class communication. The first two of these behaviors are linked with "teachers' nonverbal immediacy", whereas the latter two behaviors represent "teachers' verbal communication" with their students. That means there are two inseparable sides of communication in education: 1) Verbal and 2) Nonverbal.

1.1.1. Verbal Communication in Education

Verbal communication in education can be categorized into two parts; in-class and out-of-class communication. In-class conversation covers behaviors such as encouraging students to talk, soliciting different viewpoints, and providing personal examples. These behaviors have been shown to be related positively with students' interest in course subject and student motivation. Out-of-class communication describes the extent to which teachers are perceived as accessible out of the class. Studies on out-of-class communication have proved that it is also related to the students' desire of learning and higher student teaching evaluations, as well as better actual academic performance and retention (Georgakopoulos and Guerrero 2010: 6). Western cultures are more likely to use in-class conversation as a teaching strategy. Many studies have shown that students from Asian countries are less likely to participate in class. For example, Korean students reported talking less in class, liking larger classes more, and seeing their instructors as having more authority than did the US students (Lee and Carrasquillo 2006). Asian students may engage in relatively high levels of out-of-class communication with their instructors compared to students from other countries. Chinese students reported engaging in more out-of-class communication with their college instructors than did US students, and that immediacy was correlated with out-of-class communication for Chinese students but not for US students (Zang 2005).

1.1.2. Nonverbal Communication in Education: Nonverbal Immediacy

Researchers on communication have included "immediacy" in their studies since the beginning of 1980s. Immediacy can simply be defined as a "communication evoking liking and delectation feelings." The concept was first introduced by Mehrabian (1969) to describe "communication with other and behaviors developing nonverbal interaction." In a more inclusive framework, immediacy may be defined as the development of communication among individuals through selected verbal and nonverbal communication behaviors (Mehrabian 1969; Mehrabian 1971; Andersen et al. 1979) or as a concept describing the degree of closing the perceived power distance among people (Thweatt and

McCroskey 1996). Studies on the effectiveness of immediacy through "verbal communication," "nonverbal communication," or both indicated that "**immediacy is best provided by nonverbal communication**" (Rodriguez et al. 1996; Christensen and Menzel 1998; Christophel 1990). Therefore, immediacy behaviors recently more emphasized are **eye-contact, smiling, touching, standing in close distance to other person, being more active and energetic**, etc. Many researchers advocate that such kinds of behaviors develop interpersonal communication since they are qualified as positive and charming (Richmond et al. 1987; McCroskey et al. 1995; Moore et al. 1996).

Nonverbal immediacy behaviors for instructors in the university classroom include establishing and sustaining eye-contact, gestures, walking around in the class, calm body posture, using different voice tones while speaking, smiling, approval behavior, allowing time to students, good clothing, etc. Studies on instructional communication have searched many dimensions such as effects of teacher's communication behavior on students' attitude toward teacher and learning level of students.

Many studies on nonverbal communication in classroom have indicated **positive effects of nonverbal communication competencies of instructors on learning level of students** (Plax et al. 1986; Chesebro and McCroskey 2001; McCroskey et al. 1996a; Comstock et al. 1995; Gorham 1988; Kelley and Gorham 1998; Sanders and Wiseman 1990). These studies especially have searched for correlation between nonverbal communication and learning styles defined by educational psychologists in their research regarding academic learning behavior. Three learning fields firstly exposed by a study group led by Benjamin Bloom in 1956 are "cognitive learning" (amount of course content learnt by student), "affective learning" (student's adoption/internalization of course content, and student's desire for self development about course subject due to his/her interest in class and instructors), and "psychomotor learning" (physical skills learnt through continuous repetitions). In more simple terms, cognitive learning signifies the amount of knowledge learnt whereas affective learning indicates positive emotional attitude toward course subject, and psychomotor learning expresses progress in physical skills and abilities (Bloom et al. 1956; Krathwohl et al. 1973; Simpson 1972; Dave 1975; Harrow 1972).

1.2. Cultural Dimension in Nonverbal Immediacy: Immediate/Contact vs. Non-immediate/Non-contact Cultures

Cultural differences in societies are likely to have certain effects on social and organizational communication and nonverbal communication styles. Hofstede (1980), the most famous author in inter-societal cultural studies, defined four dimensions related to cultural differentiation; "**masculinity**", "**power distance**", "**individualism-collectivism**", and "**avoidance from uncertainty**". This classification implicitly contains cultural dimensions regarding nonverbal communication. For example, individualistic culture is more prone to deny physical contact in communication and to rarely use nonverbal communication styles. In contrast, collectivist culture is more familiar with physical contact in communication and use nonverbal communication styles more. In the same way, a feminine culture is expected to be sensitive for signals produced by body language. However, physical contact may be prohibited in a culture with high power distance. Obviously, more clear communication styles instead of nonverbal communication styles will be preferred in a culture avoiding uncertainty. Nevertheless, this is not the exact figure for effects of cultural differences on nonverbal communication.

Hofstede's cultural dimensions could only present partial and misty explanation for effects of cultural differences on nonverbal communication. However, Hall (1990) brought a more functional classification when nonverbal language is concerned: "Contact vs. non-contact cultures". This classification is also called "Immediate vs. non-immediate cultures" (McCroskey et al. 1995, 1996a and 1996b). In immediate/contact cultures, people typically stand close, touch frequently, and are nonverbally expressive; and in non-immediate/non-contact cultures, people generally stand farther apart, touch infrequently, and are more emotionally reserved. "High immediate/contact cultures" are geographically located in places having **warmer climates** such as **Mediterranean** countries, Middle East, Eastern Europe, southern America whereas non-immediate/non-contact cultures are located in places such as Asia (Japan, China, Taiwan etc.) and to a lesser extent Northern Europe (Norway, Sweden, Finland etc.) (McCroskey et al. 1995, 1996a and 1996b; McDaniel and Andersen 1998;

Andersen 2008). However, the US, Canada, Great Britain, and Australia have moderate immediate/contact orientations (McDaniel and Andersen 1998; Andersen 2008).

Therefore, while searching for the relation between the success of instructors and nonverbal communication, reflections of country culture on this relationship will be analyzed in the framework of immediacy/contact vs. non-immediacy/non-contact dimension. According to this dimension, countries in the present study are assumed to be ranked in the following order: As a Mediterranean country Turkey should be highly immediate, USA is moderately immediate and as an Asian country, China is the less immediate one. This assumption will also be questioned in the following empirical part of the study.

2. METHOD

To investigate the connection among "culture, immediacy, and learning" from student perspective, an empirical research was designed, and implemented to students in three countries; Turkey, USA, and China.

2.1. Purpose

The research was conducted for exposing the effects of nonverbal immediacy competencies of instructors regarded as outstanding by students in the classroom on student perception of cognitive learning. Turkish, American, and Chinese students involved in the research were asked to respond the questionnaire based on their perception of the most successful instructors in the class. In this context, hypotheses of the research were formed as follows:

H_1. Instructors perceived as outstanding in classroom teaching have highly developed nonverbal immediacy competencies.

H_2. "The level of nonverbal immediacy competencies of instructors" is in positive correlation to "the level of immediacy in national culture".

H_3. There is a positive correlation between the level of nonverbal immediacy competencies of instructors and the level of student perception of cognitive learning.

2.2. Study Group

In this cross-cultural study, we tried to cover different cultures so as to demonstrate the cultural similarities and differences in nonverbal language. In the study, Turkey represents a transition point or a bridge between the Eastern and Western cultures. China stands for eastern culture and USA represents Western culture. The survey was conducted with the participation of fourth year undergraduate business administration students from Turkey (Hacettepe University/Department of Business Administration/Ankara), USA (University of Massachusetts/Isenberg School of Management/Department of Management/Amherst), and China (Huazhong Agricultural University/Department of Business Administration/Wuhan). Selected universities are state universities with a focus of teaching and scientific research. They are at a similar size in terms of student numbers (Hacettepe University/Ankara: 36.112 undergraduate and graduate students, Massachusetts University/Amherst: 28.084 undergraduate and graduate students and Huazhong Agricultural University/Wuhan: 23.000 undergraduate and graduate students).

Of total 234 students in the survey, 87 are Turkish, 89 are American, and 58 are Chinese. A total of 116 instruments were completed by males (49.6 %) and 118 were completed by females (50.4%).

2.3. Data Collection

Questionnaires were conducted in the end of Spring semester in all countries with the participation of fourth year undergraduate students. The data were collected during the first 30 minutes of class hours by the permission of course instructor. The courses were randomly selected. Students were asked to respond a total of 28 items. The main scale used in the research was 26 item "**Nonverbal Immediacy Scale for Observers (NIS-O)**" for measuring the level of nonverbal immediacy competencies of instructors. In addition, a question was added to measure the level of students' perception of learning course content. They described their level of learning in between 0 and 9 (*0 means they learnt nothing, and 9 means they learnt more than all other courses attended*). This question was taken from **Perceived Cognitive Learning Scale**/PCLS that was developed by Richmond

and colleagues in 1987 at an article titled "The relationship between selected immediacy behaviors and cognitive learning" published at Communication Yearbook (Richmond et al. 1987: 574-590). The reason of using a perception test (PCLS) instead of a standardized cognitive learning test is summarized below:

> "Although standardized tests exist in a variety of subject matters, such tests, by their very nature, are individually restricted to a single subject area. Thus, if research is to be conducted across disciplines, such tests are not useful. Some researchers have chosen, as a result, to use grades as an indicator of cognitive learning. Unfortunately, such grades are subject to a variety of influences in addition to cognitive learning, such as attendance, participation, writing skills, and the like... " (Richmond et al. 1987: 581).

As is mentioned above, cognitive learning can be measured by means of standardized tests in a specific field, however, in the present study, instead of using subject tests, student perception of cognitive learning was used as a learning measure by resting on the approach of Richmond and colleagues (1987: 581). Therefore, one must not forget that what is measured in this study is not "the actual level" of cognitive learning, but "the perception" of cognitive learning. Thus, the study has the limitations of a self-reported perception test approach in some way or another.

Lastly, another question was asked to measure the perceived success level of the instructor selected; therefore, in that item, the students evaluated the success level of the instructor (*0 means weak, 10 means extraordinary*).

- Nonverbal Immediacy Scale (NIS)

There are few scales for measuring instructors' nonverbal immediacy competencies. Andersen's Generalized Immediacy (GI) scale and Behavior Indicants of Immediacy (BII) scale are the first instruments to measure perceived teacher nonverbal immediacy (Andersen 1978; Andersen et al. 1979). In 1987, Nonverbal Immediacy Measure (NIM) was developed by Richmond, Gorham and McCroskey. A more developed version of NIM was produced by McCroskey and colleagues in 1995 (Revised Nonverbal Immediacy Measure-RNIM) (McCroskey et al. 1995). In 2003, Richmond, McCroskey and Johnson created the most comprehensive and lengthy instrument called Nonverbal Immediacy Scale (NIS).

The 26 item Nonverbal Immediacy Scale (NIS) was the instrument selected for this study, since it is the most comprehensive and lengthy instrument among the cited ones above (e.g. GI: 9 items, BII: 15 items, NIM: 14 items, and RNIM: 10 items). This instrument is also called NIS-Observer or NIS-Other, since it rests on student observations of teachers. There is another version called NIS-Self Report, where teachers evaluate their own nonverbal immediacy skills. Differences between the two versions of the instrument are the designation of the target to be addressed (applies "to you" for self-report, applies to [a designated target] for other-report) and the wording of the items ("I use my hands ..." for self-report, "He/She uses his/her hands ..." for other-report) (Richmond et al. 2003: 508). In this study, NIS-Observer (NIS-O) was used, since the student perceptions were asked to evaluate teacher performance.

RNIM (which is proved to be highly valid and reliable) became the most widespread instrument in the nonverbal language studies in the last decade, since 26-item NIS-O is a rather long and time-consuming instrument when compared to 10 item RNIM.

In this study, the scale was used differently when compared to previous in-class applications[1] of NIS-O (Richmond et al. 2003, McCroskey et al. 2006, Santilli and Miller 2011). In those applications, a course was randomly chosen and students were asked to evaluate instructor of this selected course. Whereas, in this survey, students were first asked for selecting "the most successful instructor" that they had ever known in the university classroom without revealing his/her name and then they answered the

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[1] Beside these student studies, NIS-O was also used in a US study on 160 employees from different organizations by Goodboy and McCroskey (2008). Since the focus of that study is not the teaching-learning process, it is not cited here (the study was on the role of organizational orientations and Machiavellianism on nonverbal immediacy behavior and job satisfaction of employees).

questions assessing the nonverbal immediacy degree of the most successful instructors chosen. Thus, the study tries to explore the role of nonverbal immediacy competencies in best instructors' success in classroom teaching as much as the effects of nonverbal immediacy competencies on the level of students' perception of learning. The present study does not explore the various behaviors that people from different cultures consider to be characteristic of outstanding instructors, but it does allow a comparison of how nonverbal immediacy describe outstanding instructors across the three cultures investigated (Turkey, USA, and China). That means, it just tries to find similarities and differences in student perceptions of how much outstanding instructors from three countries are perceived to use immediacy skills.

This approach is similar to that of Richmond, Gorham, and McCroskey (1987) while using another scale called Nonverbal Immediacy Measure (NIM). In their survey, they asked students to recall either the "best" or "worst" instructor they had during their undergraduate studies. Except for the distinction between best and worst instructors, both questionnaires were the same in those studies. After students selected their best or worst instructor, they rated that instructor's communication skills. Here in this study, the same approach was used in NIS-O instrument for the first time by using the question related to best instructors, but worst instructor dimension was removed to save time. The immediacy literature already proved statistically significant difference between the best and worst instructors related to nonverbal immediacy skills. In addition to this, in 1990s new studies with Revised Nonverbal Immediacy Measure (RNIM) also proved significant correlation between "the level of immediacy skills of the instructors" whose courses were randomly selected and "the perception of learning of their students" at the same course (McCroskey et al. 1995, 1996a and 1996b). In those studies, students just evaluated the instructor of their course (not the best or worst ones that they had known). Therefore, this study focused only on the outstanding success dimension in order to save time (when two dimensions are questioned with two questionnaires, application time simply increases twofold) and to make a contribution to the 26-item NIS-O instrument.

What differentiates NIS-Observer as the most comprehensive scale from other widely used scales like 14-item NIM and 10-item RNIM is the inclusion of 26 items in categories like eye contact, smiling, relaxed body, lively voice, using gestures, touching, leaning toward, standing/sitting close (see Table 1). This approach might provide researchers with a more thorough evaluation of nonverbal immediacy behaviors.

Table 1. Nonverbal Immediacy Scale-Observer (NIS-O)

Instruction: Think about "the most accomplished instructor in classroom teaching" at your department among the instructors that you have had a class. For the following statements, please circle the most appropriate number that best describes this person by using the 5-point scale below: **Never**=1 **Rarely**=2 **Occasionally**=3 **Often**=4 **Very Often**=5

1	He/she uses her/his hands and arms to gesture while talking to students.
2	He/she touches students on the shoulder or arm while talking to them.
3*	He/she uses a monotone or dull voice while talking to students.*
4*	He/she looks over or away from students while talking to them.*
5*	He/she moves away from students when they touch her/him while they are talking.*
6	He/she has a relaxed body position when he/she talks to students.
7*	He/she frowns while talking to students.*
8*	He/she avoids eye contact while talking to students.*
9*	He/she has a tense body position while talking to students.*
10	He/she sits close or stands close to students while talking with them.
11*	Her/his voice is monotonous or dull when he/she talks to students.*
12	He/she uses a variety of vocal expressions when he/she talks to students.
13	He/she gestures when he/she talks to students.
14	He/she is animated when he/she talk to students.
15*	He/she has a bland facial expression when he/she talks to students.*
16	He/she moves closer to students when he/she talks to them.
17	He/she looks directly at students while talking to them.
18*	He/she is stiff when he/she talks to students.*
19	He/she has a lot of vocal variety when he/she talks to students.

20*	He/she avoids gesturing while he/she is talking to students.*
21	He/she leans toward students when he/she talks to them.
22	He/she maintains eye contact with students when he/she talks to them.
23*	He/she tries not to sit or stand close to students when he/she talks with them.*
24*	He/she leans away from students when he/she talks to them.*
25	He/she smiles when he/she talks to students.
26*	He/she avoids touching students when he/she talks to them.*

* Item should be reflected prior to scoring.
Source: Richmond et al. 2003

2.4. Reliability and Validity

Reliability and validity information of the original scale can be obtained from the article titled "Development of the Nonverbal Immediacy Scale (NIS): Measures of Self-and Other-Perceived Nonverbal Immediacy" written by Richmond, McCroskey and Johnson at Communication Quarterly in 2003 (Richmond, McCroskey and Johnson 2003: 504-517). In the article, developers of the NIS showed that; Alpha reliability of the scale (NIS Observer/NIS for teachers) is 0.92 on a survey of 310 students from the US (Richmond, McCroskey and Johnson 2003: 512). In a following study conducted by McCroskey, Richmond and Bennet (2006: 406), reliability score of 0.92 was confirmed with the participation of 189 American students. The first multi-cultural study of NIS-O conducted by Santilli and Miller (2011: 12) also found a 0.90 reliability for the US students, 0.88 for Brazilian students and 0.77 for Kenyan students.

In the present study, statistical analysis indicates that Cronbach's Alpha coefficient is 0.86 for 26 item NIS-O instrument (negative items in the questionnaire were coded reversely before conducting the reliability test). Reliability level for China (0.56) is rather lower than those of USA (0.85) and Turkey (0.91). This is perhaps due to the relatively low number of participants in China.

Richmond and colleagues (2003: 514) put forth that factor analysis supported the single-factor structure of the instrument and indicated overall validity (Richmond et al. 2003: 515, 516). However, in this study, we could not confirm the single factor structure of the original instrument. Our analysis produced a seven-factor structure (number of eigenvalues over 1) with a 66.28 % of total variance explained cumulatively. Furthermore, six items were overlapping, meaning that they should be eliminated from the instrument (item numbers in the questionnaire: 2, 5, 10, 16, 19 and 21). This result is possibly due to the limited number of participants of the present study (n=234), since the number of participants should be over 300 in order to perform an accurate factor analysis (Hatcher 1994; Tabachnik and Fidell 1996).   Therefore, the factor analysis results were not taken into consideration and no items were removed from the questionnaire.

3. FINDINGS

Arithmetical means were used for exploring nonverbal immediacy competencies of the most outstanding instructors (first hypothesis), whereas One Way ANOVA was used to evaluate the significance of differences (second hypothesis). Lastly, Pearson Simple Correlation test was used for testing the third hypothesis of the study.

3.1. Nonverbal Immediacy Competencies of Outstanding Instructors in Classroom Teaching

The first hypothesis of the study is "nonverbal immediacy competencies of outstanding instructors' in classroom teaching are highly developed". Therefore, arithmetic means of NIS items were calculated after combining the related questions in eight categories like voice tone, relaxed body, smiling, etc. Those categories and the related question numbers are given below.

1. Lively voice tone/variety of vocal expressions (3, 11, 12, 19),
2. Relaxed body posture (6, 9, 18),
3. Smiling (7, 15, 25),
4. Maintaining eye contact (8, 17, 22),
5. Using gestures/being energetic (1, 13, 14, 20),
6. Standing or sitting close (10, 23),
7. Leaning toward/moving closer to students while talking (4, 5, 16, 21, 24),
8. Touching students while talking (2, 26).

Following table shows the ranking of arithmetic means for nonverbal immediacy competencies of outstanding instructors.

Table 3. Nonverbal Immediacy Competencies of Outstanding Instructors in Classroom Teaching (arithmetic means in a descending order)

Order		Mean	Std. Deviation
1	Maintaining eye contact*	4.31	0.59
2	Relaxed body posture*	4.20	0.71
3	Smiling*	4.15	0.63
4	Lively voice tone/variety of vocal expressions*	4.11	0.65
5	Using gestures/being energetic*	4.05	0.67
6	Standing or sitting close*	3.69	0.82
7	Leaning toward/moving closer to students while talking*	3.69	0.59
8	Touching students while talking	2.78	0.86

* Arithmetic means for each variable are in between 1 and 5. Values equal or over "3.5" mean that the behavior is frequently repeated.

From students' perspective, values of the above table show that the outstanding instructors in classroom teaching frequently demonstrate "7" of those eight variables (arithmetic means are above "3.5", meaning that behavior is **frequently repeated** by the outstanding instructors). Value is below "3.0" only in the "**touching**" category, which means the behavior is **repeated rarely**. This may be due to a misinterpretation related to the perception of touching behavior (when different sexes concerned, "touching the arm and shoulder" of the other sex may be seen as harassment, so it is difficult to interpret this behavior as positive or negative).

Since the values for 7 out of 8 categories in the questionnaire are over "3.5", it can be said that findings point out a strong support for the first hypothesis of the research. In other words, those who are perceived as outstanding instructors in classroom teaching have a really high level of nonverbal immediacy competency.

3.2. Cultural Differences for Nonverbal Immediacy Competencies

Second hypothesis of the study is that "the evaluation of nonverbal immediacy competencies by the students is culturally bound." A comparison of arithmetic means of three countries included in the study is given in the table below. A general value for immediacy is calculated by summarizing 26 questions in the scale. This summary variable is called NIS (13 negative questions were coded reversely before summarizing the 26 variables).

Table 4. Ranking of Instructors' Overall Nonverbal Immediacy Competencies according to Students' Perception.

	Arithmetic Mean of NIS Score	Std. Deviation
USA	105.30	8.93
Turkey	105.15	14.97
China	97.31	7.41

In the ranking, USA and Turkey has very close values, whereas China has a relatively lower level of immediacy. There is a statistically significant difference between China, USA, and Turkey ($F_{(2-194)}=9.20$, $p<0.01$). This difference is significant between "China and USA" ($p<0.05$) and "China and Turkey" ($p<0.05$).However, there is no statistically significant difference between USA and Turkey ($p>0.05$). This result implies that China's culture is less extraverted/immediate when compared to those of USA and Turkey. Since immediacy is culturally bound, Chinese instructors have also a lower level immediacy when compared to the other two countries in our survey. This finding supports the second hypothesis.

3.3. Relationship between Student Perception of Cognitive Learning and Nonverbal Immediacy Level of Instructors

Third hypothesis of the study claims that there is a positive correlation between "the level of nonverbal immediacy competencies of instructors" and "the student perception of cognitive learning". To test this hypothesis, "student perception of learning" and "immediacy scale values" (NIS) were analyzed by Pearson Correlation test, and the result showed statistically significant positive correlations except China. Correlation scores for all three countries were similar (positive, small size, but not significant in China with a p value of 0.06 which is very close to 0.05 level) (USA: r=0.27, p<0.05; Turkey: r=0.23, p<0.05; China: r=0.27, p>0.05).

This finding supports the third hypothesis only in Turkey and USA meaning that the overall perception of the immediacy level of the instructor and the student perception of cognitive learning are positively correlated. However, Eastern culture pose an exception in this relationship, since correlation scores in China is not statistically significant.

4. DISCUSSION

Findings of previous studies on nonverbal immediacy in the classroom demonstrate a positive and meaningful relationship between the instructors' nonverbal communication skills, and different dimensions of the learning process (McCroskey et al. 1995; McCroskey et al. 1996a; McCroskey et al. 1996b). This study also produced similar results in terms of the positive effects of nonverbal immediacy competencies.

4.1. Nonverbal Immediacy Competencies of Outstanding Instructors

When the instructors' arithmetic means on the nonverbal immediacy scale (NIS-O) are examined, in seven of the eight behaviors in the scale, the mean values show that instructors who are regarded as outstandingly successful in the classroom by their students, depict the immediacy behaviors often (arithmetic means equal or over 3.5 out of 5.0). These behaviors, in order of importance, can be listed as: 1. Maintaining eye contact, 2. Relaxed body posture, 3. Smiling, 4. Lively voice tone/variety of vocal expressions, 5. Using gestures/being energetic, 6. Standing or sitting close, and 7. Leaning toward/moving closer to students while talking. Only the "Touching students while talking" category had a low value. The most possible explanation is a misinterpretation related to the perception of touching behavior. Therefore, either this category must be reworded in order to reflect a positive meaning or it must be eliminated from the scale in the future research. Positive findings related to the first five categories are parallel to the immediacy literature findings obtained with other scales (McCroskey et al. 1995; McCroskey et al. 1996a; McCroskey et al. 1996b). Since other nonverbal immediacy scales do not include the last three categories (standing/sitting close, leaning toward, and touching) unlike NIS scale, a comparison could not be made regarding with those categories.

4.2. Cross-Cultural Comparison of Instructors' Competencies

The ranking of the immediacy values of instructors can be compared with other NIS-O studies within USA. In Santilli and Miller's (2011) cross-cultural study using NIS-O, arithmetic means for USA, Brazil and Kenya were not presented, since the focus of their study is not the comparison of NIS scores, but the effects of gender and power distance on nonverbal immediacy. Therefore, a multicultural comparison could not be made and only the US values of similar two studies were compared with that of the present study.

Table 5. Comparison of American Instructors' Overall Nonverbal Immediacy Competencies from Students' Perception with NIS-O Instrument.

USA	Arithmetic Mean	Std. Deviation
Present study	105.30	8.93
Richmond et al. (2003: 511)	93.8	15.2
McCroskey et al. (2006: 406)	93.15	15.02

When findings of other NIS-O studies in the US were examined for a comparison in the table above, lower arithmetic mean scores can easily be noticed for the US sample (*M*=93.8 and *M*=93.15) when compared to the *M*=105.30 in the present study. Students in the present study evaluated the most outstanding instructors that they had ever known, whereas in the other studies, evaluation was made for the instructor of the class in which the survey is conducted. Therefore, the higher score in this study is an expected finding.

Furthermore, present study generated another important result. USA and Turkey took place in the same rank (*M*=105.30, *SD*=8.93 and *M*=105.15, *SD*=14.97 respectively), and China had a very low immediacy value (*M*=97.31, *SD*=7.41). This finding confirms that China is a less immediate culture in comparison to Turkey and USA. Therefore, it can be said that differences arising from country cultures have a strong effect on nonverbal immediacy behaviors of the members of that culture. Similar immediacy scores of Turkey and USA is an interesting finding of this study, because in the immediacy literature, Mediterranean countries are seen as highly immediate/high contact, while USA is a moderately immediate country. This finding of the present study is contradictory to the common perception of Turkey as a Mediterranean culture and must be examined in future studies (a comparison of the immediacy level of different countries were given below at Table 6). Possible reason of this finding can be the location of Turkey as a cultural transition point between east and west, which makes it susceptible to both Eastern and Western values.

Table 6. Nonverbal Immediacy Level of Countries

	Immediacy Level
Mexico	High*
Puerto Rico	Moderate**
USA	Moderate*, **
Australia	Moderate*, **
Finland	**Moderately Low****
Sweden	**Moderately Low***
Japan	**Low***
Taiwan	**Low***

* Georgakopoulos and Guerrero (2010: 15).
** McCroskey et al. (1995: 287)
Note: The scale used in the studies above is the Revised Nonverbal Immediacy Measure (RNIM) developed by McCroskey and colleagues (1995).

4.3. Student Perception of Cognitive Learning and Instructor's Nonverbal Immediacy

Finally, the findings of this NIS-O study showed a positive and statistically significant correlation (except China with a p value of 0.06 which is very close to 0.05) at small size between outstanding instructors' nonverbal immediacy behaviors and the perceived cognitive learning of the students (USA: *r*=0.27, p<0.05; Turkey: *r*=0.23, p<0.05; China: *r*=0.27, p>0.05). Since this is the first NIS-O study on the relationship of nonverbal immediacy and perception of cognitive learning in a cross-cultural setting, a direct multi-cultural comparison of the findings with a similar study using NIS-O scale could not be made[2]. However, to give an insight into the findings of this study, we compared them with findings of similar scales.

Findings of the present study are similar to the immediacy literature findings obtained with other scales (Richmond, Gorham, and McCroskey 1987, Sanders and Wiseman 1990, McCroskey et al. 1996a). For example, McCroskey et al. (1996a), using a RNIM instrument, showed positive and statistically significant correlations at high and medium levels between instructors' nonverbal immediacy behaviors and the perceived cognitive learning of university students in different cultures (Finland: *r*=0.59, p<0.05; Puerto Rico: *r*=0.45, p<0.05; USA: *r*=0.40, p<0.05; Australia: *r*=0.36, p<0.05). By using the same scale (RNIM), Aydin (2006) demonstrated a medium size relationship

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[2] In Turkish literature on "nonverbal immediacy in education", we have met 4 studies using a similar approach with the present study with some technical differences (Aydin 2006, Bozkaya and Aydin 2008, Ozmen 2010, Ozmen 2011). Aydin (2006) found a significant and positive relationship between nonverbal immediacy behaviors of instructors and student perception of cognitive learning by using RNIM. Bozkaya and Aydin (2008) changed 26 item-NIS-O by excluding 7 items from the original scale, with this new 19 item-scale, they examined the relationship between teacher immediacy behaviors and learners' perceptions of social presence and satisfaction in open and distance education. They found a significant, medium level and positive correlation with immediacy, social presence and satisfaction levels of learners. Ozmen (2010) used NIS-Self Report instrument which is completed by 44 teacher trainees at an English language teaching department in Turkey. The study found significant correlations between nonverbal immediacy and professional identities of the teacher trainees. Ozmen (2011) used NIS-Self Report instrument in order to show that nonverbal immediacy positively correlates with effective teaching with the participation of 450 student teachers studying in ELT undergraduate programs in Japan, Turkey and USA.

(r=0.34, p<0.01) in Turkey and Myers, Zhong, and Guan (1998) could not find a significant correlation in China (p>0.05) producing a very similar result to that of our study.

Myers, Zhong, and Guan (1998: 248-249) explain this difference of Chinese and American cultures as follows:

> "A primary function of Chinese culture is to reinforce role and status differentials (Gao et al. 1996). In the Chinese classroom, the instructor student relationship is bound by formality and respect (Hu and Grove 1991). Consequently, Chinese instructors may be perceived as less immediate because adherence to role and status differences does not lend itself to the use of immediacy behaviors. And because the behaviors of individuals with lower status (i.e., students) are expected to complement the behaviors of individuals with higher status (i.e., instructors) in the Chinese culture (Gao 1997), Chinese students adhere to the behavioral guidelines ascribed to the student role (Taylor 1989). On the other hand, American instructor student relationships are characterized by degrees of informality, and instructor immediacy may be advanced, expected, and/or heightened by students in the American classroom."

Parallel to the findings of Myers, Zhong, and Guan (1998), Gao and colleagues (1996), Hu and Grove (1991), Gao (1997) and Taylor (1989) cited in the paragraph above; Zhang, Oetzel, Gao, Wilcox, and Takai (2007) also show that instructors in Asian cultures are less likely to be perceived as using high levels of nonverbal expressiveness, since Asian instructors may prefer to show immediacy through indirect ways than using direct nonverbal cues associated with expressiveness. In this framework, nonverbal immediacy behaviors like standing close to others or using high levels of eye contact, are seen as more appropriate in Western than Eastern cultures (Zhang, Oetzel, Gao, Wilcox, and Takai 2007).

As a result, students in Turkey and USA perceive their instructors as using high levels of nonverbal expressiveness, whereas students in China perceive their instructors as using low levels of nonverbal expressiveness.

5. CONCLUSION

In this cross-cultural study, the effects of university instructors' nonverbal immediacy competencies on the student perception of cognitive learning were examined at three countries (Turkey, USA, and China). Results showed that perceived cognitive learning level of the students in the classroom is positively correlated with the nonverbal immediacy competencies of the instructors. Outstanding instructors have a high level of nonverbal immediacy skills, the findings also showed that those skills are culturally bound.

Future studies in the field of nonverbal immediacy can be performed with larger student groups, and in other schools and departments within universities. These studies will help the development of a more extensive framework about the effect of nonverbal immediacy factors on the success in classroom teaching. The limited number of participants in this study restricts the ability to generate the results to other departments in the university. However, the high score in the reliability test (0.86), and the production of similar results to those of other similar scales (eg. NIM, RNIM), all support the value of the current study.

The findings of the study proved that the instructors, who are regarded as outstandingly successful in classroom teaching by the students, have high levels of competency in terms of nonverbal immediacy behaviors. This finding shows that it would be a healthy approach to integrate the topic of nonverbal immediacy into the academic in-service training programs aiming at increasing the classroom success of instructors in universities, especially in Western cultures. Another important finding is on the perception of Turkish culture as a high-contact (highly immediate) culture in the current literature. The present study creates a wedge of doubt on this issue showing that Turkey is at the same rank with USA that is a moderate-contact (moderately immediate) culture.

In conclusion, findings of this study show that nonverbal immediacy competencies cited in this study (except for touching) contribute positively to the classroom success of instructors. When instructors monitor and control their body languages and the nonverbal signals that they send to students; classroom communication and teaching-learning process will improve. However, it must be

borne in mind that nonverbal immediacy is culturally bound and it is more effective in highly or moderately immediate Western culture rather than non-immediate Eastern culture as the lower scores of China shows in this study.

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REFERENCES

Andersen, J. E. (1978). *The relationship between teacher immediacy and teaching effectiveness*. Unpublished doctoral dissertation, West Virginia University, Morgantown, WV.

Andersen, J.F., Andersen, P.A. & Jensen, A.D. (1979). The measurement of immediacy. *Journal of Applied Communication Research*, *7*, 153-180.

Andersen, P. A. (2008). *Nonverbal communication: Forms and functions* (2nd ed.). Prospect Heights, IL: Waveland Press.

Arthur, D. (1995). The Importance of Body Language. *HR Focus*, *72*, 22-28.

Aydin, M.D. (2006). Nonverbal Communication and High Success at the Work Setting: The Case of Academicians (Sözsüz İletişim ve İş Ortamında Üstün Başarı: Öğretim Elemanları Örneği), *Hacettepe Üniversitesi İİBF Dergisi*, *24*(2), 227-255.

Bloom, B. S., & Krathwohl, D. R. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain*, New York: Longmans, Green.

Bozkaya, M. & Aydin, E. (2008). The relationship between teacher immediacy behaviors and learners' perceptions of social presence and satisfaction in open and distance education: The case of Anadolu University Open Education Faculty. *The Turkish Online Journal of Educational Technology,* 7(3).

Chesebro, J. C., & McCroskey, J. C. (2001). The relationship of teacher clarity and immediacy with student state receiver apprehension, affect, and cognitive learning. *Communication Education*, *50*, 59-68.

Christensen, L. J., & Menzel, K. E. (1998). The linear relationship between student reports of immediacy behaviors and perceptions of state motivation, and of cognitive, affective, and behavioral learning. *Communication Education*, *47*, 82-90.

Christophel, D. (1990). The relationships among teacher immediacy behaviors, student motivation, and learning. *Communication Education*, *39*, 323-340.

Comstock, J., Rowell, E., & Bowers, J.W. (1995). Food for thought: Teacher nonverbal immediacy, student learning, and curvilinearity. *Communication Education*, *44*, 251-266.

Dave, R. H. (1975). *Developing and Writing Behavioural Objectives*. (R. J. Armstrong (ed.) Educational Innovators Press.

Gao, G. (1997). Self and OTHER: A Chinese perspective on interpersonal relationships. In W. B. Gudykunst, S. Ting-Toomey, & T. Nishida (Eds.), *Communication in personal relationships across cultures*. Thousand Oaks, CA: Sage. (81-101).

Gao, G., Ting-Toomey, S., & Gudykunst, W. (1996). Chinese communication processes. In M. H. Bond (Ed.), *The handbook of Chinese psychology*. Hong Kong: Oxford University Press, (280-293).

Georgakopoulos, A., & Guerrero, L. K. (2010). Student Perceptions of Teachers' Nonverbal and Verbal Communication: A Comparison of Best and Worst Professors across Six Cultures, *International Education Studies, 3*(2), 3-16.

Goleman, D. (1998). *Working with Emotional Intelligence*. New York: Bantam.

Gorham, J. S. (1988). The relationship between verbal teacher immediacy behaviors and student learning. *Communication Education*, *37*, 40-53.

Goodboy, A. K.& Mccroskey, J. C. (2008). Toward a Theoretical Model of the Role of Organizational Orientations and Machiavellianism on Nonverbal Immediacy Behavior and Job Satisfaction, *Human Communication. 11,* 293-308.

Hall, E. T. (1990). *The hidden dimension* (2nd ed.). New York: Anchor Press.

Harrow, A. (1972). *A taxonomy of psychomotor domain: A guide for developing behavioral objectives*. New York: David McKay.

Hatcher, L. (1994). *A step-by-step approach to using the SAS System for factor analysis and structural equation modeling*. Cary, NC: SAS Institute.

Hofstede, G. (1980). *Culture's Consequences: International differences in work-related values*. California: Sage Publications.

Hu, W., & Grove, C. L. (1991). *Encountering the Chinese: A guide for Americans.* Yarmouth, ME: Intercultural Press.

Kelley, D. H., & Gorham, J. (1988). Effects of immediacy on recall of information. *Communication Education*, *37*, 198-207.

Krathwohl, D. R., Bloom, B. S., & Bertram, B. M. (1973). *Taxonomy of Educational Objectives, the Classification of Educational Goals. Handbook II: Affective Domain*. New York: David McKay Co., Inc.

Lee, K.S. & Carrasquillo, A. (2006). Korean college students in United States: Perceptions of professors and students. *College Student Journal, 40(2),* 442–56.

McCroskey, J. C., Richmond, V. P., Sallinen, A., Fayer, J. M., & Barraclough, R. A. (1995). A cross-cultural and multi-behavioral analysis of the relationship between nonverbal immediacy and teacher evaluation. *Communication Education*, *44*, 281-291.

McCroskey, J. C., Sallinen, A., Fayer, J. M., Richmond, V. P., & Barraclough, R. A. (1996a). Nonverbal immediacy and cognitive learning: A cross-cultural investigation. *Communication Education*, *45*, 200-211.

McCroskey, J. C., Sallinen, A., Fayer, J. M., Richmond, V. P., & Barraclough, R. A. (1996b). A multi-cultural examination of the relationship between nonverbal immediacy and affective learning. *Communication Quarterly*, *44*, 297-307.

McCroskey, J. C., Richmond, V. P., & Bennett, V. E. (2006). The Relationships of Student End-of-Class Motivation with Teacher Communication Behaviors and Instructional Outcomes. *Communication Education, 55(4)*, 403-414.

McDaniel, E. & Andersen, P. A. (1998). Intercultural patterns of tactile communication: A field study. *Journal of Nonverbal Behavior*, 22, 59-76.

Mehrabian, A. (1969). Some referents and measures of nonverbal behavior. *Behavioral Research Methods and Instruments*, *1*, 213-217.

Mehrabian, A. (1971). *Silent Messages*. Belmont, CA: Wadsworth.

Moore, A., Masterson, J. T., Christophel, D. M., & Shea, K. A. (1996). College teacher immediacy and student ratings of instruction, *Communication Education*, *45*, 29-39.

Myers, S., Zhong, M., & Guan, S. (1998). Instructor immediacy in the Chinese college classroom, *Communication Studies*, *49*(3), 240-254.

Nussbaum, J. D. (1992). Effective teacher behaviors. *Communication Education, 41,* 167-180.

Ozmen, K.S. (2010). Fostering Nonverbal Immediacy and Teacher Identity through an Acting Course in English Teacher Education. *Australian Journal of Teacher Education, 35*(6).

Ozmen, K.S. (2011). Perception of Nonverbal Immediacy and Effective Teaching among Student Teachers: A Study across Cultural Extremes. *International Online Journal of Educational Sciences*, *3*(3), 865-881.

Plax, T. G., Kearney, P., McCroskey J. C., & Richmond, V. P. (1986). Power in the classroom VI: Verbal control strategies, nonverbal immediacy, and affective learning. *Communication Education*, 35, 43-55.

Richmond, V. P., Gorham, J. S., & McCroskey, J. C. (1987). The relationship between selected immediacy behaviors and cognitive learning. *Communication Yearbook*, *10*, 574-590.

Richmond, V. P., McCroskey, J. C., & Johnson, A. D. (2003). Development of the nonverbal immediacy scale (NIS): Measures of self- and other-perceived nonverbal immediacy. *Communication Quarterly*, *51*, 504-517.

Rodriguez, J. I., Plax, T. G., & Kearney, P. (1996). Clarifying the relationship between teacher nonverbal immediacy and student cognitive learning: Affective learning as the central causal mediator. *Communication Education*, *45*, 293-305.

Sanders, J. A., & Wiseman, R. L. (1990). The effects of verbal and nonverbal teacher immediacy on perceived cognitive, affective, and behavioral learning in the multicultural classroom. *Communication Education*, *39*, 341-353.

Santilli, V. and Miller, A.N. (2011). The Effects of Gender and Power Distance on Nonverbal Immediacy in Symmetrical and Asymmetrical Power Conditions: A Cross-Cultural Study of Classrooms and Friendships. *Journal of International and Intercultural Communication*, *4*(1), 3-22.

Simpson, E. J. (1972). *The Classification of Educational Objectives in the Psychomotor Domain*. Washington, DC: Gryphon House.

Swenson, J., & Cashmir, F. L. (1998). The Impact of Culture-Sameness, Gender, Foreign Travel, and Academic Background on the Ability to Interpret Facial Expression of Emotion in Others. *Communication Quarterly*, *46*(2), 214-15.

Tabachnick, B.G. & Fidell, L.S. (1996). *Using Multivariate Statistics*. New York: HarperCollins College Publishers.

Taylor, R. (1989). Chinese hierarchy in comparative *perspectives. Journal of Asian Studies, 48,* 490-511.

Thweatt, K.S., & McCroskey, J. C. (1996). Teacher nonimmediacy and misbehavior: Unintentional negative communication. *Communication Research Reports*, *13*(2), 198-204.

Zhang, Q. (2005). Immediacy and out-of-class communication: A cross-cultural comparison. *International Journal of Intercultural Relations, 30,* 33-50.

Zhang, Q., Oetzel, J. G. Gao, X., Wilcox, R. G., & Takai, J. (2007). Teacher immediacy scales: Testing for validity across cultures. *Communication Education*, *56,* 228-248.

Genişletilmiş Özet

Bu çalışma, Türkiye, ABD ve Çin'de üniversite öğrencileri üzerinde yürütülen kültürlerarası bir görgül araştırma yoluyla öğretim elemanlarının sözsüz yakınlık becerilerinin sınıfta "öğretim-öğrenme" sürecine etkilerini araştırmayı amaçlamaktadır. Görgül çalışma; Türkiye'de Hacettepe Üniversitesi İşletme Bölümü, Amerika Birleşik Devletleri'nde Massachusetts Üniversitesi (Isenberg School of Management) İşletme Bölümü, Çin'de ise Huazhong Tarım Üniversitesi İşletme Bölümü son sınıf öğrencilerinin katılımı ile gerçekleştirilmiştir. Bu çerçevede çalışma; 1) öğrencileri tarafından sınıf ortamındaki öğretim sürecinde "üstün başarılı" olarak algılanan Türk, Amerikalı ve Çinli öğretim elemanlarının sözsüz yakınlık becerilerinin derecesini, 2) bu becerilerin düzeyi açısından kültürlerarası bir fark olup olmadığını ve son olarak 3) sözsüz yakınlık becerilerinin öğrencilerin başarı algıları üzerindeki etkisini ölçmektedir.

Çalışmanın ilk kısmında sözsüz iletişim ve sözsüz yakınlık konuları incelenmektedir. Ardından görgül çalışma kısmına geçilmekte, bu kısımda "göz kontağı kurmak ve sürdürmek, gülümsemek, dokunmak, diğer kişiye yakın mesafede durmak, aktif ve enerjik olmak" vb. sözsüz yakınlık davranışları mercek altına alınmaktadır. Araştırmada, 2003 yılında Richmond ve arkadaşları tarafından geliştirilen 26 sorudan oluşan "Sözsüz Yakınlık Gözlemci Ölçeği" (NIS-O) kullanılmıştır. Bu ölçeğin sözsüz iletişim çalışmalarında tercih edilen diğer ölçeklerden farkı ve bu çalışmada tercih edilme nedeni, çok kapsamlı oluşu ve diğer ölçeklerde mevcut olmayan çok sayıda değişkeni içermesidir, ancak bu durum katılımcı ve araştırmacı açısından zaman kaybettirici olduğundan aynı zamanda ölçeğin dezavantajlı yanını oluşturmaktadır. Uygulamada geçerlilik ve güvenilirliği kanıtlanmış NIM ve RNIM gibi çok daha küçük ölçekli rakipleri ile kıyaslandığında tercih edilme şansını da azaltmaktadır. Ölçeğin sınırlı kullanımı bu çalışmanın önemini de artırmaktadır. Çünkü mevcut çalışma, Şubat 2013 itibariyle, kültürlerarası çalışmalarda Santilli ve Miller'ın (2011) ardından bu ölçeğin ikinci kullanımını oluşturmakta; "öğretim üyelerinin sözsüz yakınlık davranışları ve öğrencilerin algılanan başarısı arasında ilişki" üzerine yapılan çalışmaların oluşturduğu kültürlerarası sözsüz yakınlık literatüründe ise ilk çalışma olma özelliğini taşımaktadır. Yine sadece tek ülkeyi içeren çalışmalarda da ABD dışında, Türkiye ve Çin'deki ilk kullanım da bu çalışma sayesinde gerçekleştirilmiştir. Bu durumun, çalışma bulgularının sözsüz yakınlık literatürü açısından önemini önemli ölçüde artırdığı düşünülmektedir.

Bu çerçevede, Türkiye, ABD ve Çin'de yürütülen araştırmada öğretim elemanlarının incelenen sözsüz yakınlık becerilerinin, farklı boyutları ortaya çıkarılmaya çalışılmıştır. Çalışma bulguları, çalışma hipotezleri çerçevesinde değerlendirildiğinde; ilk hipotezi oluşturan; öğrencileri tarafından sınıfta öğretim sürecinde üstün başarılı bulunan öğretim elemanlarının gerçekten de sözsüz yakınlık becerilerine yüksek oranda sahip olduğu iddiası, elde edilen sonuçlarla desteklenmiştir. Aritmetik ortalamalar itibariyle yapılan değerlendirmeler, öğretim elemanlarının sekiz kategoriden oluşan sözsüz yakınlık becerilerinin yedisinde yüksek bir puana sahip olduğunu (5 üzerinden 3,5 ve üzerinde bir aritmetik ortalama değeri), sadece konuşurken dokunmak kategorisinde puanların düşük olduğunu göstermiştir. Ölçekteki bu kategori, olumsuz anlamda da değerlendirilebilecek bir davranış olduğundan puanların bu yönde çıkması normal bulunmuştur. Ölçeğin ileriki uygulamalarında bu kategorideki soruların, "samimi ve güven verici bir şekilde dokunur" şeklinde tekrar düzenlenmesinin ya da ölçekten tamamen çıkarılmasının uygun olacağı düşünülmektedir. İkinci hipotezi oluşturan, ülke kültürünün sözsüz iletişime verdiği öneme göre öğretim üyelerinin sözsüz yakınlık beceri puanları arasında farklılık olması gerektiği iddiası da doğrulanmıştır. Araştırma sonuçları aritmetik ortalamalar itibariyle yakınlık düzeyi en yüksek kültürün ABD olduğunu, onu çok benzer bir değerle Türkiye'nin izlediğini, Çin'in ise yakınlık açısından en düşük ortalama değere sahip olduğunu göstermiştir. Sonuçlar arasındaki farklılığın istatistiksel olarak da anlamlı olduğu görülmüştür (Türkiye ve ABD arasında istatistiksel olarak anlamlı bir fark yokken, Çin'le her iki ülke arasında anlamlı bir fark mevcuttur; $F_{(2-194)}=9,20$, $p<0,01$). ABD ve Türkiye'nin birbirine benzer beceri değerlerine sahip olması ise iki kültürün yakınlık boyutu açısından oldukça benzeştiği sonucunu ortaya çıkarmaktadır. Çalışmanın üçüncü ve aslında en önemli hipotezini oluşturan, öğretim elemanlarının sözsüz yakınlık becerileri ve öğrencilerin başarı algısı değerleri arasında ilişki olduğu iddiası da Türkiye ve ABD için elde edilen istatistiksel açıdan anlamlı ve pozitif korelasyon değerleriyle doğrulanmış (bu ilişki Çin'de anlamlı çıkmamıştır).

Sözsüz yakınlık alanında, ileriki çalışmaların daha yüksek katılımcı sayıları ile üniversitelerdeki diğer bölümlerde de gerçekleştirilmesi, alana önemli katkılar sağlayacaktır. Böylece, sözsüz yakınlık davranışlarının sınıf ortamında öğretim sürecine katkıları konusunda daha kapsamlı bir çerçeve ortaya konulabilecek ve genel anlamda da sınıfta etkili iletişim alanındaki literatüre önemli katkılar sağlanabilecektir. Bu çalışmadaki katılımcı sayısının sınırlılığı (234 kişi) sonuçların diğer bölümlere ve tabi ki ülke nüfusunun tamamına genellenmesini zorlaştırmaktadır. Bunula birlikte, güvenilirlik testi değerinin yüksekliği (0,86) ve diğer sözsüz yakınlık çalışmalarındaki sonuçlara paralel sonuçların alınması, çalışmanın güvenilirliğini ve geçerliliğini desteklemekte ve sonuçların bilimsel gücünü ve dolayısıyla açıklayıcılığını artırmaktadır.

Sonuç olarak, bu çalışmanın bulguları, çalışmada ele alınan sözsüz iletişim becerilerinin (dokunma hariç) öğretim elemanlarının sınıftaki başarısına katkıda bulunduğunu göstermiştir. Elde edilen çalışma bulguları

çerçevesinde, öğretim elemanlarının, kendi beden dillerini ve öğrencilere yolladıkları sözsüz sinyalleri gözleyip yakınlık davranışı oluşturacak şekilde yönlendirebilmeleri halinde, sınıftaki iletişim ortamının ve öğretme-öğrenme sürecinin bundan olumlu şekilde etkileneceği sonucuna varılmıştır. Bununla birlikte, sözsüz yakınlığın kültürel bir olgu olduğu; yüksek/orta düzeyde yakınlığa sahip olan Batı kültüründe daha etkili sonuçlar alınıp, yakınlık düzeyi düşük Doğu kültüründe ise aynı ölçüde etkili olunamayabileceği olasılığı gözden uzak tutulmamalıdır.