Ufuk University

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PREPARATORY CLASS STUDENTS' PERCEPTIONS OF THEIR ENGLISH INSTRUCTORS' INTERPERSONAL BEHAVIOURS AT KARABÜK UNIVERSITY SCHOOL OF FOREIGN LANGUAGES

Esin Uysal

Master's Thesis

Ankara, 2014

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KABUL VE ONAY

Esin Uysal tarafından hazırlanan "Karabük Üniversitesi Yabancı Diller Yüksek Okulundaki hazırlık öğrencilerinin, İngilizce okutmanlarının kişilerarası davranış özelliklerini algıları" başlıklı bu çalışma, 26.06.2014 tarihinde yapılan savunma sınavı sonucunda başarılı bulunarak jürimiz tarafından Yüksek Lisans Tezi olarak kabul edilmiştir.

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_____

Yrd. Doç. Dr. Gülşen DEMİR

_____

Yrd. Doç. Dr. Neslihan ÖZKAN

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26.06.2014

Esin Uysal

ABSTRACT

Uysal, Esin. *Preparatory Class Students' Perceptions of Their English Instructors' Interpersonal Behaviours at Karabük University School of Foreign Languages,* Master's Thesis, Ankara, 2014.

The purpose of this study was to investigate Karabük University preparatory class students' perceptions of their English instructors' interpersonal behaviours. The study also investigated instructors' perceptions of their own interpersonal behaviours as well as the relationships among students' perceptions of their instructors' interpersonal behaviours, student gender, instructor gender, student alma mater, and instructor professional experience. For data collection, 50-item translated and adapted version of Questionnaire on Teacher Interaction (QTI) on a five-point scale representing 8 different dimensions of teacher interpersonal behaviour (leadership, helpful friendly, understanding, student freedom, uncertain, dissatisfied, admonishing, strict) was used. The data were collected from a sample of 991 preparatory class students at Karabük University School of Foreign Languages in 30 classrooms taught by 30 English instructors.

The data were analyzed by using paired samples and independent T-test analyses, one-way ANOVA, and simple correlation. The results indicated that the differences between students' and instructors' perceptions dimensions of teacher interpersonal behaviour were statistically significant in three scales (helping/friendly, understanding, and uncertain). Although the students' perceptions revealed statistically significant differences in terms of instructor gender, they showed non-significant differences in terms of student gender. In addition, the results indicated that there was a relationship between students' perceptions and instructors' professional experience, and the differences were significant. However, students' perceptions of their English instructors' interpersonal behaviours showed non-significant results in terms of the students' alma mater. Lastly, the analysis of instructor profiles indicated that most of the English instructors at Karabük University were tolerant-authoritative.

The results of the study carry considerable implications for English classrooms, instructors, and researchers.

ÖZET

Uysal, Esin. *Karabük Üniversitesi Yabancı Diller Yüksek Okulundaki hazırlık öğrencilerinin, İngilizce okutmanlarının kişilerarası davranış özelliklerini algıları*, Yüksek Lisans tezi, Ankara, 2014.

Bu çalışmanın amacı, Karabük Üniversitesi hazırlık sınıfı öğrencilerinin İngilizce okutmanlarının kişilerarası davranış özelliklerini araştırmaktır. Bu çalışma, ayrıca okutmanların kendi kişilerarası davranış algılarının yanı sıra öğrencilerin algıları ile öğrenci cinsiyetleri, okutman cinsiyetleri, öğrencilerin mezun oldukları okul türü ve okutmanların tecrübe yılı arasındaki ilişkileri de araştırmıştır. Veri toplama aracı olarak 50 madde ve 8 alt boyuttan oluşan (liderlik, yardımsever/arkadaş canlısı, anlayışlı, öğrenci serbestliği, kararsız, hoşnutsuz, azarlamacı, katı) Türkçeye çevrilen ve uyarlanan Öğretmen Etkileşim Ölçeği (QTI) kullanılmıştır. Veriler Karabük Üniversitesi Yabancı Diller Yüksek Okulunda 30 İngilizce okutmanın 30 sınıfında eğitim gören 991 hazırlık öğrencisinden toplanmıştır.

Veriler bağımlı ve bağımsız örneklem T-testi, tek yönlü ANOVA ve korelasyon analizleri kullanılarak incelenmiştir. Sonuçlar, öğrenciler ve okutmanların kişilerarası öğretmen davranış algıları 3 alt boyutta istatistiksel olarak farklı olduğunu göstermiştir. Öğrenci algıları, okutman cinsiyetine göre anlamlı farklılık gösterse de, öğrenci cinsiyetine göre anlamlı farklılık göstermemiştir. Ayrıca, sonuçlar öğrencilerin öğretmen davranışını algıları ve okutman tecrübe yılı arasında ilişki olduğunu ve farkın anlamlı olduğunu göstermiştir. Ancak, öğrencilerin İngilizce okutmanlarının kişilerarası davranışını algıları öğrencilerin mezun oldukları okul türü bakımından anlamlı farklılıklar göstermemiştir. Son olarak, okutman profilleri incelemesi, Karabük Üniversitesi'ndeki İngilizce okutmanlarını çoğunun hoşgörülü-otoriter yapıda olduğunu göstermiştir.

Bu çalışmadan elde edilen sonuçlar araştırmacılar ve okutmanlar için önemli çıkarımlar içermektedir.

Anahtar Sözcükler: Öğrenme ortamı, öğretmen kişilerarası davranışları, öğrenci algıları, Öğretmen Etkileşim Ölçeği

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LIST OF ABBREVIATIONS

ANOVA		: Analysis of Variance
DV		: Dependent Variables
IV		: Independent Variables
EFL		: English as a Foreign Language.
LER		: Learning Environment Research
M		: Mean
Max.		: Maximum
Min.		: Minimum
N		: Number
QTI		: Questionnaire on Teacher Interaction
	DC	: Leadership scale of QTI
	CD	: Helpful/Friendly scale of QTI
	CS	: Understanding scale of QTI
	SC	: Student Responsibility/Freedom scale of QTI
	SO	: Uncertain scale of QTI
	OS	: Dissatisfied scale of QTI
	OD	: Admonishing scale of QTI
	DO	: Strictness scale of QTI
SD		: Standard Deviation
TIB		: Teacher Interpersonal Behaviour

CHAPTER 1
INTRODUCTION

1.1. Background to the Study

People always communicate and interact with their environments. A person's personal development is influenced by everything around him/her. Particularly for the learning process, learners are more influenced from everything around them, including the physical and the social environment. Their best performance is seen when the environment they are in is without problems. Many research studies found out that students learn better when they perceive the classroom environment positively (Fisher, Henderson, & Fraser, 1995; Wubbels, & Levy, 1993).

Apart from the importance of the interaction in learning processes, foreign language teaching and learning is, on its own, a communicative and social activity. Interpersonal behaviours and social sides of a teacher gain more importance in a foreign language classroom when compared to other subjects, since written and oral communication are intensely required in a foreign language learning environment. In this regard, the relationship between the language teacher and the learner is one of the most important aspects in education. It is almost impossible that a student learn a foreign language when there is no positive interaction between the language teacher and the learners.

As well as the importance of positive learning environments, students are a good viewpoint to make research about classroom environments, because students usually get experience from a variety of learning environments and have lots of time in the learning environment to obtain a specific impression of the classroom environment. The basis behind the methodology applied in this study is a result of these assumptions, and this research aims to explore teacher interpersonal behaviour and its role on student outcomes by getting student perceptions.

1.2. Statement of the Problem

Since Karabük University School of Foreign Languages has the goal to make sure that the students have got a certain level of proficiency in English and become competent users of English before they start studying at their departments, preparatory class is compulsory for almost all of the departments. Therefore, the students who are unable to pass the Proficiency Exam carried out at the beginning of the academic year are exposed to an intensive general English program for a year.

Karabük University School of Foreign Languages was converted from Preparatory Unit Coordinatorship in 2010. It provides compulsory English preparatory classes for Higher Vocational School, undergraduate, and graduate programs. Students who fail the proficiency test are placed in groups according to their levels of English and their departments. There are eight different groups in the Foreign Language Preparatory Department, named A, BE, BT, C, D, E, and F. *A* groups are students of English Language and Literature department. *BE* group students, who are the target population of this study, are registered to the Faculty of Engineering and medium of instruction of their departments is partly (30%) or wholly (100%) English. *BT* groups are registered to the Faculty of Technology and are also studying engineering; however, the medium of instruction of *BT* group students are Turkish. *C* group students are the ones who are registered to Faculty of Economics and Administrative Sciences. *D* group students are those registered to Faculty of Letters, Faculty of Sciences, and Faculty of Fine Arts. While *E* groups belong to Vocational Schools, *F* groups are Vocational School of Health students.

Once the students are assigned to their groups and sections, instructors for each class are determined randomly. For 2013-2014 academic year, there were 164 sections and around 7600 preparatory class students who had 16 hours face-to-face main course lessons, and 4-hour-web-based classes at Karabük University School of Foreign Languages. For their 16-hour main course classes, two different instructors are assigned, which means that each instructor is responsible for 8 hours of a particular language class.

As working for 4 years at Karabük University as an English instructor, the researcher has observed that the instructors always complain about their language classes at the

end of the year. Their complaints are mostly about students' lack of interest or insufficient interaction through the lessons in very crowded classrooms. The instructors complain about students and think that they are uninterested, but we do not know for sure how the students perceive the teachers' interpersonal behaviours in the class.

Additionally, most of the students state that they start the academic year enthusiastically, but soon they lose their interest in the language classes. It is a very common knowledge that most of the students do not like English because of their English teacher. When examined the reasons behind this feeling, they usually refer to the interaction model of their teachers more than the instructional aspect of the teacher. Students with such experiences certainly develop negative attitudes toward English and lose their interest in time as also observed at Karabük University School of Foreign Languages.

That is why this study aimed to investigate students' perceptions related to their English instructors' interpersonal behaviour, because creating a positive learning environment is a very important aspect of language classes, as mentioned above.

1.3. Purpose and Research Questions

The purpose of this study is to investigate preparatory class students' perceptions related to their English instructors' interpersonal behaviour at Karabük University School of Foreign Languages. The study also aims to investigate English instructors' perceptions of their own interpersonal behaviours and relationships between students' perceptions of their instructors' interpersonal behaviours, and other variables, such as students' gender, instructor gender, students' educational backgrounds, and instructors' years of professional experience.

In some ways, this study aims to make connections between the students and the instructors. It is also expected that the results of the study will broaden the knowledge on the functions of interpersonal teacher behaviour in EFL classrooms, so that it provides pedagogical implications for English instructors and a better understanding of the teaching/learning environments.

For this reason this study aims to find answers to these questions:

1. Are the students' perceptions of their English instructors' interpersonal behaviour different from instructors' own perceptions of their interpersonal behaviour?

2. Are the students' perceptions of their English instructors' interpersonal behaviour different in terms of instructor gender?

3. Is there a significant relationship between students' perceptions of teacher interpersonal behaviour and instructor professional experience?

4. Are the students' perceptions of their English instructors' interpersonal behaviour different in terms of students' gender?

5. Are the students' perceptions of their English instructors' interpersonal behaviour different in terms of students' alma mater?

6. What are the instructors' interpersonal profiles?

1.4. Scope

This research is concerned with the psychosocial side of the classroom environment in terms of students' perspective at Karabük University School of Foreign Languages. In particular, this research explores teacher interpersonal behaviour in relation to instructor variables (gender, professional experience) as well as students' variables (gender, and alma mater). In order to get the necessary data on students' perceptions of their English instructors' interpersonal behaviour, preparatory students are given a questionnaire.

The reason for investigating preparatory students in this study is that they are exposed to an intensive English learning programme, and so, they interact with their English instructor for longer periods in a week, which enables them to know the instructor better. The underlying principle of focusing on student perceptions is that they are reliable and objective sources of data about classroom environment, because perceptions are usually based on a large number of lessons, and they are created by students who naturally take into consideration many different situations, and contexts.

In this study, BE group students are used as samples, for they are the most motivated group to learn English as medium of instruction of their departments is partially or fully English.

1.5. Significance

It is a common knowledge that classroom learning environment is a place where learners and teachers continuously interact with each other and the most important role in this learning environment belongs to the teacher. As mentioned before, the main influence on students' cognitive and affective outcomes is teacher behaviour, even the attitudes towards language are affected by teacher behaviour. It is a known fact that, when students get positive learning environments, they learn better. Many studies have shown some evidence of associations between student perceptions of their classroom learning environment and student outcomes.

Although research in learning environment in many countries has grown rapidly, it has not got much attention in Turkey. Questionnaire on Teacher Interaction (QTI) and other learning environment scales were used to measure students' perceptions of teacher interpersonal behaviour in many countries, and also in Turkey in different fields (Telli, 2006). Although it was used for EFL learning context before (Güçlü, 2012), it has not been conducted at the university level. This research hopes to add an interest in the need to realize the importance of students' perceptions of teacher interpersonal behaviour in English classrooms, also, at the university level.

This study also aims to help administrators and instructors to improve their language teaching and classroom teachers to improve language learning environments in their classrooms. Understanding students' perceptions of their classroom learning environment and teacher interpersonal behaviours and the factors associated with their perceptions can help language instructors to find out some alternative ways that enhance the students learning and attitudes. By this way, instructors may develop their self-awareness of their interactions with the students.

1.6. Assumptions and Limitations

1.6.1 Assumptions

This study was conducted based on a set of assumptions. Firstly, all of the students in the study were assumed to complete the items of the QTI sincerely and correctly by themselves. Secondly, the administration of the instruments was assumed to be under standard conditions. The students of both the pilot study and main study were assumed to have approximately the same characteristics and conditions. Assumedly, no external factors affected students' answers.

1.6.2 Limitations

Although this research was carefully designed and carried out, there were several factors that could have interfered in the study outcomes and the quality of the study. First of all, though the instrument was shortened and changed accordingly, some of the items might not be easy-to-understand for students. Secondly, the study consisted of only Karabük University School of Foreign Languages to investigate and also, only the Faculty of Engineering preparatory class students were the sample of the study.

Selecting samples in a convenient manner was also a limitation of this study. Another limitation was that some of the classes were too crowded, so some of the students could not be concentrated on the scale. Apart from limitations about the application of the QTI, there were two instructors for each of the classes, but the instrument was applied for only one of their instructors.

1.7. Definitions of Important Terms

English as a foreign language (EFL): It refers to the use or study of English by speakers of different native languages other than English.

Learning Environment Research (LER): It is the educational research concerned with the social, psychological and pedagogical context in which learning takes place and which affects students' achievement and attitudes (Fraser, 1998b).

Teacher interpersonal behaviour (TIB): Interpersonal teacher behaviour means the interactions that occur between teachers and students. Or, in other words the behaviour of a teacher that is directed to the students in the classroom as a form of communication. In this study, teacher interpersonal behaviour means English teachers' interpersonal behaviour in their classes.

Student perceptions: In this study, student perceptions mean students' thoughts and observations and their awareness about their English teachers' interpersonal behaviour.

Teacher perception: In this study, teacher perception means English instructors' thoughts and observations and their awareness about their own interpersonal behaviour.

CHAPTER 2
LITERATURE REVIEW

2.1. INTRODUCTION

Classroom learning environment refers to a space or a place where learners and teachers interact with each other and use a variety of tools and information resources in their pursuit of learning activities (Wilson, 1996). The learning environment has a strong influence on student outcomes and plays an important role in improving the effectiveness of learning from the level of the institution to the level of the individual classroom. Learning environment researches offer investigators insight into what goes on in school and university educational settings beyond the notation of student achievement.

This chapter provides a literature survey which serves as the background to the study. In order to obtain an extensive overview, relevant databases on the internet have been reviewed. In the searches, the keywords "QTI, learning environment research, teacher interaction, and interpersonal teacher behaviour" have been used. Related articles, theses and dissertations from Turkey and abroad have been got from the related databases and downloaded online.

The main points explained in this chapter are learning environment research and interpersonal teacher behaviour. Within these main points historical background of learning environment research, instruments to measure the learning environment, and researches on interpersonal teacher behaviour and interpersonal profiles are clarified.

2.2. LEARNING ENVIRONMENT RESEARCH

Learning Environment Research (LER) deals with the "social, psychological and pedagogical context in which learning occurs and it affects students' achievement and attitudes" (Fraser, 1998:3). Learning Environment Research is now a developing research field in education. Learning environment has been investigated by many researchers for many years. And, also, varied instruments have been constructed for

educators and curriculum developers to investigate the nature of the psychosocial environment in classroom settings from the perspectives of students and teachers.

2.2.1. Historical Background of Learning Environment Research

Very first studies were done by Hartshorne and May and Newcomb. Newcomb compared students' talkativeness during lunch periods, a highly stable trait, to other situations and concluded that the same trait did not transfer to other situations. So, with their very first studies, these researchers directed attention to the environment and showed that student behaviour could be modified and changed by the environment (Walker, 2003). They confirmed that personality traits were poorly correlated to their behaviour.

Later, the researchers head towards to investigate the effects of the psychosocial learning environments and their influences on student outcomes. Walberg and Moos, independent of one another, began considering psychosocial environments and their influences on student outcomes in the late 1960s and early 1970s. Their work can be concerned as the beginning of contemporary learning environment research which was originated in the 1970s (Fraser, 1990).

In the 1970s, Rudolph Moos, attributed increased awareness and action related to the natural environment to an upsurge of interest in human environment researches. According to Moos (1976), the way people socialize and adapt to their environments is equally important to the physical environment they are exposed to. He suggested that humans seek environments that can provide them maximum human functioning and competence. From this perspective, Moos (2002) classified human social environments that can represent considerably different environments in terms of three dimensions:

    a) relationships,

    b) personal development,

    c) system maintenance/change.

It is through the framework of these dimensions that researchers are able to characterize and integrate the impacts social environments have on individuals and groups. Learning environment instruments drew on these dimensions to classify individual scales within

themselves. Studies on social environments such as family, work, school, and health communities have confirmed the quality of these dimensions.

In the 1980s, some factors that influence cognitive and affective outcomes of the students were determined by Walberg (Walberg, 1981). These factors are student ability, age and motivation, the quality and quantity of instruction, the psychosocial climate of the home environment, the classroom social group, peer groups outside the classroom and mass media (especially television). According to the model that Walberg identified, learning occurs as a function of all these nine elements and in principle with no functioning of any of these elements, there will be no learning. Also, Walberg stated that due to the dynamic structure of these factors, improving one factor that limits learning is better than enhancing a factor that is already high and that all nine factors rather than only a dominant one affect students' achievement and attitudes. These studies show that classroom and school environments have mainly important roles in improving students' cognitive and affective outcomes.

For the last four decades, the field of learning environments has undergone remarkable growth, diversification and internationalization (Fraser, 1998a). There are three common approaches to studying learning environment involving systematic observations, case study, and assessing student and teacher perceptions. Students have a good superiority to make judgments about classrooms because they have encountered many different learning environments and have enough time in class to form accurate impressions. Also, even if teachers are inconsistent day-to-day behaviour, they usually project a consistent image of the long-standing attributes of classroom environment. Thus, an outstanding feature of this field is the availability of a variety of economical, valid and widely-applicable questionnaires that have been developed and used for assessing students' perceptions of classroom environment (Fraser, 1998b). A brief explanation about some of the questionnaires is given in the next section.

2.2.2. Instruments to Measure Learning Environment

As discussed earlier, Moos' work (1974) has influenced the development and application of many instruments used to assess the qualities of the learning environment from the perspective of the student (Koul, 2003). There has been a productive

development of questionnaires in the field of learning environment researches. This section presents a brief look at a few of the instruments that are available today for learning environment research.

Early questionnaires include the Learning Environment Inventory (LEI) and the My Class Inventory (MCI). The LEI assumes that students, as well as the teachers, are determinants of the learning environment (Anderson & Walberg, 1974). The MCI is a simplified version of the LEI, adapted for use with younger children aged 6-12 years. Meanwhile, the College and University Classroom Environment Inventory (CUCEI) focused exclusively upon perspectives at the post-secondary level (Fraser, Treagust, & Dennis, 1986). Individualised Classroom Environment Questionnaire (ICEQ) distinguishes individualised classrooms from conventional ones (Rentoul & Fraser, 1979).

Instruments that are more contemporary are numerous and ever growing. They include: the Science Laboratory Environment Inventory (SLEI) geared toward upper secondary and post-secondary students (Fraser, Giddings, & McRobbie, 1992); the Constructivist Learning Environment Survey (CLES) aimed at secondary students (Taylor, Fraser, & Fisher, 1997) and Classroom Environment Scale (CES) considered teacher behaviour, teacher-student interaction and student-student interaction (Moos, 1979). The Computer-Facilitated Learning (CFL) environments instrument was developed for use in technology-rich university courses (Bain, McNaught, Mills & Luedkenhausen, 1998). The "What Is Happening in this Classroom?" (WIHIC) instrument focuses on secondary classrooms and was designed to bring economy to the field by combining the most relevant scales from existing questionnaires (Aldridge, Fraser, & Huang, 1999). The Questionnaire on Teacher Interaction (QTI) focuses on the interpersonal relationships between students and their mathematics and science teachers (Wubbels, & Levy, 1993).

A distinctive feature of most of the instruments is that they have not only a form to measure perceptions of actual classroom environment, but also a form to measure perceptions of preferred classroom environment. The preferred (or ideal) forms are concerned with goals and value orientations and measures perceptions of the classroom environment ideally liked or preferred. Although the item wording is identical or similar for actual and preferred forms, the instructions for answering are different. For example,

an item in the actual form such as 'There is a clear set of rules for students to follow' would be changed in the preferred to 'There would be a clear set of rules for students to follow'.

Table 2.1 (Fraser, 1998, b) gives some information about nine major instruments, namely; LEI, ICEQ, CES, CUCEI, MCI, SLEI, QTI, CLES and WIHIC. The levels of instruments, item per scale, and scale classification have been listed. The scales are classified according to Moos's Scheme.

Table 2.1 Overview of scales contained in nine learning environment instruments (Fraser, 1998b)

Instrument	Level	Items/ Scale	Relationship dimensions	Personal development dimensions	System maintenance and change dimensions
Learning Environment Inventory (LEI)	Secondary	7	Cohesiveness Friction Favouritism Cliqueness Satisfaction Apathy	Speed Difficulty Competitiveness	Diversity Formality Material Environment Goal Direction Disorganization Democracy
Individualized Classroom Environment Questionnaire (ICEQ)	Secondary	10	Personalization Participation	Independence Investigation	Differentiation
Classroom Environment Scale (CES)	Secondary	10	Involvement Affiliation Teacher Support	Task Orientation Competition	Order and Organization Rule Clarity Teacher Control Innovation
College and University Classroom Environment Inventory (CUCEI)	Higher Education	7	Personalization Involvement Student Cohesiveness Satisfaction	Task Orientation	Innovation Individualization
My Class Inventory (MCI)	Elementary	6-9	Cohesiveness Friction Satisfaction	Difficulty Competitiveness	
Science Laboratory Environment Inventory (SLEI)	Upper Secondary/ Higher Education	7	Student Cohesiveness	Open-Endedness Integration	Rule Clarity Material Environment
Questionnaire on Teacher Interaction (QTI)	Secondary/ Primary	8-10	Helping/Friendly Understanding Dissatisfied Admonishing		Leadership Student Responsibility Uncertain Strict
Constructivist Learning Environment Survey (CLES)	Secondary	7	Personal Relevance Uncertainty	Critical Voice Shared Control	Student Negotiation
Constructivist Learning Environment Survey (CLES)	Secondary	8	Student Cohesiveness Teacher Support Involvement	Investigation Task Orientation Cooperation	Equity

2.3. INTERPERSONAL TEACHER BEHAVIOUR

2.3.1. Research on Interpersonal Teacher Behaviour

It is the reciprocal nature of the teacher-student communication that makes it a powerful force in influencing the learning environment and subsequently student performance. In the last 30 years, this long-standing recognition has inspired a tradition of studying classroom learning environment through the perceptions of both students and teachers (Fraser, 1994; Fraser & Walberg, 1991).

According to Koul (2003) one of the earliest attempts to categorize and observe interaction in the classroom with the use of trained observers who recorded verbal elements of the interaction in the classroom was carried out by Withall (1949). Withall classified the seven different categories in three main categories. The first category was "learner centred", which involves learner-supportive statements, acceptance and clarifying statements, and problem-structure statements. The second category was "teacher centred" that involves directive and authoritative statements, reproving or deprecating remarks and teacher self-supporting remarks. The last category was "neutral" that involves neutral statements.

2.3.2. Instruments to Measure Interpersonal Teacher Behaviour

It is a fact that Learning Environment Research has become popular over the past 30 years or so, but the theoretical backgrounds of this field are deeply-rooted in the past psychological and social descriptions of human communication. The traditional Systems Approach of Communication, the following Leary Model for Interpersonal Behaviour and the most recent Model for Interpersonal Teacher Behaviour have been the principal theoretical sources for studies on Teacher Interpersonal Behaviour, and particularly those performed with Questionnaire on Teacher Interaction (QTI).

2.3.2.1. The Systems Approach of Communication

The first important starting point for the interpersonal teacher behaviour is the Systems Approach of Communication (Watzlawick, Beavin and Jackson, 1967). Watzlawick and his colleagues (1967) regarded communication as an ongoing interactive process. Compatible with this idea, classroom groups can also be regarded as ongoing systems. For ongoing systems, certain stability is important for their continued existence. For the first lesson of a class, students can have uncertain ideas about the interpersonal behaviour of their teacher. Uncertainty is caused by the possibility of teacher's behaving differently. Only after a few lessons in that class, tentative ideas about the teacher will have stabilised and students can tell what kind of teacher someone "is". This stability of perceptions equally applies to the teacher's ideas about the students. Once the tone is set, it is difficult to modify. Both students and teachers resist against changes (Doyle, 1986).

In order to describe these kinds of processes, *the systems approach to communication* distinguishes among different levels of communication (see Table 2.2). The lowest level is *molecular* that consists of messages, e.g. a question, assignment, response, gesture, et cetera. The intermediate level is that of *interactions*, i.e. chains of several messages. When the interactions show recurrent patterns and some form of regularity, *pattern* level emerges. It is this pattern level which is important in describing the rather stable interpersonal relationships that determine the working atmosphere of classrooms. The main focus of the systems approach to communication is the pragmatic aspect, namely the effects of someone's actions on the other. This effect is most visible in the perception of the person involved.

Table 2.2 Three levels of communication (Telli, 2006)

	Level	Definition
1st	Molecular (Syntax)	One single code or physical process (e.g. a handshake, a greeting, etc.)
2nd	Interaction (Semantics)	A series of exchanged meanings of words and sentences (e.g. a question and an answer, etc.)
3rd	Pattern (Pragmatics)	The most extended level of communication, exchange of messages (e.g. a lecturing teacher, etc.)

2.3.2.2. Leary's Circumplex Model for Interpersonal Teacher Behaviour

Teachers develop different types of relationships with their students because of their different communication types. Some teachers behave friendlier, some other are stricter. In order to measure these behaviours, Wubbels and his colleagues used a framework based on Leary's (1957) model for interpersonal behaviour.

Leary's Circumplex Model has been a source of great inspiration for the Learning Environment Research in general and teacher interpersonal behaviour in particular, since Leary's model places personality at the centre of interpersonal behaviour. Leary believes that the way humans communicate is indicative of their personality. Leary constructed a model that made it possible to measure both normal and abnormal behaviour on the same scale. Leary and his co-workers divided the discourse into short statements representing different kinds of interpersonal behaviour. These were then coded and arranged into sixteen categories which, over time, were reduced to eight.

As cited in the study of Wubbels, Levy and Brekelmans (1997), Timothy Leary (1957) conceptualized all interpersonal behaviour on two primary dimensions. One of the dimensions, the horizontal axis, is called *Proximity* dimension that measures the degree of cooperation between individuals or oppositional behaviour, and the vertical axis is called *Influence* dimension that measures the degree of control or influence over the communication process, namely the dominance and submissiveness in the relationship. The influence dimension indicates who is controlling the communication and how often. Proximity dimension, on the other hand, represents the cooperation or closeness between the people communicating.

Leary and researchers who followed this model (Wubbels, Creton, Levy & Hooymayers, 1993) argued that all interpersonal behaviour can be conceptualized into positions somewhere on these two dimensions and they used the two dimensions to distinguish between sixteen or eight sectors of interpersonal personality behaviours that combined different amounts of Cooperation-Opposition and Hostility-Affection. They mentioned that these two dimensions are both necessary and sufficient to describe the interpersonal behaviours (Rawnsley, 1997). Figure 2.1 expresses diagrammatically this conceptualization of interpersonal behaviour.

The two dimensions (proximity & influence) have also been easily transferred into education. Slater (1962) used them to effectively describe pedagogical relationships, and Dunkin and Biddle (1974) demonstrated their importance in teachers' efforts to influence classroom events.
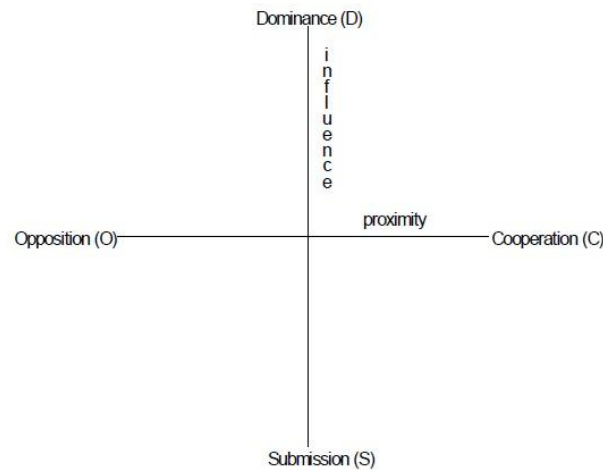
Figure 2.1 Leary's (1957) model for the interpersonal communication (cited in Wubbels, Creton and Hooymayers (1985))

2.3.2.3. Model for Interpersonal Teacher Behaviour (MITB)

Just like the Systems Approach of Communication, Model for Interpersonal Teacher Behaviour (MITB) is another important element in the research of the interpersonal teacher behaviour.

On the basis of the model of Leary (1957), Wubbels, Creton and Hooymayers (1985) developed a model to map interpersonal teacher behaviour in order to be able to describe the perceptions students have of the behaviour of their teacher. This model is adapted to the education by dividing Leary's original two dimensions, which is called *Influence* (Dominance-Submission) and *Proximity* (Opposition-Cooperation), into the eight behaviour types. The first letters of the two closer dimensions label these eight sections. For example, DC section and CD sectors are both characterized by the dimensions Dominance and Cooperation. But the DC sector includes more dominant behaviours and less cooperative behaviours; however CD includes more cooperative behaviours and less dominant behaviours. The sections of the model describe eight different behaviour aspects. Every instance of interpersonal teacher behaviour can be

placed within the system of axes. The closer the instances of behaviour are in the chart, the more closely they resemble each other. The eight sectors are labelled as; Leadership (DC), Helpful/Friendly (CD), Understanding (CS), Student Responsibility and freedom (SC), Uncertain (SO), Dissatisfied (OS), Admonishing (OD), Strict (DO). Figure 2.2 shows these sectors and behaviours, in an octagonal representation that is often called "goniometric circle" and some typical behaviours for each sector of Model for interpersonal teacher behaviour (MITB) are given in Table 2.3. Adjacent sectors in the model reflect similar interpersonal behaviours whereas opposite sectors reflect opposite behaviours. Because of this, it is called a circumplex model.
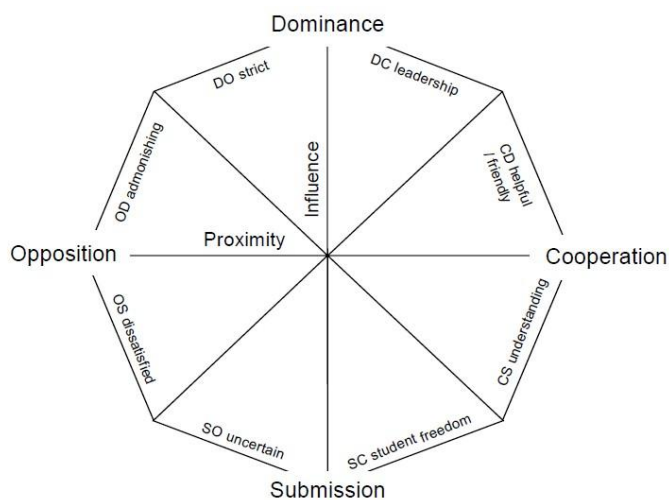
Figure 2.2 The eight dimensions of the model for interpersonal teacher behaviour (Wubbels, Levy, & Brekelmans, 1997).

Table 2.3 Typical behaviours for MITB (Wubbels, et al, 1985)

Scale (sector)	Typical behaviours
DC Leadership	Notice what is happening, lead, organize, give orders, set tasks, determine procedure, structure the classroom situation, explain, hold class attention
CD Helpful/friendly	Assist, show interest, show concern, be able to take a joke, inspire confidence and trust.
CS Understanding	Listen, understanding, be open to, be patient.
SC Student responsibility/freedom	Give opportunity for independent work. Give freedom and responsibility.
SO Uncertain	Keep a low profile; admit one is in the wrong.
OS Dissatisfied	Wait for silence, keep quiet, and show dissatisfaction.
OD Admonishing	Get angry, forbid, correct, punish.
DO Strict	Keep reins tight, check, get class silent, exact norms and set rules.

Wubbels et al. (1985) suggest that in the MITB, sectors do not have strict boundaries between them, however sectors opposite each other represent opposite behaviours. For example, SO (uncertain) sector describes opposite behaviours from DC (Leadership) sector describes.

2.3.2.4. The Questionnaire on Teacher Interaction (QTI)

The Questionnaire on Teacher Interaction (QTI) is a unique instrument that can be used to determine both students' and teachers' perceptions of interpersonal teacher behaviour and provide different perspectives to researchers.

The Model for Interpersonal Teacher Behaviour (MITB) formed the theoretical starting point of the Questionnaire on Teacher Interaction (QTI). Its origin was the128-item Interpersonal Adjective Checklist (ICL). Leary used ICL to collect his data and it was piloted in education by Wubbels and his colleagues (1985). They decided that it was impractical to use this checklist in an educational context, since many of the items were irrelevant to teachers and the field of education. This, sequentially, led to the development of the Questionnaire on Teacher Behaviour (Wubbels, et al., 1985) and afterwards to the Questionnaire on Teacher Interaction (QTI) in 1982 (Wubbels, et al., 1985).

The Questionnaire on Teacher Interaction (QTI) was first developed in the Netherlands based on Model for Interpersonal Teacher Behaviour (MITB) between 1978 and 1984 to collect data about teachers' communication styles (Wubbels & Levy, 1991, Wubbels et al., 1985). It consists of 8 subscales of behaviour that are based on the Model for Interpersonal Teacher behaviour (MITB), and each consisting of about 10 items. Each item corresponds to one of the eight sectors of the MITB, namely; leadership, helping/friendly, understanding, giving responsibility/freedom, uncertain, dissatisfied, admonishing and strict (see Table 2.4 for additional information). The 77 items are answered on a Likert-type 5 point scale ranging from "never/not at all" to "always/very".

Table 2.4 Description of scales and sample items for each scale of the QTI (Rickards, Newby, & Fisher, 2001)

Scale name	Description of scale (The extent to which the teacher...)	Sample item
DC Leadership	leads, organizes, gives orders, determines procedure and structures the classroom situation.	This teacher talks enthusiastically about his/ her subject.
CD Helpful / friendly	shows interest, behaves in a friendly or considerate manner and inspires confidence and trust.	This teacher helps us with our work.
CS Understanding	listens with interest, empathizes, shows confidence and understanding and is open with students.	This teacher trusts us.
SC Student responsibility/ freedom	gives opportunity for independent work, gives freedom and responsibility to students.	We can decide some things in this teacher's class.
SO Uncertain	behaves in an uncertain manner and keeps a low profile.	This teacher seems uncertain.
OS Dissatisfied	expresses dissatisfaction, looks unhappy, criticizes and waits for silence.	This teacher thinks that we cheat.
OD Admonishing	gets angry, express irritation and anger, forbids and punishes.	This teacher gets angry unexpectedly.
DO Strict	checks, maintains silence and strictly enforces the rules.	This teacher is strict.

Based on the original Dutch version, an American version was developed between 1985 and 1987 by translating the set of 77 items, and adjusting this set of items based on three rounds of testing (Wubbels & Levy, 1991). Ultimately, the American version contained 64 items. This American version was firstly also used in Australia. In 1993, Fisher, Fraser and Wubbels developed a more economical version of QTI consisting of 48 items in Australia (Wubbels & Levy, 1993). The Australian version, in turn, was used without translation or adaptation in Singapore (Fisher et al., 1997).

Since its development, QTI has been the focus of well over 120 (learning environment) studies in many countries (den Brok, Brekelmans, Levy & Wubbels, 2002) and has been translated into more than 15 languages (Wubbels, Brekelmans, van Tartwijk & Admiraal, 1997) such as Hebrew, Russian, Slovenian, Swedish and Finish. Some of those studies followed the American (64 items) version, while others followed the Australian (48 items) version. For instance; the Brunei version, in which the 48-item version had been translated into Malay followed the Australian version. Other versions

based on the Australian version were those in Canada, Hong Kong, Korea, Fiji and Indonesia. On the other hand, studies conducted by researchers from the United Kingdom, Slovakia, Israel, the Philippines and Greece were based on the American version (Telli, 2006).

The original QTI, designed for secondary education, also formed the basis for a number of other versions for primary education, higher education, principals and supervisors (den Brok, 2001).

QTI can be applied to both students and teachers. There are three forms of QTI; first one is students' perceptions of their actual teacher-student interpersonal behaviour, second one is teacher's perceptions of their actual teacher-student interpersonal behaviour in the classroom, and the last one is what they perceive to be ideal. The versions are basically similar. For example, item 1 in the Student questionnaire is "This teacher is strict" whereas in the Teacher questionnaire it is "I am strict".

The study of Den Brok et al. (2003) investigated the reliability and the validity of the Questionnaire on Teacher Interaction (QTI) in 6 countries: United States, Australia, the Netherlands, Slovakia, Singapore and Brunei. QTI data were obtained from researchers that conducted their studies in each of the six countries, and were then reanalyzed to meet the purposes of the present study. To enhance comparison between countries, researchers were asked to provide only data on secondary Science (Physics and Chemistry) teachers. In all countries, convenience sampling was used, except for the Netherlands, where teachers were randomly sampled. Reliability of the scale scores at the class level was above .80 in most countries. In most countries, reliability was the lowest for the student responsibility/freedom scale (SC) and strict scale (DO). On average, reliability was the highest for Australia and Singapore. Outcomes indicated that the scale inter-correlations corresponded with a circular ordering best for Australia and the Netherlands and least for Slovakia and Singapore. The study shows that results on the QTI cannot be compared between countries on the scale level and that further research is necessary to determine whether the instrument has cross-cultural validity.

2.3.2.5. Studies involving QTI

Since its development, QTI has been the focus of over 120 learning environment studies in many countries (den Brok, Brekelmans, Levy & Wubbels, 2002) and has been translated into more than 15 languages (Wubbels, Brekelmans, van Tartwijk & Admiraal, 1997).

Wubbles (1993) investigated the relationships between the students' perceptions on the QTI scales and student learning outcomes in the Netherlands. It is found that regarding students' cognitive outcomes, the more teacher demonstrated strict, leadership and helping/friendly behaviour, the higher were cognitive outcomes scores. Conversely, student responsibility and freedom, uncertain and dissatisfied behaviours were related negatively to achievement. According to this study, student responsibility and freedom, understanding, helping/friendly, and leadership behaviours were related positively to student attitudes. Uncertain, dissatisfied, admonishing, and strict behaviours were related negatively to attitudes (effective outcomes).

In another research, Wubbels (1993) applied the QTI to a sample of 792 students and 46 teachers in Western Australia and Tasmania. The results of this study were similar to previous Dutch and American research in that teachers generally, did not reach their ideal and differed from the best teachers as perceived by students. It is noteworthy that the best teachers, according to students, are stronger leaders, more friendly and understanding, and less uncertain, dissatisfied and admonishing than teachers on average. When teachers described their perceptions of their own behaviours, they tended to see it a little more favourably than their students did. On average, the teachers' perceptions were between the students' perceptions of actual behaviour and the teachers' ideal behaviour.

The aim of the study of Henderson, Fisher and Fraser (1995) was to investigate the relationships between students' perceptions of their biology teachers' interpersonal behaviour and their laboratory learning environments and their affective and cognitive outcomes. The Questionnaire on Teacher Interaction (QTI) and the Science Laboratory Environment Inventory (SLEI) were applied together to a sample of 489 students from 28 senior biology classes in eight schools in Tasmania, Australia. The results of the study indicated that favourable student attitudes were associated with the student's

perceptions of the teacher's strong leadership, a greater degree of integration of practical and theory work, and more rule clarity. Furthermore, it was found that the teacher's strong leadership, provision of a degree of student responsibility and freedom, and integration of practical and theory components of the course were likely to promote achievement, whereas a greater degree of strict behaviour by the teacher, emphasis on rule clarity and an open-ended approach to the course are negatively associated with student achievement. In addition, the results indicated that the associations between the attitudinal outcomes and learning environment dimensions assessed by the SLEI and QTI were stronger than with either achievement or practical outcomes.

Goh and Fraser (1996) adapted the QTI for use in elementary schools in Singapore. Their aim was to investigate the effect of gender differences in students' perceptions of their teacher interpersonal behaviours. The results of this study indicated that girls perceived their teachers' interpersonal behaviours in a more positive way than boys did. Girls thought that teachers display more understanding and helping/friendly behaviours and less uncertain, dissatisfied, and admonishing behaviours. Fisher, Fraser, and Rickards (1997) made a similar study with a sample of 3994 students from 182 secondary science and mathematics classes in 35 schools to determine association between science and mathematics students' perceptions of their classroom learning environments, the cultural backgrounds and gender of students. Their results were similar to the results of other studies. They concluded that females perceive their teachers in a more positive way than do males. Studies on gender differences and interpersonal teacher behaviour were realized with different subjects, samples or in different countries. Similar results also obtained from Rawnsley and Fisher's (1997) study in Australia, Riah, Fraser, and Rickards' (1997) study in Brunei, Fisher and Rickards' (1998) study in Tasmania, Australia.

In order to compare the students' perceptions of their teachers' interpersonal behaviour and teachers' perceptions of their own interpersonal behaviour, QTI is applied both to students and teachers in recent studies. Rickards and Fisher (1997) conducted another study. A sample of 3589 students in 173 science classes in 35 different schools completed the student version of the QTI while their 164 teachers completed the teacher self and teacher ideal versions. The result of this study showed that there were differences in teacher and student perceptions of teacher-student interpersonal

behaviour and that teachers perceived their classes more positively than their students did. The results also indicated that teachers describe their ideal teachers more positive than themselves.

Levy, Wubbels, Brekelmans, and Morganfield (1997) carried out a study in order to determine the language and cultural factors in students' perceptions of teacher communication style. The sample of the study was totally 550 high school students in 38 classes involving 117 Latinos, 111 Asians and 322 students from the United States. The results from this study suggested that the students' cultural background is indeed significantly related to the perceptions that they had of their teachers' interaction behaviour. The study also concluded that teachers do not seem to be aware of cultural differences in their interactions with students in their classes in the same way as their students perceive.

In another study, Goh and Fraser (1998) studied on the nature and impact of two aspects of classroom learning environment (interpersonal teacher behaviour and classroom climate) and their associations with affective and cognitive outcomes among primary mathematics students in Singapore. A secondary purpose of the study was to explore the effects of gender differences in students' achievement, attitudes and perceptions of classroom environment. The two questionnaires: the Questionnaire on Teacher Interaction (QTI) and the My Class Inventory (MCI) were applied to a random sample of 1512 boys and girls from government primary schools. The results indicated that there are differences between girls and boys in mathematics achievement, in favour of boys. Girls generally viewed their classroom environments more favourably than boys did.

Rawnsley and Fisher (1998) applied the QTI to a sample of 490 9th grade students to research the relationships between students' perceptions of their teachers' interpersonal behaviour, student learning outcomes and their attitudes towards mathematics. The results of this study showed that students develop more positive attitudes towards mathematics classes, where the teacher was perceived to be highly supportive, equitable, place a strong emphasis on understanding the work, were involved in investigations, showed leadership, helping-friendly behaviour and minimal admonishment of students. Students showed the greatest cognitive gains in classes

where students perceived that the teacher emphasized understanding the work. The least cognitive gains occurred in classes where students perceived that the teacher was dissatisfied, gave them too much freedom and responsibility, and where they were involved in investigations.

Evans and Fisher (2000) also conducted a study on the differences between the students' perceptions and their cultural backgrounds. The QTI is applied to a sample of 2986 science students in 153 classes in 48 Australian secondary schools in two Australian states, Victoria and Western Australia. The results indicated significant differences between students from different cultural backgrounds and their perceptions of student-teacher interactions.

Rickards and Fisher (2000) conducted another study to compare science students' perceptions of their teacher-student interactions with those of their teachers. To gather data on perceptions of teachers' and students' interpersonal communication patterns, QTI was applied to a sample of 3515 students from 164 secondary school science classes in 35 schools. The study found differences between the perceptions of teachers and their students. The results showed that the teachers thought they demonstrated more leadership and helping/friendly behaviour than did their students. Differences in teacher actual and ideal perceptions were significant and suggested that teachers perceived the ideal teacher as being more positive than they currently were.

In Tasmania and Western Australia, Rickards, Newby, and Fisher (2001) carried out a study with a sample of 1659 students and 164 teachers. The aim of the study was to compare students' perceptions of teacher-student interactions with those of their teachers. In the analysis, the students' perceptions of the teacher interaction were measured by using the class mean score as the unit of analysis. In order to investigate possible relationships between teachers' perception of their ideal and actual interaction, and relationships between teachers' perception of the actual interaction and the class' perception of that interaction, two structural equation models were used. The results would seem to confirm the underlying basis of the QTI in that the teachers' actual perceptions of their interactions with students affects the students' perceptions, which in turn affect the teachers' perceptions.

In order to examine the variables associated with differences in students' perceptions of interpersonal teacher behaviour, Levy, Den Brok, Wubbels, and Brekelmans (2003) conducted a study on 3023 students and 74 teachers in 168 classes. Investigating differences in the student, class, teacher and school levels revealed that several variables are significantly related to students' perceptions. These variables are: student and teacher gender, student and teacher ethnic background, student age and grade, class size, grade level, subject taught and teacher experience. There were interaction effects between some variables, such as student ethnicity and student gender, as well as student and teacher gender. While significant, the amount of variance explained by these was low.

Another research on QTI that conducted by Waldrib and Fisher's (2003), aimed to determine the usefulness of the QTI to identify and describe exemplary science teachers. QTI is applied to a sample of 493 science students and their 25 teachers in 25 Australian secondary school classrooms. A number of students from classes that had indicated very positive student-teacher interactions were interviewed to examine why these students had such positive perceptions. The interviews showed that the better teachers were identified as those whose students' perceptions were more than one standard deviation above the mean on the scales of leadership, helping/friendly, and understanding and more than one standard deviation below the mean on the uncertainty, dissatisfied and admonishing scales. It is apparent from these interviews that these better teachers tried to interest students in the learning process, involve students in developing understanding, were friendly, gave students responsibility and had a level of strictness that students were comfortable and such that they felt was conducive to learning.

Another study conducted by Scott, Den Brok and Fisher (2004) explored the relationships between students' perceptions of their teachers interpersonal behaviour and their subject-related attitude in primary science classes in Brunei. The Questionnaire on Teacher Interaction (QTI) is used in order to distinguish teacher-student interpersonal behaviours. 1,305 students from 64 classes were involved in this study. The results indicated strong and positive effects of Influence and Proximity on students' enjoyment of their science class and supported the findings of earlier work with the QTI.

Den Brok, Fisher, and Rickards (2004) investigated whether student, teacher and class characteristics affect students' perceptions of their teacher interpersonal behaviour. The Questionnaire on Teacher Interaction (QTI) is applied in the U.S. and in the Netherlands. The results indicated that, several factors affect student's perceptions, including student and teacher gender, student and teacher ethnic background, student age, teacher experience, class size, student achievement and subject. The results also indicated that each of these variables has a distinctive effect, but also that they interact with each other in determining students' perceptions. The results showed that the more positive the attitude of the student, the higher his or her perception of the teacher in terms of both influence and proximity. Boys perceived their teachers as less dominant and cooperative than girls.

Den Brok, Veldman, Wubbels, and Tartwijk (2004) investigated students' and teachers' perceptions of teacher interpersonal behaviour in Dutch multicultural classes and the relationships between students' ethnic and socio-cultural background and their perception of the learning environment, and teachers' interpersonal behaviour. QTI was applied to a sample of 365 students from 18 classes of 15 Dutch secondary education teachers. The results showed that culturally related differences in students' perceptions and teachers using a variety of strategies and knowledge in teaching multicultural classes. The results on teacher knowledge about teaching strategies for multicultural classrooms confirmed indications in the literature on general effective teaching competencies as well as previously found effective teaching methods in multicultural classes.

Research on teacher interpersonal behaviour in Turkey has not grown parallel with the worldwide attention to this topic. Only a few studies have been conducted with the QTI in science (Rakıcı, 2004), mathematics (Şimşeker, 2005), in science comparing two countries (Telli, 2006) and in EFL classes (Güçlü, 2012).

Rakıcı's (2004) work was the first study conducted with QTI in Turkey. A total of number of 722 eighth grade science students in 24 classes of 5 schools participated in her study and also answered the *What is Happening in this Class* (WIHIC) questionnaire, plus a science attitude scale. She concluded that the students generally perceived their science classroom learning environment positively and that they

perceived their teachers with more cooperative behaviours (than opposition behaviours), while indicating the relationship between students' perceptions of classroom environment and students' cognitive and affective outcomes. Şimşeker's (2005) study was the second one with the QTI in Turkey and additionally one mathematics attitude scale was used. A total number of 1317 eight grade mathematics students in 37 classes from 17 schools and 22 teachers participated in her study. The results showed that students perceived their mathematics teachers more cooperative and strict. Also, she reported that male teachers were perceived with higher Influence scores than female teachers. Moreover, she concluded that students with higher socio-economic background and girls generally perceived their teachers more favourably and more cooperative. Telli's (2006) work was more comprehensive than its precedings. It was conducted to investigate Turkish secondary school students' perceptions of their science teachers' interpersonal behaviour and differences in perceptions between Turkish students and their Dutch equivalents. The data were gathered from 7484 secondary school science students in 278 classes from 55 schools and collected with the adapted Turkish version of QTI and the translated version of TOSRA. This data set was compared to Dutch data set that contained 8503 students, located in 27 schools and 301 classes. In this study, some significant differences were found between countries in terms of students' perceptions of their teachers' interpersonal behaviours as well as different distribution of teachers' profiles over countries and subject. As well as studies on sciences, Güçlü's (2012) work was the first time QTI was used in EFL classrooms in Turkey. He conducted the Turkish version of QTI constructed by Telli (2006) added with a qualitative question. Along with QTI Gardner's Attitude/Motivation Test Battery was used to assess student attitudes toward Learning English to a total number of 509 high school students in 32 classrooms taught by 16 EFL teachers in one Anatolia Teacher Training High School and two Anatolia High Schools. The results of the analyses indicated that students' perceptions of their English teachers' interpersonal behaviour had significant relationships with teacher experience and student attitudes and significant differences in students' perceptions of teacher interpersonal behaviour according to teacher gender, teacher major, and student grade level. The student responses to a qualitative question served to identify the most liked and disliked teacher interpersonal behaviours, and how students interpreted them.

2.3.3. Interpersonal Profiles

Each item in the QTI is scored on a five-point Likert scale, ranging from 0 (never) to 4 (Always). Each completed questionnaire allows a score to be calculated for each sector of the Model for Interpersonal Behaviour. For example, for the strict sector, a score is gathered by adding up the scores of the 9 items in this scale. When the number of questions in the related scale divides the score of that scale, a mean score for the scales are obtained ranging from 0 to 4. For all sectors the mean scores can be calculated. These mean scores can be framed on a sector profile as shown in figure 2.3. In this sector profile, every sector is divided into 4 parts. According to the mean score of the scale, the amount of shaded part is defined. As indicated, the mean scores range from 0 to 4 where 'four' indicates that the behaviour in that scale is always demonstrated and 'zero' indicates that the behaviour in that scale never displayed. For all of the 8 scales, this process is applied, so that the scores for all scales can be compared in order to compare the sectors. By this way, a set of eight scores, called a profile, can be obtained from a completed questionnaire.

The interpersonal style of teachers can be described in two different dimensions; one is the perception of students of their teachers, and the other is perception of teachers themselves. As mentioned above, a set of eight scores can be obtained from every completed QTI. Then, each sector is shaded according to the height of the scale mean scores. In a research study in which nearly all the teachers of one Dutch urban secondary school participated, Brekelmans (1989) developed a typology of learning environments based on students' perceptions of teachers' interpersonal behaviour. Brekelmans' (1989) study revealed a typology of eight types of teacher behaviour. In both Dutch and American classes, these eight different types of relatively stable patterns could be distinguished (Wubbels & Levy, 1993). These eight interpersonal profiles are named as; Directive, Authoritative, Tolerant/Authoritative, Tolerant, Uncertain/Tolerant, Uncertain/aggressive, Drudging, and Repressive. These patterns can be characterized in terms of two dimensions in the Model for Interpersonal Teacher Behaviour. Figure 2.3 summarizes each of these eight profiles.
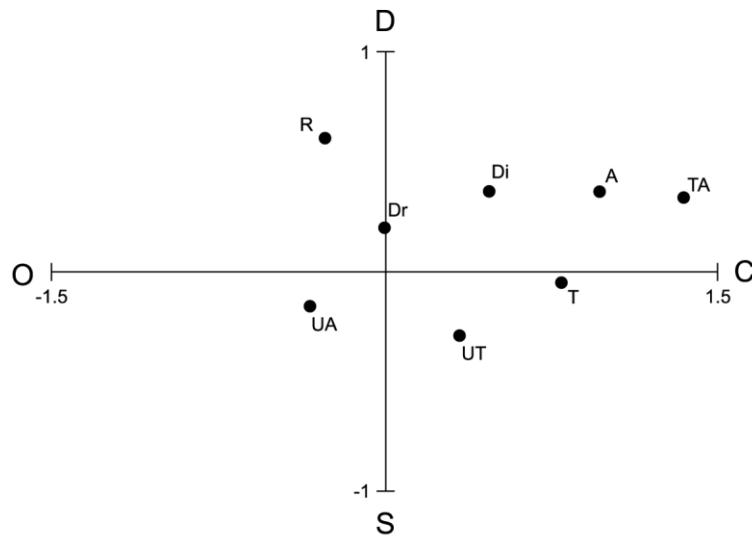
(A=Authoritative, Di=Directive, Dr=Drudging, T=Tolerant, R=Repressive, TA= Tolerant/Authoritative, UA=Uncertain/Aggressive, UT=Uncertain/Tolerant)

Figure 2.3 Main points of the eight types of patterns of interpersonal relationships (Rickards, Den Brok, & Fisher, 2003).

The Authoritative, the Tolerant/Authoritative and the Tolerant type are patterns in which students perceive their teachers relatively high on the Proximity Dimension, with the Tolerant type lowest on the Influence Dimension. Less cooperative than the three previous types are the Directive type, the Uncertain/Tolerant and the Drudging type, with the Uncertain/Tolerant type lowest on the Dominance Dimension. The least cooperative pattern of interpersonal relationships has Repressive and Uncertain/Aggressive type classes. In Repressive type classes, teachers are the most dominant of all eight types (Rickards, et al, 2003).

These eight interpersonal types are summarized with their profiles below Brekelmans, M., Brok, P. den, Tartwijk, J. van, & Wubbels, T. (2005).

1) Directive

The Directive teacher is the least co-operative, shows relatively low scores on the co-operation scales but a high score on strictness. The learning environment in a class with a teacher with a directive profile is well-structured and task-oriented. The Directive teacher is organised efficiently and normally completes all lessons on time. S/he dominates class discussion, but generally holds students' interest. The teacher usually is not really close to the students, though s/he is occasionally friendly and understanding. S/he has high standards and is seen as demanding. While things seem businesslike, the

teacher continually has to work at it. S/he gets angry at times and has to remind the class that they are there to work. S/He corrects students' behaviour every now and then. The figure 2.4 summarizes a directive classroom environment and teacher profile.
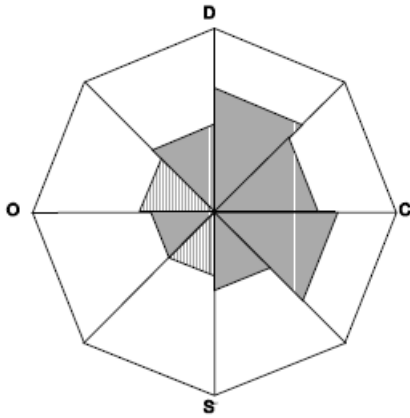
Figure 2.4 Sector profile for *Directive* teacher profile

2) Authoritative

The lessons of an authoritative teacher are well structured and the environment is pleasant and task-oriented. Rules and procedures are clear and students do not need to be reminded. They are attentive, and their behaviours are less corrected than done by a directive teacher. The Authoritative teacher is enthusiastic and his or her students listen and behave attentively. S/he takes a personal interest in them. An authoritative teacher likes lecturing teaching method most but s/he frequently uses other methods, too. Figure 2.5 summarizes an authoritative teacher's behaviour.
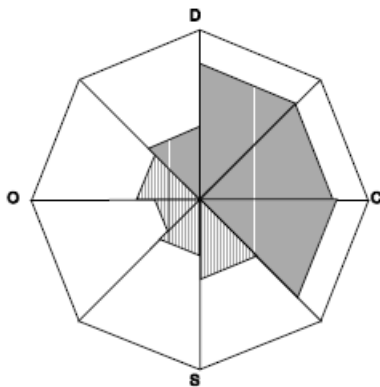

Figure 2.5 Sector profile for *Authoritative* teacher profile

3) Tolerant and Authoritative

Tolerant and Authoritative teachers maintain a structure that supports student responsibility and freedom. The environment is more supportive than type 2 teachers'. Teachers in this profile have close relationships with students. Students are highly involved in the lessons because they enjoy being in the class. The teacher uses different teaching methods in order to involve students into the lesson. S/he does not need to correct students' behaviour or enhance rules. Students follow unwritten rules automatically. Students got the correct behaviours and need to reach achievement themselves because they like the teacher and enjoy the lessons. Figure 2.6 summarizes the behaviour of a tolerant and authoritative teacher.
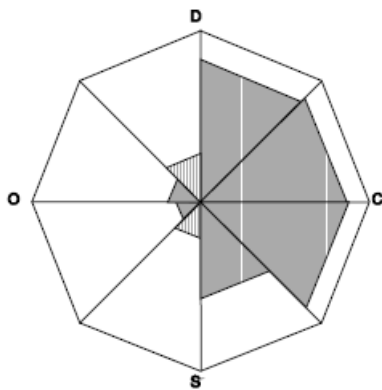
Figure 2.6 Sector profile for *Tolerant/Authoritative* teacher profile

4) Tolerant

These teachers have a pleasant, supportive atmosphere during their lessons. They give more freedom to the students than other types of teachers. They have more possibilities to influence lesson procedures and content. There seem to be separate Dutch and American views of the Tolerant teacher. To the Dutch, the atmosphere is pleasant and supportive and students enjoy attending the class. They often work at their own pace and the class atmosphere sometimes may be a little confused as a result. In the U.S., however, the Tolerant teacher is seen disorganized. His/Her lessons are not prepared well and they do not challenge students. The teacher often begins the lesson with an explanation and then sends the students off to individually complete an assignment.
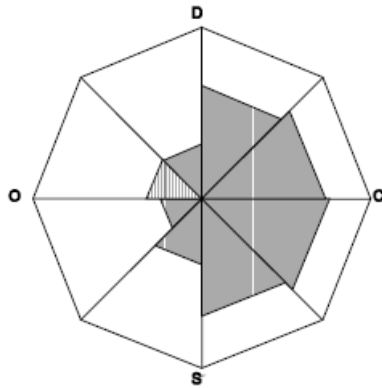
Figure 2.7 Sector profile for *Tolerant* teacher profile

5) Uncertain/Tolerant

Uncertain/Tolerant teachers' behaviours involve much cooperation, but less leadership. Their lessons are poorly structured, are not introduced completely. They generally tolerate disorder, and the task orientation is very low. The environment is unstructured. The teacher is quite concerned about the class, and explains things again and again to students who have not been listening. Only some of the students are attentive while the others do something else. They are not provocative so that teacher ignores most of the disorders. The Uncertain/Tolerant teacher's rules of behaviour are arbitrary, and students do not know what to expect when infractions occur. The teacher has little effect on the class. He or she is usually very busy explaining the subject matter and talks loudly and quickly. It seems as if there is a tacit agreement that the teacher and students can go on their own way. Figure 2.8 summarizes the profile.

Figure 2.8 Sector profile for *Uncertain/Tolerant* teacher profile

6) Uncertain/Aggressive

In an uncertain/aggressive teacher's class, there is an aggressive kind of disorder. The teacher and students regard each other as opponents and spend almost all their time in symmetrically escalating conflicts. When the teacher tries to explain something, students take every opportunity to disturb the lesson. They continually provoke the teacher by jumping up, laug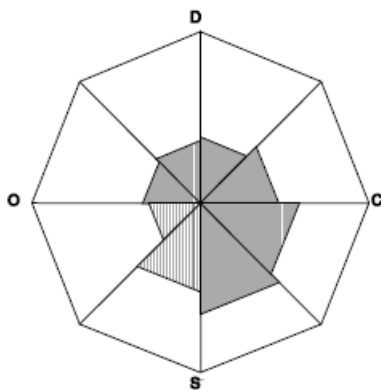hing and shouting out. The teacher cannot direct the class at these times and generally his or her behaviours are violent, arbitrary and panicky. Because of the teacher's unbalanced reactions, the students feel that the teacher is the one who is to blame disorder. Therefore, after teacher's reactions to their disturbances, they spend much effort to disturbing. In this class, rules of behaviour are not explained properly. The teacher spends most of his/her time trying to manage the class.
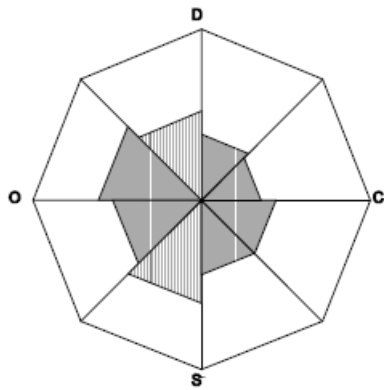
Figure 2.9 Sector profile for *Uncertain/Aggressive* teacher profile

7) Repressive

Students in the lessons of these teachers are uninvolved and extremely docile. They follow the instructions of the teacher and are afraid of the teacher's angry outbursts. In the class, rules are clean, explained and there is tight control. The teacher can react very angrily to the small mistakes of the students. His/her grades are very low and examinations are hard, so that students fear his/her examinations. The repressive teacher's lessons are structured but not well organized. While directions and background information are provided, few questions are allowed or encouraged. The teacher does not help the students if they do not understand the lesson. S/he thinks they have to work individually. The atmosphere is unpleasant, and the students are fearful and apprehensive. The Repressive teacher's expectations are competition-oriented and

inflated. The teacher seems to repress student initiative, preferring to lecture while the students sit still.
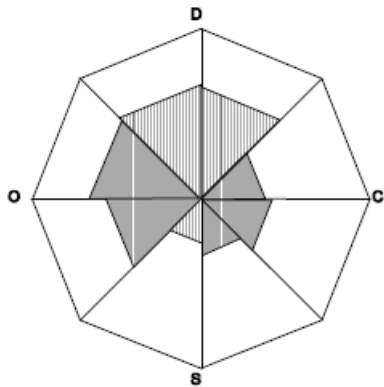
Figure 2.10 Sector profile for *Repressive* teacher profile

8) Drudging

The atmosphere in a Drudging teacher's class varies. Sometimes it resembles the aggressive disorder of type6, and sometimes it is like the tolerant disorder of type 5. One thing is constant, however: the teacher continually struggles to manage the class. S/he usually succeeds (unlike Types 5 and 6), but after spending a great deal of energy. Students pay attention as long as the teacher actively holds on their attention. When they are an orderly classroom, the atmosphere of the class is subject matter oriented and neither friendly nor unfriendly. The teacher uses much energy to control the class and he or she does not use different methods in lessons, generally teach lessons in a routine way. S/He sometimes supports students but also there can be a produced competition in the lessons. Figure 2.11 summarizes this type of behaviour.
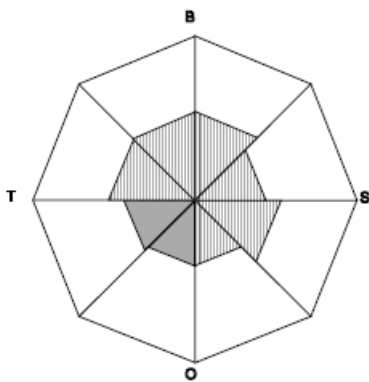
Figure 2.11 Sector profile for *Drudging* teacher profile

Each type of the eight interpersonal profiles is linked to student outcomes (Brekelmans, Wubbels & Levy, 1993). According to Rickards, den Brok, and Fisher (2003), it is found that, repressive teachers', tolerant and directive teachers' classes have highest achievement. Uncertain-tolerant and uncertain-aggressive teachers' classes released lowest achievement. Highest motivation has been found in classes of authoritative, tolerant-authoritative and directive teachers, lowest motivation in classes of drudging and uncertain-aggressive teachers. The pattern found for the tolerant-authoritative teachers approximates the image of the 'best' or 'ideal' teacher closest.

2.4. SUMMARY

This chapter has reviewed the theoretical background of the concepts like learning environment and teacher interpersonal behaviour and research studies involving the measuring instrument Questionnaire Teacher Interaction (QTI). The findings showed that Leary and Moos pioneered Learning Environment Research and teacher interpersonal behaviour researches having deep roots in the past psychological theories of communication and human relationships. Their researches indicated to the dynamic and interrelated nature of human social environment, and in particular learning environments. Also, several studies showed that teacher interpersonal behaviour is a fundamental factor in learning environments and has a positive effect on students' affective and cognitive outcomes. In order to measure interpersonal teacher behaviours, an instrument called Questionnaire on teacher interaction (QTI) developed originally in Dutch by Wubbels, Creton, and Hooymayers (1985) can be used. Moreover, based on the QTI eight types of teacher behaviours are defined and called interpersonal profiles (Brekelmans, 1989), which is useful to see strong and weak sides of a teacher visually.

Studies showed that a significant part of the classroom atmosphere is seriously influenced by the interpersonal skills of teacher and students' perceptions of interpersonal teacher behaviour are affected by many factors. Thus, studies on teacher interpersonal behaviour might provide valuable information about learning environments and its factors.

Accordingly, the present study aims to gather information about the interpersonal behaviours of English teachers at a Turkish university and the variables that affect

students' perceptions. It is also aimed to make contributions to the related literature by giving information about the situation in EFL classes at the university level.

CHAPTER 3

METHODOLOGY

In the first chapter, problems and hypotheses of the study were described and significance of the study was explained. In the second chapter, related literature was reviewed. In this chapter, the method of study, including the population and sampling, description of the variables, the instruments of the study, the procedure and the methods used to analyze the data and the assumptions and limitations will be explained briefly.

3.1. Sampling

All of the preparatory class students at Karabük University School of Foreign Languages were identified as the target population of this study. There were totally 164 sections and about 7600 preparatory class students at Karabük University School of Foreign Languages in 2013-2014 academic year. However, it was necessary to define an accessible population since it was not easy to come into contact with this target population. The accessible population was determined as all of the *BE* group students. They were the students who were registered to the Faculty of Engineering. They were chosen as the target population as medium of instruction of their departments is partially or fully English. That group of students was also the most motivated group to learn English. Since all the students included in the study were exposed to the same program at the Preparatory School in 2013-2014 academic year and the level of English-medium instruction within their departments was identical (30% and 100%), they were regarded and treated as a single group and were chosen to be the sample group.

The questionnaire was conducted in the spring semester of 2013-2014 academic year. The target sample population was determined as all of the *BE* group students. However, instructors of some classes were changed for the spring semester. In order to have consistent results, the classes whose instructors stayed same for both fall and spring semesters were determined as samples. While sampling, it was also essential that the selected sample was representative of the target population. Consequently, 30 *BE* group classes were identified as samples. As it was difficult and confusing for the students to complete the questionnaire for both of their instructors one after the other at a time, one

out of two instructors was selected as samples. This is the population, which the results of the study will be generalized. The detailed information about the number of the total and sample population can be seen on Table 3.1.

Table 3.1 Number of total and sample population at Karabük University School of Foreign Languages

Total number of sections	164
Total number of students	7600
Number of sections of BE group	40
Number of selected sections of BE group	30
Number of selected students	991
Number of selected instructors	30

3.2. Variables

There were six variables involved in this study. They were categorized as dependent and independent variables. Two of these variables were categorized as dependent and four variables were categorized as independent.

The *dependent variables* (DV) are students' perception of interpersonal teacher behaviour and instructors' perception of their own interpersonal teacher behaviour. These variables are continuous.

Students' perception of interpersonal teacher behaviour: This variable is a dependent variable which depends on various factors like student/instructor gender, and students' alma mater. This variable is continuous and based on the 50-item QTI, including eight subscales, namely leadership, helpful/friendly, understanding, responsibility/freedom, uncertain, dissatisfied, admonishing and strictness.

Instructors' perception of their own interpersonal teacher behaviour: This variable is also a dependent variable which depends on various factors like instructor gender and instructors' years of experience. It is also continuous and based on the 50-item QTI-teacher form, including eight subscales, namely leadership, helpful/friendly,

understanding, responsibility/freedom, uncertain, dissatisfied, admonishing and strictness.

The *independent variables* (IV) are students' gender and alma mater; instructors' gender and years of experience.

Students' gender: The variable is a nominated variable with categories of female (1) and male (2).

Students' Alma Mater: This variable is a nominated variable with categories of Anatolian High school (1), Anatolian Teacher Training High School (2), State high school (3), Technical and Vocational High School (4), and other high schools (5).

Instructors' gender: Just like students' gender, this variable is also a nominated variable with categories of female (1) and male (2).

Instructors' years of experience: This variable is a categorical variable with categories of 1-2 years (1); 3-4 years (2); 5 and more years (3).

3.3. Data Collection Instrument

In this study, two forms of one instrument were used in order to obtain data. That was the Turkish version of the Questionnaire on Teacher Interaction (QTI) student form and teacher form. The QTI was used to assess and describe the EFL students' and instructors' perceptions on the interpersonal teacher behaviour at Karabük University School of Foreign Languages. The student version of the QTI was used to describe the students' perceptions related to their English instructor's interpersonal behaviours and the teacher version of the QTI was used to describe instructors' perceptions of their own interpersonal behaviours.

As stated in Chapter 2, the Questionnaire on Teacher Interaction (QTI) developed in the Netherlands in 1984 to collect data about teachers' communication styles (Wubbels & Levy, 1991, Wubbels, 1985). It originally consisted of 77 items, answered on a Likert-type 5-point scale (1= never to 5= always), but, in time, the number of items has been reduced to 64. The items of the QTI refer to the eight scales of behaviour; leadership, helpful/friendly, understanding, responsibility/freedom, uncertain, dissatisfied, admonishing and strict.

In the present study, firstly the USA version of the QTI (see Appendix 1) was translated into Turkish by the researcher. A qualified Turkish specialist checked the translations, and for some items, necessary modifications in the Turkish translation were carried out. Then, it was consulted to two experts on English language, two academicians from the Department of English Language Teaching. The content and the format of the instrument were checked by these professionals. The suggestions of these academicians were taken into consideration; the necessary changes were done accordingly.

Then, the pilot study was conducted in the 2013 fall semester with 131 preparatory class students from 5 classes and for their 10 instructors.

For the QTI, both the factor analysis and the discriminant validity analysis are irrelevant because of its conceptual characteristic structure, which is based on Leary's circumplex model of interpersonal behaviour. Instead, the pattern of inter-scale correlation was calculated, as recommended by Wubbels and Levy (1993).

According to circumplex model of QTI, adjacent behaviour scales should correlate highest and positively with each other, and the level of the correlation should decrease as the scales become increasingly different as they move further apart from each other until they are diametrically opposite each other. Diametrically opposite scales, such as Helpful/Friendly (CD) and Dissatisfied (OS), should have the highest negative correlation (Wubbels, 1993).

The results of the present study satisfy this assumption to some extent. According to the pilot study results, diametrically opposite scales *Leadership* (DC) - *Uncertain* (SO) and *Understanding* (CS) - *Admonishing* (OD) scales show the highest negative correlation with each other. In line with previous researches, adjacent behaviour scales *Uncertain* (SO) scale shows the highest positive correlation with *Dissatisfied* (OS) scale, but *Dissatisfied* (OS) scale does not show the highest positive correlation with *Uncertain* (SO), on the contrary OS-SO correlation shows the lowest correlation.

There are also some other differences which might be caused by cultural characteristics. Although adjacent behaviour scales *Leadership* (DC) and *Helpful/ friendly* (CD) should show the highest positive correlation with each other, they both show the highest positive correlation with *Understanding* (CS) scale. Similarly, *Understanding* (CS) and *Student responsibility/freedom* (SC) scales should show the highest positive correlation

with each other, but they both the highest positive correlation with *Helpful/ friendly* (CD) scale. For the opposition-dominance scales *Admonishing* (OD) and *Strict* (DO) scales the results are also different from the assumption. While *Strict* (DO) scale shows the highest positive correlation with its adjacent behaviour scale *Admonishing* (OD), *Admonishing* (OD) scale correlates highest and positively with the other adjacent behaviour scale *Dissatisfied* (OS). The detailed information about inter-scale correlation of QTI using the students' perceptions is can be seen in Table 3.2.

Table 3.2 The inter-scale correlation of QTI

	DC	CD	CS	SC	SO	OS	OD	DO
DC Leadership	1	,68	,72	,24	-,49	-,24	-,34	-,13
CD Helpful/Friendly	,68	1	,82	,55	-,28	-,42	-,50	-,42
CS Understanding	,72	,82	1	,47	-,35	-,50	-,58	-,47
SC Student responsibility/Freedom	,24	,55	,47	1	,21	-,28	-,28	-,42
SO Uncertain	-,49	-,28	-,35	,21	1	,32	,31	,06
OS Dissatisfied	-,24	-,42	-,50	-,28	,32	1	,80	,72
OD Admonishing	-,34	-,50	-,58	-,28	,31	,80	1	,74
DO Strict	-,13	-,42	-,47	-,42	,06	,72	,74	1

In addition to validating the QTI using the pattern of scale inter-correlations discussed in the previous sections, the Turkish version of the QTI was validated in terms of the internal consistency (Cronbach Alpha Reliability) and ability to differentiate between the classrooms (ANOVA). The results of the pilot study indicated that all the scales of the QTI have a Cronbach Alpha Reliability ranging from 0.64 to 0.85. In line with the previous researches, the statistics reported two units of analysis; namely, the student's score and the class mean score. Table 3.3 suggests that the QTI has quite good reliability, with seven out of eight scales (namely, leadership, helpful/friendly, understanding, uncertain, dissatisfied, admonishing, and strict) having values above 0.85 for class mean, and the same seven scales having values between 0.73 and 0.85 with the individual student as the level of analysis.

Table 3.3 Internal consistency reliability (Cronbach Alpha Coefficient) and ability to differentiate between classrooms (ANOVA results) for the QTI.

QTI Scales	Unit of Analysis	Alpha Reliability	ANOVA Results (eta squared)	p (ANOVA)
DC Leadership	Individual **Class Mean**	0.81 **0.85**	0.16	.008
CD Helpful/friendly	Individual **Class Mean**	0.83 **0.89**	0.30	.000
CS Understanding	Individual **Class Mean**	0.84 **0.86**	0.17	.005
SC Student responsibility /freedom	Individual **Class Mean**	0.64 **0.75**	0.25	.000
SO Uncertain	Individual **Class Mean**	0.73 **0.90**	0.17	.005
OS Dissatisfied	Individual **Class Mean**	0.76 **0.88**	0.30	.000
OD Admonishing	Individual **Class Mean**	0.85 **0.94**	0.49	.000
DO Strict	Individual **Class Mean**	0.79 **0.91**	0.47	.000

As expected, reliability for the class means is higher than those where the individual student is used as the unit of analysis. This meant that the scales were one-dimensional at the class level. These values for a Turkish sample are comparable to those reported by Wubbels (1993), and Wubbels and Levy (1991) for the secondary students in the Netherlands, the USA and Australia. In all four countries, the highest reliability occurred for helpful/friendly teacher behaviour and the lowest for student responsibility/freedom.

In order to measure the ability of QTI to differentiate between the classes, one-way ANOVA statistics was used. A series of analyses of variance (ANOVA), with class membership as the main effect revealed significant differences ($p < .01$) for every QTI scale between the perceptions of the students in different classes. The eta squared statistics (which is the ratio of 'between' to 'total' sums of squares and represents the proportion of variance in scale scores accounted for class by membership), ranging from 0.16 to 0.49 for different the QTI scales (see Table 3.3) indicating that the instrument is able to distinguish between the classes. Only DC (*leadership*) CS (*understanding*), and SO (*uncertain*) scales show the small effect with the eta squared value of 0.16-0.17.

Others show a large effect. The results of the analyses suggest that each scale of the QTI was able to differentiate significantly ($p < .01$) between the students' perceptions in different classes. In other words, ANOVA results indicate that there are significant differences between the classes in means of student perceptions.

Based on the pilot study results, the necessary changes were made. In order to increase the reliability and for contextual factors, fourteen items are excluded from the study. Seven of these items were deleted in order to increase reliability, since they showed problems in respect of their item-total correlation having the results below 0.25. The others were deleted since they did not fit the applied context. Eventually, the instrument was shortened to 50 items. By this way, the final form of the QTI for the present study was obtained (see Appendix 2). Consequently, the present study has been conducted with the Turkish version of the QTI involving 50 items which was translated and adapted by the researcher according to the data gathered from the pilot study. The item-scale distribution of the QTI for this study is shown in Table 3.4.

Table 3.4 Item-scale distribution of the QTI for the present study

QTI Scales	Inventory Items	Items per scale
DC Leadership	3, 23, 27, 31, 35, 48	6
CD Helpful/friendly	11, 26, 28, 37, 39, 46	6
CS Understanding	4, 5, 8, 10, 12, 24	6
SC Student responsibility/freedom	7, 15, 19, 38, 50	5
SO Uncertain	17, 25, 30, 32, 34, 36, 43	7
OS Dissatisfied	9, 14, 20, 21, 22, 42, 44	7
OD Admonishing	18, 29, 33, 40, 45, 49	6
DO Strict	1, 2, 6, 13, 16, 41, 47	7

3.4. Data Collection Procedure

At the beginning of the study, for the literature review, related documents were obtained through the university libraries and the internet by using the keywords "QTI, learning environment, teacher interaction, and interpersonal teacher behaviour." After completing the literature review, the QTI was translated into Turkish and the necessary checks and changes were carried out accordingly. The pilot study was conducted in the 2013 fall semester with 131 preparatory class students from 5 classes and for their 10

instructors. The results of the pilot study were as expected, but some of the items needed to be changed. All the reliability scores were reasonable.

After the pilot study, the data collection procedure began and the measuring instruments were applied to the selected 991 preparatory class students from 30 different classes and their 30 instructors at Karabük University during the second/spring term of 2013-2014 academic year. All the data were collected by the researcher herself. Almost 30 minutes were given to the participants to complete the instrument. Directions were given clearly and the researcher gave the necessary explanations. The researcher also told that any data collected from them would be held in confidence. They were warned to complete the measuring tool without leaving any empty items as well.

No specific problems were encountered during the administration of the measuring instruments. Instructors and students were volunteers in the study.

The data gathered on all instructor and student variables as well as the items of the questionnaires were entered into the computer into SPSS 18.0 for statistical analyses. They were analyzed by using both descriptive statistics and inferential statistics. The variables were defined in accordance with the research purposes and the related analyses. The data which are returned incomplete by the participating students were not included in the analyses.

CHAPTER 4
DATA ANALYSIS AND RESULTS

The findings obtained from this research are presented in this chapter in the following way. First the reliabilities of the scales of the instrument are reported followed by tables for descriptive statistics for the sample and the scales of the quantitative instruments. Then, the results of the analyses to answer specific research questions were given separately.

4.1. Descriptive Statistics

Before starting the statistical analysis, the missing data analyses were carried out. The questionnaires were applied to 1011 students. 20 students did not answer some items of the QTI. Totally 991 students included in the analyses.

For an overview of the data, frequencies, percentages, mean scores, and standard deviations of the scales of all variables were computed. The descriptive statistics helped checking the item quality. To measure the internal consistency, Cronbach Alpha reliability analysis was performed. In order to have an overall idea about students' perceptions of their instructors' interpersonal behaviours, minimum and maximum values, and the mean scores for each of the eight scales were computed. All the statistical analyses for the quantitative instrument were conducted with these scale mean scores.

4.1.1. Descriptive Statistics for the Participants

The first step in descriptive statistics was to get a frequency table with means, standard deviations and other statistics to get a general view of the variables. As explained before, the study is including 30 classes and their 30 English instructors, and 991 students at Karabük University School of Foreign Languages. There are 17 female instructors which form the 56.7% of the whole sample; whereas there are 13 male instructors and they form the 43.3% of the whole sample. As there are 16 English instructors having majors in English Language Teaching, 55.2% of them have majors in

English Language Teaching, while 12 of them which makes 41.4% of the whole sampled instructors have majors in English Language and Literature, and 3.4% have major in American Culture and Literature as there are 1 instructor. The sampled instructor professional experience ranged from 1 to 21 years and was categorized into 3 groups. As there are 4 instructors having 1-2 years of experience, they constitute 13.4% of the study. While 3-and-4-year-old experienced instructors have the majority forming 63.4% of the study with 19 instructors, there are 7 instructors who have 5 and above years of experience which makes 23.2% of the sampled instructors.

As for the students, the gender distribution was 22.6% female and 77.4%. While 224 of the students were females, 767 of them were males. As they are registered to the Faculty of Engineering, the whole study consists 21.9% Computer Engineering, 2.8% Biomedical Engineering, 22.5% Electrical-Electronics Engineering, 21.7% Mechanical Engineering, 4.8% Metallurgical-Materials Engineering, 10.8% Automotive Engineering, 8% Rail Systems Engineering, and 7.5% Medical Engineering students. The sampled students' alma mater was categorized into 5 groups which are 40% Anatolian High School, 3.9% Anatolian Teacher High School, 37.3% State High School, 15.9% Technical and Vocational High Schools, and 2.8% other High Schools; namely private high school, religious vocational high school, military high school, open education high school, and multi-program high school. Descriptive statistics show that the majority of the students participated in the study graduated from Anatolian High schools having 40% rate. State high school graduates follow this rate with 37.3%. While Anatolian Teacher High School graduates form 3.9% of the study, 15.9% of the students graduated from Technical and Vocational High School, and 2.8% of them graduated other high schools, such as Private High School, Religious Vocational High School, Military High School, Open Education High School, and Multiprogram High School. The age range was between 17 and 27; however, the majority of the students were 18-20 years old, so they were grouped into 4. Accordingly, of the sampled students 19.6% are 18 and below, 34.6% are 19, 29.5% are 20 and 15.3% are 21 and above years old. The statistics results are summarized in table 4.1.

Table 4.1. Descriptive statistics details for the participants

	Variable		N	Percentage (%)
Instructor	**Gender**	Female	17	56.7
		Male	13	43.3
	Major	ELT	17	56.7
		ELL	12	40.0
		ACL	1	3.3
	Experience	1-2 years	4	13.4
		3-4 years	19	63.4
		5 and above	7	23.2
Student	**Gender**	Female	224	22.6
		Male	767	77.4
	Department	Computer Engineering	217	21.9
		Biomedical Engineering	28	2.8
		Electrical-Electronics Engineering	223	22.5
		Mechanical Engineering	215	21.7
		Metallurgical-Materials Engineering	48	4.8
		Automotive Engineering	107	10.8
		Rail Systems Engineering	79	8
		Medical Engineering	74	7.5
	Alma Mater	Anatolian High School	396	40
		Anatolian Teacher High School	39	3.9
		State High School	370	37.3
		Technical/Vocational High School	158	15.9
		Other High Schools	28	2.8
	Age	18 and below	194	19.6
		19	353	34.6
		20	292	29.5
		21 and above	152	15.3

4.1.2. Descriptive Statistics for the QTI

First of all, to measure the reliability of the instrument, Cronbach alpha coefficient was computed for each QTI scale as a measure of internal consistency. As can be seen in Table 4.2, the reliability coefficients for the QTI scales ranged from .71 to .86. The highest reliability was found for Helpful/Friendly, which is similar to the findings of previous studies (Telli, 2006). However, the lowest reliability was scored for uncertain and strict scales. The results indicated that the instrument was reliable, since all the

reliability coefficients were above the .65 level as the suggested acceptable reliability for QTI-related research purposes by Wubbels (cited in Telli, 2006).

Table 4.2. Internal consistency (Cronbach alpha coefficient) reliability for the scales of the QTI

QTI Scales	Reliability
DC Leadership	.83
CD Helpful/friendly	.86
CS Understanding	.81
SC Student responsibility /freedom	.75
SO Uncertain	.71
OS Dissatisfied	.76
OD Admonishing	.81
DO Strict	.71

In order to investigate the nature of the English instructors' interpersonal behaviour at Karabük University, the average item mean (the scale mean divided by the number of items in that scale) and average item standard deviation of each scale of the QTI was calculated (Table 4.4). The results showed that students generally perceived that their instructors display cooperative behaviours (leadership, helpful/friendly, and understanding), rather than opposition behaviours (uncertain, dissatisfied, admonishing). The mean score for the *Understanding* scale is found 4.08 where the maximum value was equal to 5. In addition, the mean values for *Leadership* and *Helpful/Friendly* scales were 3.98 and 3.85 respectively. As seen in Table 4.3, these scores correspond to "usually". On the other hand, *Student responsibility /freedom* scale got a relatively lower level than other cooperative behaviours, which shows us preparatory class English instructors at Karabük University have a tendency not to allow their students much freedom or responsibility in their lessons and show this behaviour "sometimes". While the *Strict* scale has the score of 2.33, which means that instructors show strict behaviours "rarely"; the lowest level belongs to *Uncertain* scale. That means English instructors at Karabük University rarely display uncertain behaviours in their classroom. *Dissatisfied* and *Admonishing* scales got mean scores almost 2, which means that instructors display these behaviours "rarely".

Table 4.3. Equivalents of scores for the scales

Range for means	Degree
1 - 1.4	Never
1.5 - 2.4	Rarely
2.5 - 3.4	Sometimes
3.5 - 4.4	Usually
4.5 - 5	Always

By looking at the mean results, it can be concluded that English instructors at Karabük University School of Foreign Languages run their classes with fairly strong *leadership*, accompanied by a fairly strong *understanding* and *helpful/friendly* behaviour, and with quite *strict* behaviour, but that they almost never display *uncertain*, *dissatisfied* and *admonishing* behaviours. Detailed information can be seen in Table 4.4.

Table 4.4. Descriptive Statistics for the QTI scales

QTI Scales	N of items	Min.	Max.	Average item means	SD
DC Leadership	6	1.17	5.00	3.98	.74
CD Helpful/friendly	6	1.00	5.00	3.85	.88
CS Understanding	6	1.33	5.00	4.08	.73
SC Student responsibility /freedom	5	1.00	5.00	3.43	.81
SO Uncertain	7	1.00	4.00	1.61	.55
OS Dissatisfied	7	1.00	4.71	2.08	.69
OD Admonishing	6	1.00	5.00	1.96	.81
DO Strict	7	1.00	5.00	2.33	.68

4.2. Inferential Statistics

This section deals with the results of the Paired sample T-test analysis, independent samples T-test analysis, simple correlation analysis, and one-way analysis of variance (ANOVA) with Post Hoc multiple comparisons in order to find out answers to the research questions.

The first research question aimed to find whether there were any differences between the students' perceptions of their English instructors' interpersonal behaviour and the teachers' own perceptions of their interpersonal behaviour. To find out this, the

perceptions of the students and the instructors were analyzed through paired samples T-test.

In order to investigate the differences between boys' and girls' perceptions of the teacher interpersonal behaviour and to investigate the differences between the students' taught by male instructors and those taught by female instructors, the independent samples T-test was used.

A simple correlation analysis was conducted to examine whether associations exist between the students' perceptions of the interpersonal teacher behaviour with the instructors' year of teaching experience. Furthermore, One-way Analysis of Variance (ANOVA) was carried with Post Hoc multiple comparisons to find out if there was any significant difference.

Differences in the student perceptions of the interpersonal teacher behaviour according to alma mater were also computed by means of One-way ANOVA with Post Hoc multiple comparisons.

4.2.1. Analysis of the Research Question 1

The first research question framed in this study was **"Are students' perceptions of their English instructors' interpersonal behaviour different from the instructors' own perceptions of their interpersonal behaviour?"** To find answers to this question **paired samples T-test statistics** were used and mean scores for both students' perceptions of their English instructors' interpersonal behaviour and instructors' perceptions of their own interpersonal behaviour were compared. Table 4.5 presents the results of t-test and figure 4.1 illustrates a comparison of the mean scores for students' perceptions and instructors' perceptions.

Table 4.5. Mean scores for students' perceptions and instructor perceptions

QTI scales	Instructor mean scores	Students mean scores	Mean difference	t	Sig. (2-tailed)
DC Leadership	4,18	3,96	0,23	2,9	,008
CD Helpful/friendly	4,18	3,85	0,34	3,5	,002
CS Understanding	4,39	4,09	0,31	4,0	,000
SC Student responsibility /freedom	3,33	3,44	-0,11	-1,0	,329
SO Uncertain	1,39	1,61	-0,22	-3,7	,001
OS Dissatisfied	2,16	2,07	0,09	,9	,362
OD Admonishing	2,02	1,95	0,07	,6	,564
DO Strict	2,50	2,31	0,19	2,6	,015
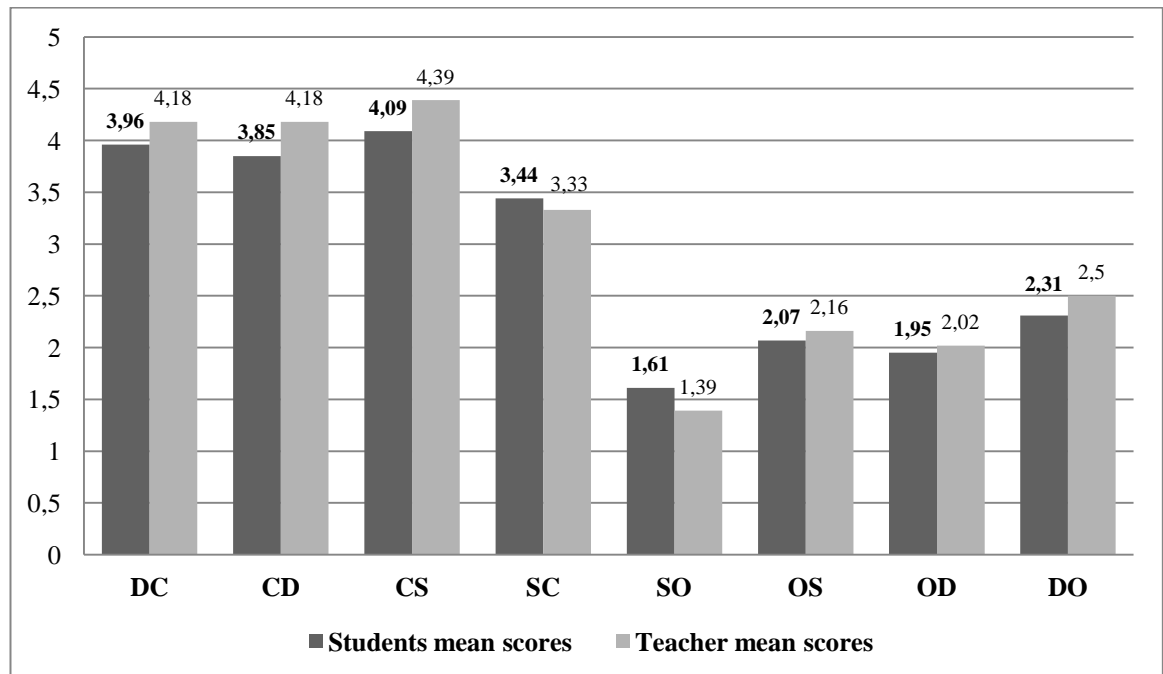
Figure 4.1 Comparisons of students' mean scores and instructors' mean scores.

The results indicate that there is a significant difference between students' perceptions of their English instructors' interpersonal behaviour and instructors' perceptions of their own interpersonal behaviour in three out of eight scales of QTI. The significant difference occurs in the *helpful/friendly*, *understanding*, and *uncertain* scales. As seen in Table 4.5 and in Figure 4.1, instructors perceive their own interpersonal behaviour more favourably than students do in terms of these three scales.

Because for the cooperative scales *helpful/friendly* and *understanding,* and for the oppositional scale *uncertain* mean differences are in favour of instructors, we can

conclude that instructors think that they display cooperative behaviours rather than oppositional behaviours in the classroom.

4.2.2. Analysis of the Research Question 2

The second research question framed in this study was **"Are students' perceptions of their English instructors' interpersonal behaviour different in terms of instructor gender?"** In order to investigate the differences between the preparatory class students taught by male instructors and those taught by female instructors with respect to students' perceptions of their English instructors' interpersonal behaviour, **independent samples T-test** was performed.

Concerning the interpretation of the T-test outcomes, first of all, in all T-test models, Levene Test for Equality of variances was conducted. When the *p*-value, i.e., significance was found to be higher than. 05 in the Levene Test, T-test results were given according to *equal variances assumed*, and when *p* is lower than .05, the T-test results were given according to *equal variances not assumed*.

In the T-test tables below, *t* signifies both the magnitude and the direction of the mean difference between the two samples. If the *t* value is positive, it means there is a mean difference to the favour of the first group, and if *t* is negative, it means there is a mean difference to the favour of the second group.

The *t* value is written in the same line with the level of the variable to whose side there is a higher mean score. Whether the difference is significant or not can be understood by the *p*-value in T-test tables. A *p*-value lower than .05 refers to a meaningful difference between the two groups.

When we look at the T-test results, we can see that in terms of instructor gender, students' perceptions of all the QTI scales, except for the *uncertain* scale, are statistically significant (p<.05). While cooperative scales (*leadership, helpful/friendly, understanding, and student responsibility /freedom*) are higher for male instructors than females, oppositional scales (dissatisfied, admonishing, strict) are higher for female instructors than males.

Table 4.6. T-Test for students' perceptions of QTI scales according to instructor gender

QTI scales	Instructor gender	N	Mean	SD	p	t
DC	Female	559	3,87	,78		
Leadership	**Male**	**432**	**4,13**	**,67**	**,004**	**-5,602**
CD	Female	559	3,64	,95		
Helpful/friendly	**Male**	**432**	**4,11**	**,69**	**,000**	**-9,096**
CS	Female	559	3,93	,78		
Understanding	**Male**	**432**	**4,27**	**,61**	**,000**	**-7,532**
SC	Female	559	3,29	,88		
Student responsibility /freedom	**Male**	**432**	**3,62**	**,68**	**,000**	**-6,625**
SO	Female	559	1,66	,58	,007	3,375
Uncertain	Male	432	1,54	,50		
OS	**Female**	**559**	**2,23**	**,76**	**,000**	**8,687**
Dissatisfied	Male	432	1,88	,51		
OD	**Female**	**559**	**2,19**	**,89**	**,000**	**11,336**
Admonishing	Male	432	1,66	,56		
DO	**Female**	**559**	**2,43**	**,76**	**,000**	**5,850**
Strict	Male	432	2,19	,52		

4.2.3. Analysis of the Research Question 3

The third research question addressed in this survey was **"Is there a significant relationship between preparatory class students' perceptions of teacher interpersonal behaviour and instructor professional experience?"** In order to find an answer to this question, first **simple correlation** analysis was computed between each of the eight QTI scales and instructors' years of professional experience. Distribution of instructors according to years of teaching experience and students in their classrooms is given in Table 4.7.

Table 4.7. Descriptive statistics of English instructors according to years of experience

Years of Experience	N of instructors	% of instructors	N of students in instructor group	% of students
1 - 2	4	13.4	93	9.4
3 - 4	19	63.4	675	68.1
5 and more	7	23.2	223	22.5

Correlation analysis indicated negative relationships at significant levels between instructor experience and *helpful/friendly* (p < .05) and *uncertain* (p < .01) scales. This means students' perceptions of helpful/friendly and uncertain teacher behaviours decrease while instructor experience increases. Instructor experience has a positive role in students' perceptions of uncertain behaviour, but has a negative role in students' perceptions of helpful/friendly behaviour (see Table 4.8).

Table 4.8. Correlation coefficients for students' perceptions of QTI scales and instructors' professional experience

QTI scales	Correlation with instructor experience
DC Leadership	.04
CD Helpful/friendly	- .06*
CS Understanding	.04
SC Student responsibility /freedom	- .06
SO Uncertain	- .10**
OS Dissatisfied	- .04
OD Admonishing	- .01
DO Strict	.02

*Significant at .05 level (2-tailed)

** Significant at .01 level (2-tailed)

In order to answer to the third research question, also **one-way ANOVA** was conducted. The reason why ANOVA was used is that there are three levels for the variable to be tested. When we have found a statistically significant variance between the groups by means of ANOVA tests, i.e. when the *F* value has been found to be significant at.05 level, we referred to **Post Hoc tests** for multiple comparisons between the three groups to identify which of the three groups is significantly different from each other.

Post Hoc multiple comparisons were computed with **LSD** for *equal variances assumed* and **Tamhane** for *equal variances not assumed*. Tests of Homogeneity of variances were computed for all ANOVA models, and when the variances were found to be homogeneous with p >.05, the results were given according to LSD, and when the variances were not found to be homogeneous with a p< .05, the results were given according to Tamhane. ANOVA tables drawn for each QTI scale for comparison of students' perceptions between the three groups of instructor experience can be seen below (Table 4.9 and Table 4.10).

ANOVA test results and subsequent multiple comparisons by means of Post Hoc tests revealed that all eight scales had significant mean differences between the instructors' professional experience levels (p= .00).

Table 4.9 ANOVA results for students' perceptions of QTI scales according to the professional experience of the instructors

QTI scales		N	Mean	SD	F	p
DC	1-2 years	93	4,21	0,60		
Leadership	3-4 years	675	3,87	0,78	23,229	,000
	5 above	223	4,21	0,60		
CD	1-2 years	93	4,30	0,65		
Helpful/friendly	3-4 years	675	3,71	0,93	27,571	,000
	5 above	223	4,06	0,69		
CS	1-2 years	93	4,35	0,58		
Understanding	3-4 years	675	3,96	0,78	28,330	,000
	5 above	223	4,32	0,52		
SC	1-2 years	93	3,87	0,61		
Student res./freedom	3-4 years	675	3,31	0,85	28,367	,000
	5 above	223	3,62	0,68		
SO	1-2 years	93	1,59	0,50		
Uncertain	3-4 years	675	1,66	0,57	11,058	,000
	5 above	223	1,47	0,48		
OS	1-2 years	93	1,97	0,58		
Dissatisfied	3-4 years	675	2,17	0,74	18,416	,000
	5 above	223	1,86	0,49		
OD	1-2 years	93	1,66	0,67		
Admonishing	3-4 years	675	2,09	0,86	30,017	,000
	5 above	223	1,68	0,54		
DO	1-2 years	93	2,10	0,65		
Strict	3-4 years	675	2,39	0,71	10,769	,000
	5 above	223	2,23	0,54		
	Total	**991**				

Looking at the ANOVA tests results, it can be argued that instructors show equal amounts of *leadership* behaviours in the first years of the profession and after 5 years of experience. As well as, in the first years of the profession instructors show more *helpful/friendly, understanding, and student responsibility/freedom* behaviours than more experienced instructors. However, instructors show more oppositional (*uncertain, dissatisfied, admonishing,* and *strict*) behaviours in their 3-4 years experience than their first years of the profession and after 5 years of experience.

Consistent with the results of ANOVA tests, comparisons among 1-2 years, 3-4 years, and, 5 and more years experienced instructors revealed that mean differences were significant for all scales of QTI (Table 4.10).

Table 4.10 Comparisons of Means of students' perceptions of teacher interpersonal behaviour according to experience level of instructors on eight scale of the QTI (based on Post Hoc ANOVA results)

QTI scales	Experience (I)	Experience (J)	Mean Difference (I-J)	p
DC Leadership	1-2 years	3-4 years	,34	,000
		5 above	,00	1,000
	3-4 years	**1-2 years**	**-,34***	**,000**
		5 above	**-,34***	**,000**
	5 above	1-2 years	,00	1,000
		3-4 years	,34	,000
CD Helpful/Friendly	**1-2 years**	**3-4 years**	**,58***	**,000**
		5 above	**,24***	**,012**
	3-4 years	1-2 years	-,58	,000
		5 above	-,34	,000
	5 above	1-2 years	-,24	,012
		3-4 years	**,34***	**,000**
CS Understanding	1-2 years	3-4 years	,38	,000
		5 above	,03	,973
	3-4 years	**1-2 years**	**-,38***	**,000**
		5 above	**-,36***	**,000**
	5 above	1-2 years	-,03	,973
		3-4 years	,36	,000
SC Student responsibility/ freedom	**1-2 years**	**3-4 years**	**,56***	**,000**
		5 above	**,24***	**,006**
	3-4 years	1-2 years	-,56	,000
		5 above	**-,31***	**,000**
	5 above	1-2 years	-,24	,006
		3-4 years	,31	,000
SO Uncertain	1-2 years	3-4 years	-,08	,434
		5 above	,12	,143
	3-4 years	1-2 years	,08	,434
		5 above	**,20***	**,000**
	5 above	1-2 years	-,12	,143
		3-4 years	-,20	,000
OS Dissatisfied	1-2 years	3-4 years	-,20	,012
		5 above	,11	,301
	3-4 years	**1-2 years**	**,20***	**,012**
		5 above	**,31***	**,000**
	5 above	1-2 years	-,11	,301
		3-4 years	-,31	,000
OD Admonishing	1-2 years	3-4 years	-,43	,000
		5 above	-,02	,991
	3-4 years	**1-2 years**	**,43***	**,000**
		5 above	**,41***	**,000**
	5 above	1-2 years	,02	,991
		3-4 years	-,41	,000

Table 4.10. (continued)

DO	1-2 years	3-4 years	-,29	,000
Strict		5 above	-,13	,251
	3-4 years	**1-2 years**	**,29***	**,000**
		5 above	**,16***	**,001**
	5 above	1-2 years	,13	,251
		3-4 years	-,16	,001

*. The mean difference is significant at the 0.05 level.

The Post Hoc tests indicated that the mean differences of students' perceptions of *leadership, understanding, dissatisfied, admonishing,* and *strict* behaviours are statistically significant between 1-2 years and 3-4 years, 3-4 years and 5 years and above experienced instructors, as it is clear from Table 4.10. Although students' perceptions for these five scales had significant difference, the mean differences between 1-2 years and 5 years and above experienced instructors were not significant. For *helpful/friendly* and *student responsibility/freedom* scales, the mean differences between all the levels of instructor experience were significant. When we look at the *uncertain* scale, the mean difference was seen significant only between 3-4 years and 5 years and above experienced instructors.

The results indicated that instructors' experience level is a significant factor in students' perceptions of their English instructors' interpersonal behaviour.

4.2.4. Analysis of the Research Question 4

The fourth research question addressed in this study was **"Are students' perceptions of their English instructors' interpersonal behaviour different in terms of student gender?"** In order to investigate differences between boys' and girls' perceptions of their English instructors' interpersonal behaviour, **independent samples T-test** was performed.

Just like the analyzing the difference between female and male instructors, first, in all T-test models, Levene Test for Equality of variances was conducted. When the *p*-value, i.e., significance was found to be higher than. 05 in the Levene Test, T-test results were given according to *equal variances assumed*, and when *p* is lower than .05, the T-test results were given according to *equal variances not assumed*.

In the T-test tables below, *t* signifies both the magnitude and the direction of the mean difference between the two samples. If the *t* value is positive, it means there is a mean difference to the favour of the first group (female students), and if *t* is negative, it means there is a mean difference to the favour of the second group (male students).

The *t* value is written in the same line with the level of the variable to whose side there is a higher mean score. Whether the difference is significant or not can be understood by the *p*-value in T-test tables. A *p*-value lower than .05 refers to a meaningful difference between the two groups.

Although previous research with QTI revealed very similar results, with female students always viewing their teachers as displaying higher degrees of strictness and leadership, and more helpful/friendly and understanding than male students (Telli, 2006), in this study, in terms of student gender, students' perceptions of their English instructors' interpersonal behaviour showed non-significant differences for all eight scales of the QTI (p > .05).

Even though female students perceived their instructors more cooperative than male students, and male students perceived their instructors more oppositional than female students, the mean differences are not significant.

Table 4.11 T-Test for students' perceptions of QTI scales according to student gender

QTI scales	Student gender	N	Mean	SD	p	t
DC	**Female**	**224**	**4,09**	**,76**	,999	2,510
Leadership	Male	767	3,95	,74		
CD	**Female**	**224**	**4,01**	**,84**	,147	3,125
Helpful/friendly	Male	767	3,80	,88		
CS	**Female**	**224**	**4,21**	**,68**	,082	3,115
Understanding	Male	767	4,04	,74		
SC	**Female**	**224**	**3,53**	**,79**	,511	2,131
Student res./freedom	Male	767	3,40	,82		
SO	Female	224	1,51	,54		
Uncertain	**Male**	**767**	**1,64**	**,55**	,400	-3,177
OS	Female	224	1,97	,68		
Dissatisfied	**Male**	**767**	**2,11**	**,69**	,336	-2,682
OD	Female	224	1,86	,77		
Admonishing	**Male**	**767**	**1,99**	**,81**	,124	-2,113
DO	Female	224	2,31	,63		
Strict	**Male**	**767**	**2,33**	**,69**	,182	-,394

4.2.5. Analysis of the Research Question 5

The fifth research question addressed in this study was **"Are students' perceptions of their English instructors' interpersonal behaviour different in terms of students' alma mater?"** In order to answer this question, **one-way ANOVA** analysis was conducted. The reason why ANOVA was used is that there are five categories (Anatolian High schools, Anatolian Teacher Training High School, State high school, Technical and Vocational High School, and other high schools) for the variable to be tested.

For each scale of QTI, *p*-value was calculated. Therefore, when variance between the groups by means of **ANOVA** tests found statistically significant, i.e. when the F value found to be significant at .05 level (p<.05), **Post Hoc tests** for multiple comparisons were to be made between the five groups to identify which of the five categories (Anatolian High schools, Anatolian Teacher Training High School, State High School, Technical and Vocational High School, and other high schools) is significantly different from each other. However, when one-way ANOVA was performed mean differences between the students' alma mater categories were <u>not</u> found significant. Therefore, Post Hoc tests for multiple comparisons were not conducted. ANOVA tables drawn for each QTI scale for comparison of students' perceptions between the five groups of students' alma mater can be seen in Table 4.12.

Table 4.12 ANOVA results for students' perceptions of QTI scales according to the type of high school students' alma mater

QTI scales	High school	N	Mean	SD	F	p
DC	And	396	3,94	0,78		
Leadership	ATT	39	4,2	0,56		
	State	370	3,96	0,73	1,81	0,125
	Tech	158	4,03	0,71		
	Other	28	4,17	0,66		
CD	And	396	3,8	0,93		
Helpful/friendly	ATT	39	4,03	0,72		
	State	370	3,85	0,85	0,997	0,408
	Tech	158	3,88	0,88		
	Other	28	4,01	0,59		

Table 4.12 (continued)

CS	And	396	4,05	0,78		
Understanding	ATT	39	4,32	0,58		
	State	370	4,07	0,7	2,211	0,066
	Tech	158	4,08	0,74		
	Other	28	4,35	0,42		
SC	And	396	3,45	0,85		
Student	ATT	39	3,7	0,74		
responsibility/	State	370	3,41	0,8	1,932	0,103
freedom	Tech	158	3,36	0,8		
	Other	28	3,63	0,5		
SO	And	396	1,64	0,57		
Uncertain	ATT	39	1,56	0,45		
	State	370	1,6	0,53	0,771	0,544
	Tech	158	1,6	0,56		
	Other	28	1,48	0,51		
OS	And	396	2,1	0,72		
Dissatisfied	ATT	39	1,89	0,53		
	State	370	2,09	0,68	1,337	0,254
	Tech	158	2,07	0,69		
	Other	28	1,91	0,54		
OD	And	396	1,97	0,81		
Admonishing	ATT	39	1,92	0,8		
	State	370	1,97	0,8	1,332	0,256
	Tech	158	1,96	0,84		
	Other	28	1,62	0,56		
DO	And	396	2,35	0,69		
Strict	ATT	39	2,18	0,7		
	State	370	2,32	0,65	0,862	0,486
	Tech	158	2,35	0,73		
	Other	28	2,21	0,45		
	Total	**991**				

As it is clear from ANOVA results (Table 4.12), there are mean differences between the categories of students' alma mater, but none of the mean differences is statistically significant.

4.2.6. Analysis of the Research Question 6

The sixth research question addressed in this study was "**What are the instructors' interpersonal profiles?**" To find an answer to this question, visual diagrams (sector profiles) were drawn for each of the instructor in terms of student perceptions and instructors' own perceptions and categorized into teacher types based on the eight

interpersonal profile types (Brekelmans, Levy, & Rodriguez, 1993). The visual diagrams showed that while 18 of English instructors at Karabük University were perceived as *Tolerant-Authoritative*, 6 of them were perceived as *Tolerant*, 3 of them were perceived as *Directive*, 1 was perceived as *Authoritative*, 1 was perceived as *Repressive*, and 1 was perceived as *Drudging*. On the other hand, according to the scores of the instructors' own perceptions, 21 instructors see themselves as *Tolerant-Authoritative*, 6 as *Tolerant*, 2 as *Authoritative*, and 1 as *Drudging*. In the same way, as the results for the first research question, these results also support the difference between perceptions' of instructors' own interpersonal behaviour and students' perceptions. Although students perceive three of the instructors as *Directive*, none of the instructors see themselves as *Directive*, instead, different from students' perceptions, three more instructors see themselves as *Tolerant-Authoritative*. The results also indicated that while students think one of their instructors is *Repressive*, none of the instructors see themselves as *Repressive*. While two instructors think themselves as *Authoritative* type of teacher, students think only one of the instructors is *Authoritative*. The summerized information can be seen in Table 4.13 and 4.14 and the detailed sector profiles can be seen in appendix 3 and 4, respectively based on the students' perceptions and instructors' own perceptions of teacher interpersonal behaviour.

Table 4.13. Summary of sector profiles according to <u>students'</u> perceptions of teacher interpersonal behaviour

Tolerant-Authoritative	Tolerant	Directive	Authoritative	Repressive	Drudging
18	6	3	1	1	1

Table 4.14. Summary of sector profiles according to <u>instructors' own</u> perceptions of teacher interpersonal behaviour

Tolerant-Authoritative	Tolerant	Directive	Authoritative	Repressive	Drudging
21	6	-	2	-	1

CHAPTER 5
CONCLUSION

This chapter presents an overview of this research followed by pedagogical implications on the basis of the student perceptions of teacher interpersonal behaviour and its effects. Finally, some suggestions for further research are offered.

5.1. Overview of the Study

The main aim of this study was to describe and analyze the existing teacher student interactions in preparatory classes at Karabük University. The research explored relationships between a range of variables and factors that may affect the interaction between the instructors and students.

As the purpose of this study was to describe teacher-student interactions, it investigated the EFL students' perceptions of their English teachers' interpersonal behaviours in preparatory classes at Karabük University. It also investigated EFL instructors' perceptions of their own interpersonal behaviours as well as the relationships between teachers' interpersonal behaviours and students' gender, instructor gender, students' alma mater, and instructors' years of professional experience. The Questionnaire on Teacher Interaction (QTI) scale was used in order to collect data on teacher interpersonal behaviour.

In order to investigate the specified purposes of the study, preparatory class students who were studying English as a foreign language and registered to the English-medium-instructed engineering departments at Karabük University were chosen as the target population of the study. In order to measure students' perceptions of instructors interpersonal behaviours, the adapted Turkish version of the Questionnaire on Teacher Interaction (QTI) was conducted with 991 preparatory class students in 30 classes and their 17 female and 13 male instructors during the second semester of the 2013-2014 academic year. The adapted version of QTI which was used in this study contained 50 items consisting of 8 scales, each of which describes an aspect of teacher interpersonal behaviour. QTI was responded on a five point scale, ranging between never to always.

After the data gathered, the first step was to test the reliability of the measuring instrument. The reliability analysis has ensured the reliability of QTI within Karabük University School of Foreign Languages context. After this step, a statistical analysis was held in order to test the hypotheses. The statistical analyses were conducted with scale mean scores of the questionnaires. The paired samples T-test analysis was used to compare students' and instructors' perceptions and it showed statistically significant differences in three scales of QTI. The independent samples T-test analyses were used to investigate the differences of the students' perceptions in terms of both instructor and student gender. Analyses showed statistically significant differences in terms of instructor gender, but non-significant differences in students' gender for all eight scales of QTI. Correlation analysis between instructors' professional experience and scale mean scores of QTI showed significant negative relationships in two out of eight scales. Along with the correlation results, the ANOVA analysis indicated significant differences between categories of instructor experience for all eight scales. However, the ANOVA analysis showed non-significant results in terms of students' alma mater. And, the analysis of the teacher profiles indicated that while eighteen of the English instructors were *tolerant-authoritative*, three of them were *directive*, six were *tolerant*, and the other three of the instructors were, respectively, *authoritative*, *repressive*, and *drudging*.

5.2. Pedagogical Implications of the Study

The students' perceptions are a reliable point of view in the evaluation of teacher interpersonal behaviour as the interpersonal behaviour of teachers remains the same after a few classes and the students' perceptions are formed by students' observation of their teachers for long periods of time. Therefore, researchers and instructors could measure the student perceptions of teacher interpersonal behaviour and could benefit from the results in their pedagogical applications, and also it could provide valuable feedback for teachers' self-improvement.

As the Questionnaire on Teacher Interaction (QTI) is an instrument validated and known at international level, it could be very useful for both teachers and administrators to be aware of the teachers' interpersonal efficiency. They can also use the results from

the student version of QTI and the teacher version of the QTI to compare the differences between what students perceive about and what teachers perceive their interpersonal behaviour.

The evaluative data on interpersonal efficiency are collected from students in many schools in Europe and the USA, but few schools and private universities in Turkey. Some instructors at Karabük University are also observed to give informal assessment forms to their students at the end of the academic year for self-evaluation of their interaction in class. In order to provide continuous feedback, getting student perceptions of teacher interpersonal behaviour could be an integrative part of the school procedures.

In order to establish a warm classroom climate and positive student attitudes towards language learning in turn, English instructors could adopt strategies and ways to display more leadership, more helpful/friendly and understanding behaviour, and more student freedom in their classrooms.

Teachers can also use the QTI as an evaluation tool for their own classroom environment over a period of time. In this way, they can know about the differences in the class perceptions and examine their self- improvement.

This study may also be useful for school leaders and policy makers, as students' perceptions of teacher interpersonal behaviour are related to their affective and cognitive outcomes. Scientifically, this study makes a contribution to the importance of interpersonal teacher behaviour in relation to student motivation, proving findings from previous studies. If teachers wish to improve students' affective and cognitive outcomes, they should provide lessons that include more student responsibility and freedom, understanding, helpful/friendly and leadership behaviours and less uncertain, dissatisfied, admonishing and strict behaviours.

The present study also indicated the differences between the perceptions of students taught by female and male instructors. Female instructors should be careful to show less dissatisfied, admonishing and strict behaviours.

The results of this study may also help to improve teacher professional development. Both inexperienced and experienced instructors can make use of this study and the QTI as a personal feedback instrument to enhance the quality of teacher - student interaction. Instructors can perceive the best fitting profile for themselves, so that they can reflect on

their good and bad sides, providing them with a way to learn to improve their teaching skills.

5.3. Suggestions for Further Research

As it had several limitations, the findings of this study should be approached attentively. This research was conducted only at Karabük University School of Foreign Languages and only the Faculty of Engineering preparatory class students were the sample of the study. Thus, the acquired results cannot be generalized to other types of schools or other parts of Turkey. Further studies on teacher interpersonal behaviour might be conducted in different settings or to students from different departments of other universities in Turkey in order to obtain broader results.

There are many variables affecting the student-teacher interaction. In the present study, limited variables are examined. Although some student variables such as gender and alma mater (i.e. previous school graduated) were investigated, others like students' attitudes and interest towards language, students' achievement, age, socio-cultural backgrounds and departments were not taken into account. Hence, further researches can deal with the effects of these variables.

As well as student variables, for instructors only gender and professional experience were taken into account. However, the teaching experience years of the sampled instructors in this study were not very varied, consisting mostly less than five years experienced instructors. To have much better comprehension on the role of instructor experience, further researches can be conducted to the instructors having more varied years of experience. Besides, other instructor variables such as instructor major, socio-cultural background, weekly workload or job satisfaction can be examined in later studies.

Further studies might also investigate the effects of variables involved in this study after corrections for certain factors. All instructor, student, and class variables can be taken into account all together and the effects of these variables can be examined through multivariate of regression analyses, which were not performed in this research.

Qualitative research can be conducted in order to examine the teacher behaviours in more detail. Further studies can take the advantage of interviews with instructors and students, as well as classroom observation, or video recordings.

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APPENDIX 1

QUESTIONNAIRE ON TEACHER INTERACTION (QTI) –

STUDENT QUESTIONNAIRE *

		Never				Always
Str	**1.** He is strict.	0	1	2	3	4
Str	**2.** We have to be silent in his class.	0	1	2	3	4
Lea	**3.** He talks enthusiastically about his subject.	0	1	2	3	4
Und	**4.** He trusts us.	0	1	2	3	4
HFr	**5.** He is concerned when we have not understood him.	0	1	2	3	4
Und	**6.** If we don't agree with him, we can talk about it.	0	1	2	3	4
Str	**7.** He threatens to punish us.	0	1	2	3	4
SRe	**8.** We can decide some things in his class.	0	1	2	3	4
Dis	**9.** He is demanding.	0	1	2	3	4
Dis	**10.** He thinks we cheat.	0	1	2	3	4
Und	**11.** He is willing to explain things again.	0	1	2	3	4
Dis	**12.** He thinks we don't know anything.	0	1	2	3	4
Und	**13.** If we want something, he is willing to coorporate.	0	1	2	3	4
Str	**14.** His tests are hard.	0	1	2	3	4
HFr	**15.** He helps us with our work.	0	1	2	3	4
Adm	**16.** He gets angry unexpectedly.	0	1	2	3	4
Und	**17.** If we want something to say he will listen.	0	1	2	3	4
Und	**18.** He sympathizes with us.	0	1	2	3	4
Str	**19.** He tries to make us look foolish.	0	1	2	3	4
Dis	**20.** His standards are very high.	0	1	2	3	4
SRe	**21.** We can influence him.	0	1	2	3	4

Str	**22.** We need his permission before we speak.	0	1	2	3	4
Unc	**23.** He seems uncertain.	0	1	2	3	4
Adm	**24.** He looks down on us.	0	1	2	3	4
SRe	**25.** We have the opportunity to choose assignments which are most interesting to us.	0	1	2	3	4
Dis	**26.** He is unhappy.	0	1	2	3	4
SRe	**27.** He lets us fool around in class.	0	1	2	3	4
Dis	**28.** He puts us down.	0	1	2	3	4
HFr	**29.** He takes a personal interest in us.	0	1	2	3	4
Dis	**30.** He thinks we can't do things well.	0	1	2	3	4
Lea	**31.** He explains things clearly.	0	1	2	3	4
Und	**32.** He realizes when we don't understand.	0	1	2	3	4
SRe	**33.** He lets us get away with a lot in class.	0	1	2	3	4
Unc	**34.** He is hesitant.	0	1	2	3	4
HFr	**35.** He is friendly.	0	1	2	3	4
Lea	**36.** We learn a lot from him.	0	1	2	3	4
HFr	**37.** He is someone we can depend on.	0	1	2	3	4
Adm	**38.** He gets angry quickly.	0	1	2	3	4
Unc	**39.** He acts as if he does not know what to do.	0	1	2	3	4
Lea	**40.** He holds our attention.	0	1	2	3	4
Adm	**41.** He's too quick to correct us when we break a rule.	0	1	2	3	4
Unc	**42.** He lets us to boss him around.	0	1	2	3	4
Adm	**43.** He is impatient.	0	1	2	3	4
Unc	**44.** He is not sure what to do when we fool around.	0	1	2	3	4
Lea	**45.** He knows everything that goes on in the classroom.	0	1	2	3	4
Unc	**46.** It's easy to make a fool out of him.	0	1	2	3	4

HFr	**47.** He has a sense of humour.	0	1	2	3	4
SRe	**48.** He allows us a lot choice in what we study.	0	1	2	3	4
SRe	**49.** He gives us a lot of free time in class.	0	1	2	3	4
HFr	**50.** He can take a joke.	0	1	2	3	4
Adm	**51.** He has a bad temper.	0	1	2	3	4
Lea	**52.** He is a good leader.	0	1	2	3	4
Str	**53.** If we don't finish our homework we're scared to go to his class.	0	1	2	3	4
Dis	**54.** He seems dissatisfied.	0	1	2	3	4
Unc	**55.** He is timid.	0	1	2	3	4
Und	**56.** He is patient.	0	1	2	3	4
Str	**57.** He is severe when marking papers.	0	1	2	3	4
Dis	**58.** He is suspicious.	0	1	2	3	4
Adm	**59.** It is easy to pick up a fight with him.	0	1	2	3	4
HFr	**60.** His class is pleasant.	0	1	2	3	4
Str	**61.** We are afraid of him.	0	1	2	3	4
Lea	**62.** He acts confidently.	0	1	2	3	4
Adm	**63.** He is sarcastic.	0	1	2	3	4
SRe	**64.** He is lenient.	0	1	2	3	4

* This is the USA version of the QTI developed by Wubbels and Levy (1993). For this research, its Turkish translation was used in the pilot study.

Lea	Leadership
HFr	Helpful / Friendly
Und	Understanding
SRe	Student Responsibility/Freedom
Unc	Uncertain
Dis	Dissatisfied
Adm	Admonishing
Str	Strict

APPENDIX 2

QUESTIONNAIRE ON TEACHER INTERACTION (QTI) –
TURKISH VERSION *

ÖĞRETMEN ETKİLEŞİM ÖLÇEĞİ - ÖĞRENCİ FORMU

Bu ölçekte ders öğretmeninizin sınıftaki davranışlarını tanımlamanız isteniyor. Cevaplarınız yalnızca araştırmacı tarafından incelenecek, asla notlarınızı etkilemeyecektir.

Ölçekte **50 soru** bulunmaktadır. Cevaplarınızı lütfen her soru için ayrılan bölüme işaretleyiniz. Her ifade için bir kutucuk seçiniz. Her cümle için cevabınıza karşılık gelen sayıyı yuvarlak içine alınız. Lütfen bütün sorulara cevap veriniz.

1. **Şube**   : BE_____
2. **Cinsiyet**   : ❑ K   ❑ E
3. **Bölüm**   :
   - ❑ Bilgisayar Mühendisliği
   - ❑ Biyomedikal Mühendisliği
   - ❑ Elektrik-Elektronik Müh.
   - ❑ Makine Mühendisliği
   - ❑ Metalurji Malzeme Mühendisliği
   - ❑ Otomotiv Mühendisliği
   - ❑ Raylı Sistemler Mühendisliği
   - ❑ Tıp Mühendisliği
4. **Mezun olduğunuz lise**:
   - ❑ Anadolu Lisesi
   - ❑ Anadolu Öğretmen Lisesi
   - ❑ Düz Lise
   - ❑ Teknik Lise/Meslek Lisesi (And.Teknik L./And.Meslek L.)
   - ❑ Diğer: _____

* This is the Turkish version of the Questionnaire on Teacher Interaction (student

form), translated and adapted from 64-item American version by the researcher.

Subscales of QTI	ÖĞRETMENİM …	Hiçbir zaman	Nadiren	Bazen	Çoğunlukla	Her zaman
Str	**1.** Serttir.	1	2	3	4	5
Str	**2. Dersinde sessiz olmak zorundayız.**	1	2	3	4	5
Lea	**3.** Dersini istekle anlatır.	1	2	3	4	5
Und	**4. Bize güvenir.**	1	2	3	4	5
Und	**5.** Aynı fikirde olmadığımızda, bunu onunla konuşabiliriz.	1	2	3	4	5
Str	**6. Bizi cezalandırmakla tehdit eder.**	1	2	3	4	5
SRe	**7.** Dersle ilgili konularda biz de karar verebiliriz.	1	2	3	4	5
Und	**8. Konuları (anlamadığımızda) tekrar anlatmakta isteklidir.**	1	2	3	4	5
Dis	**9.** Hiçbir şey bilmediğimizi düşünür.	1	2	3	4	5
Und	**10.** Bir şey istediğimizde yardımcı olmaya çalışır.	1	2	3	4	5
HFr	**11.** Çalışmalarımıza yardımcı olur.	1	2	3	4	5
Und	**12.** Bir şey söylemek istediğimizde bizi dinler.	1	2	3	4	5
Str	**13.** Bizi akılsız/mantıksız göstermeye çalışır.	1	2	3	4	5
Dis	**14.** Standartları çok yüksektir.	1	2	3	4	5
SRe	**15.** (Düşüncelerimizle) Onu etkileyebiliriz.	1	2	3	4	5
Str	**16.** (Derste) Konuşmadan önce iznini almamız gerekir.	1	2	3	4	5
Unc	**17.** Kararsız görünür.	1	2	3	4	5
Adm	**18.** Bizi küçümser.	1	2	3	4	5
SRe	**19.** (Derste) İlgimizi çeken çalışmaları seçme şansımız vardır.	1	2	3	4	5
Dis	**20.** Mutsuzdur.	1	2	3	4	5
Dis	**21.** Bizi küçük düşürür.	1	2	3	4	5
Dis	**22.** Yaptığımız şeyleri iyi yapamadığımızı düşünür.	1	2	3	4	5
Lea	**23.** Her şeyi açık, anlaşılır bir şekilde açıklar.	1	2	3	4	5
Und	**24.** Dersi kavrayamadığımızı anlar.	1	2	3	4	5
Unc	**25.** (Nasıl davranacağı konusunda) Tereddüt eder.	1	2	3	4	5

HFr	**26.Bize arkadaşça davranır.**	**1**	**2**	**3**	**4**	**5**
Lea	27.Ondan çok şey öğreniriz.	1	2	3	4	5
HFr	**28.Güvenebileceğimiz birisidir.**	**1**	**2**	**3**	**4**	**5**
Adm	29.Çok çabuk sinirlenir.	1	2	3	4	5
Unc	**30.Ne yapacağını bilmiyormuş gibi davranır.**	**1**	**2**	**3**	**4**	**5**
Lea	31.Derste dikkatimizin dağılmamasını sağlar.	1	2	3	4	5
Unc	**32.Ona karşı patronluk taslamamıza izin verir.**	**1**	**2**	**3**	**4**	**5**
Adm	33.Sabırsızdır.	1	2	3	4	5
Unc	**34.(Ders esnasında) Aylaklık ettiğimizde ne yapacağını bilemez.**	**1**	**2**	**3**	**4**	**5**
Lea	35.Sınıfta olup biten her şeyin farkındadır.	1	2	3	4	5
Unc	**36.Onunla alay etmek kolaydır.**	**1**	**2**	**3**	**4**	**5**
HFr	37.İyi bir espri anlayışı vardır.	1	2	3	4	5
SRe	**38.Dersle ilgili / ne çalışacağımız konusunda bize birçok seçenek sunar.**	**1**	**2**	**3**	**4**	**5**
HFr	39.Şaka kaldırır.	1	2	3	4	5
Adm	**40.Asabidir.**	**1**	**2**	**3**	**4**	**5**
Str	41.Verdiği ödevi yapmadıysak, dersine gitmeye korkarız.	1	2	3	4	5
Dis	**42.Memnuniyetsiz, tatmin olmamış görünür.**	**1**	**2**	**3**	**4**	**5**
Unc	43.Çekingendir.	1	2	3	4	5
Dis	**44.Şüphecidir.**	**1**	**2**	**3**	**4**	**5**
Adm	45.Onunla kavga etmek kolaydır.	1	2	3	4	5
HFr	**46.Dersi hoş, zevkli geçer.**	**1**	**2**	**3**	**4**	**5**
Str	47.Ondan korkarız.	1	2	3	4	5
Lea	**48.Kendinden emin davranır.**	**1**	**2**	**3**	**4**	**5**
Adm	49.Alaycıdır.	1	2	3	4	5
SRe	**50.Yumuşak, merhametli bir yapısı vardır.**	**1**	**2**	**3**	**4**	**5**

APPENDIX 3

INTERPERSONAL PROFILES OF TEACHERS
ACCORDING TO STUDENTS' PERCEPTIONS
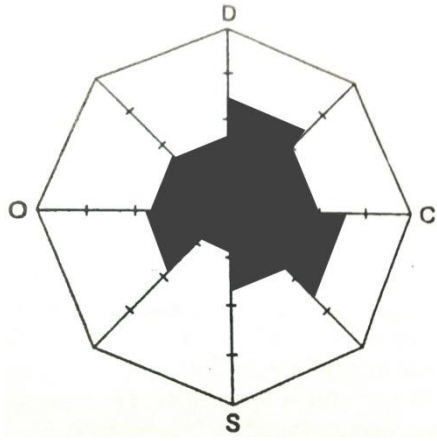
Teacher 1
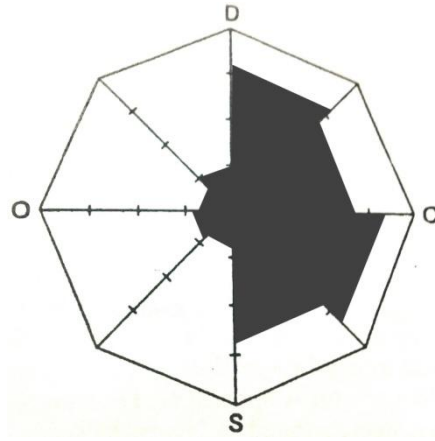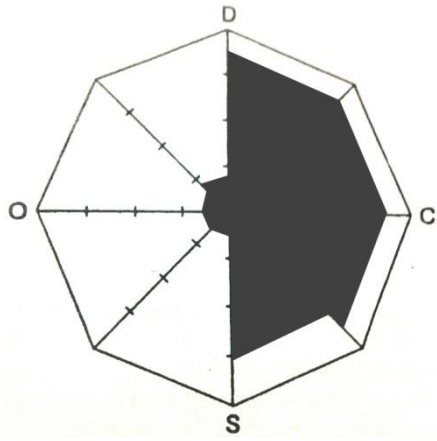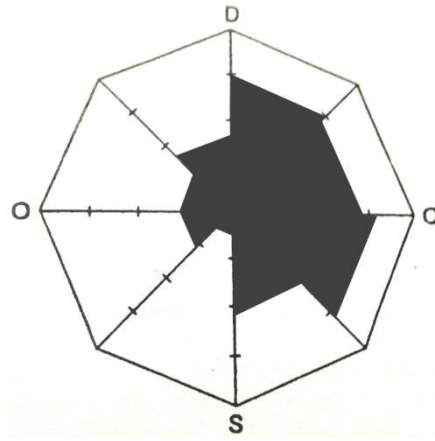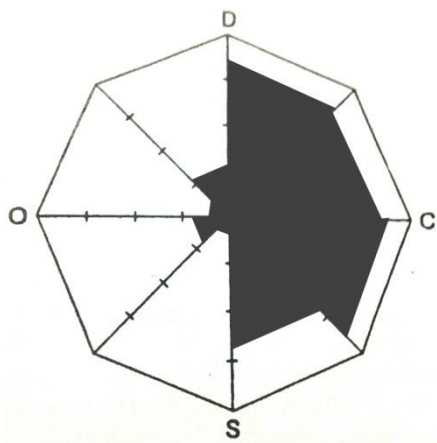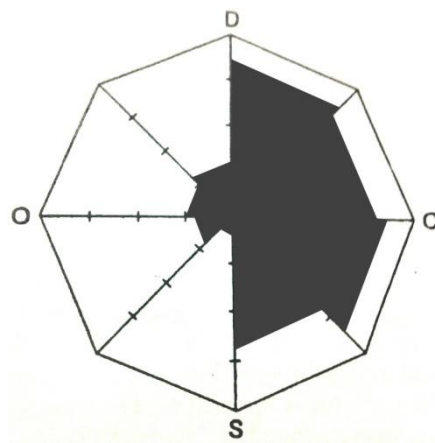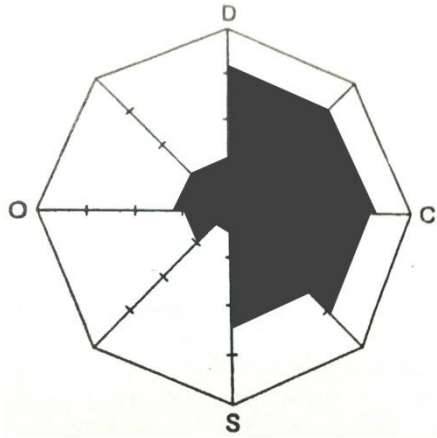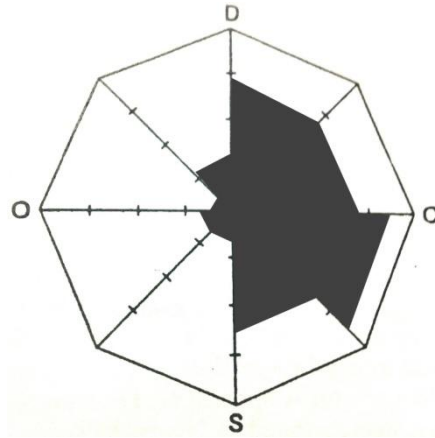
Teacher 2

Teacher 3

Teacher 4

Teacher 5

Teacher 6
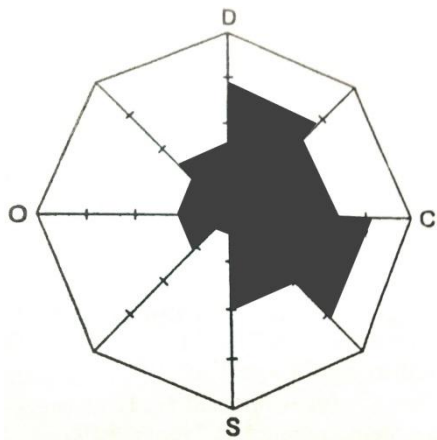
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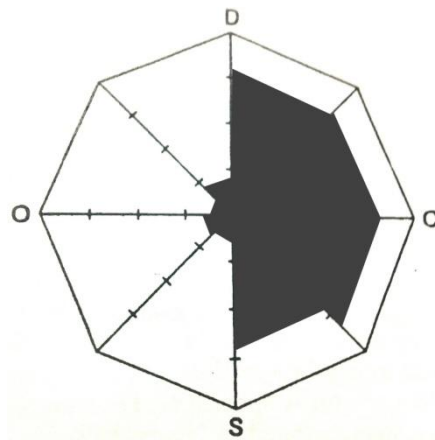
Teacher 8

Teacher 9
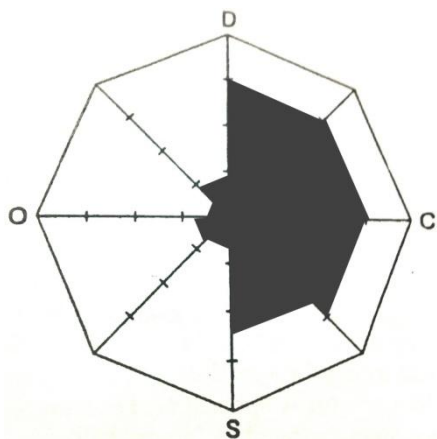
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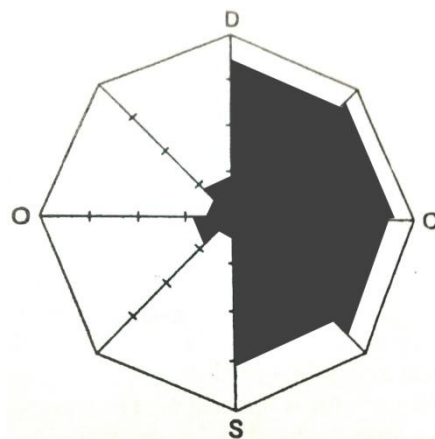
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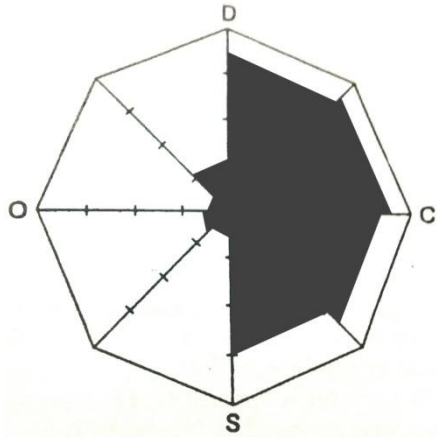
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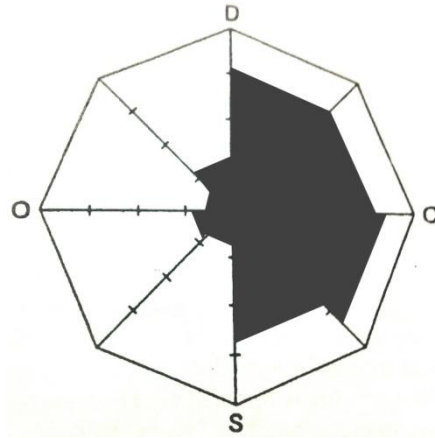
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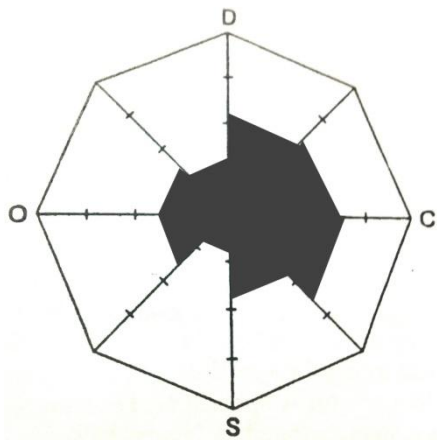
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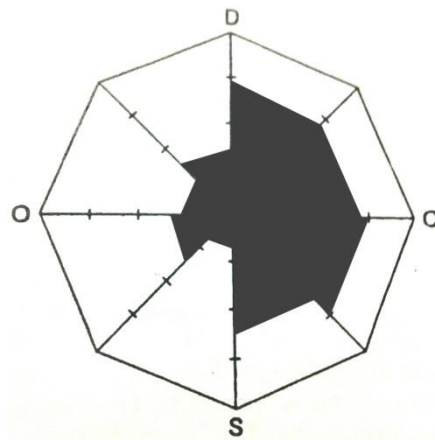
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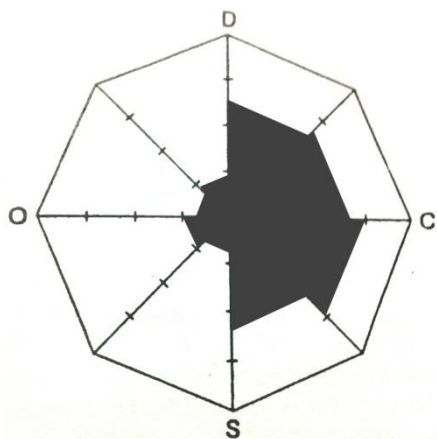
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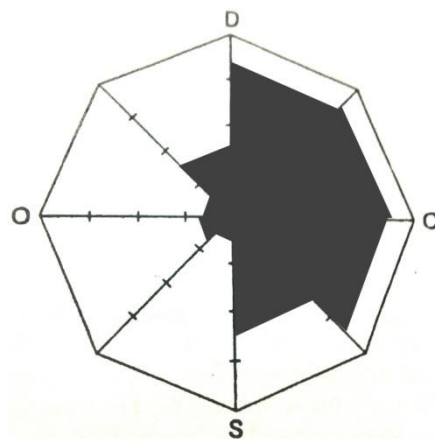
Teacher 17

Teacher 18

Teacher 19

Teacher 20

Teacher 21

Teacher 22

Teacher 23

Teacher 24

85

Teacher 25

Teacher 26

Teacher 27

Teacher 28

Teacher 29

Teacher 30

APPENDIX 4

INTERPERSONAL PROFILES OF TEACHERS

ACCORDING TO TEACHERS' PERCEPTIONS

Teacher 1

Teacher 2

Teacher 3

Teacher 4

Teacher 5

Teacher 6

Teacher 7

Teacher 8

Teacher 9

Teacher 10

Teacher 11

Teacher 12

Teacher 13

Teacher 14

Teacher 15

Teacher 16

Teacher 17

Teacher 18

89
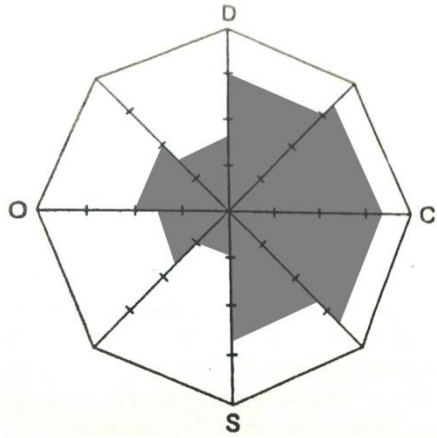
Teacher 19

Teacher 20

Teacher 21

Teacher 22

Teacher 23
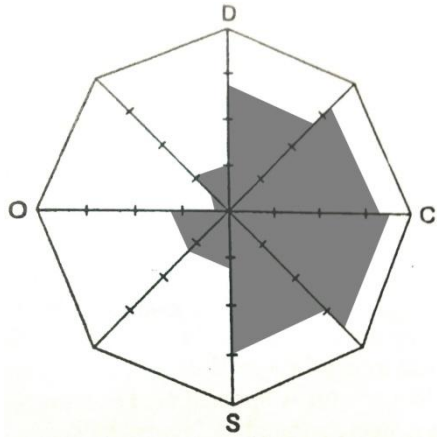
Teacher 24

Teacher 25
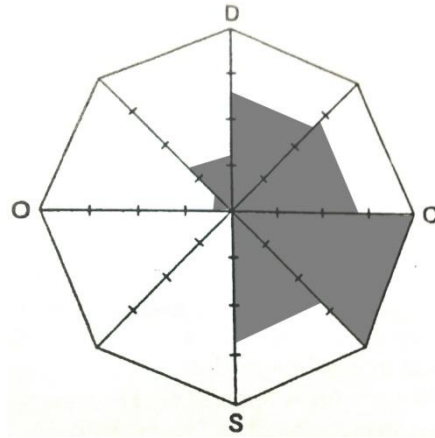
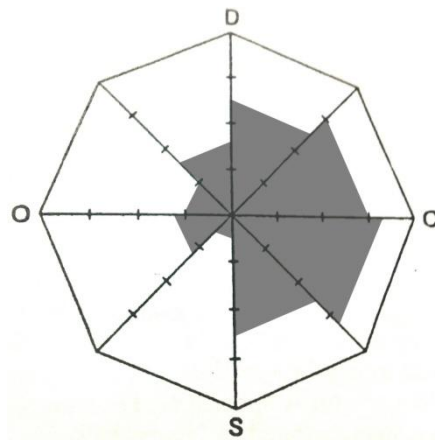**Teacher 26**
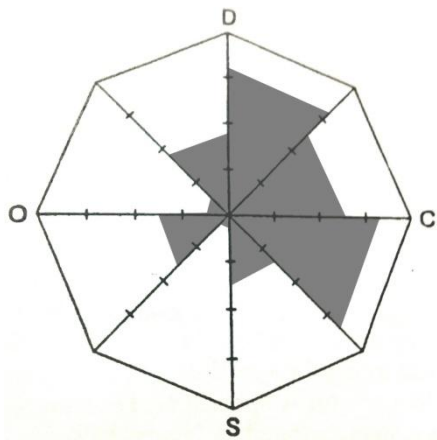
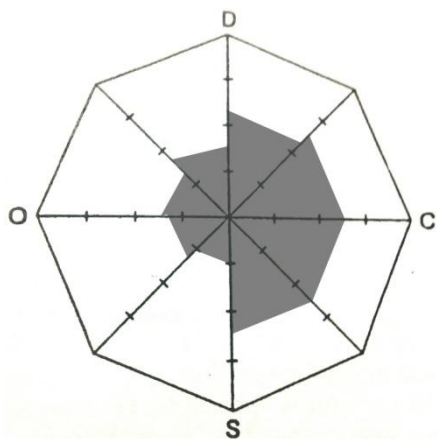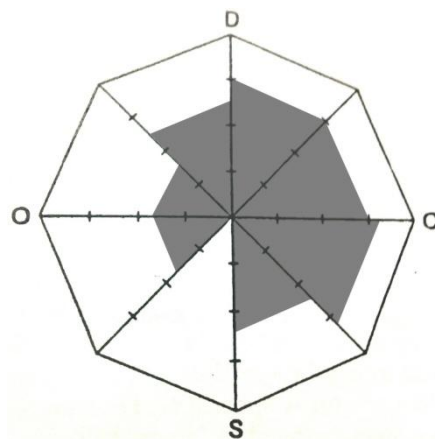**Teacher 27**

Teacher 28

Teacher 29

Teacher 30

ÖZGEÇMİŞ

Kişisel Bilgiler

Adı Soyadı   : Esin Uysal

Doğum Yeri ve Tarihi   : Dalaman - 1987

Eğitim Durumu

Lisans Öğrenimi   : İngiliz Dili Eğitimi - Hacettepe Üniversitesi

Yüksek Lisans Öğrenimi   : İngiliz Dili Eğitimi - Ufuk Üniversitesi

Bildiği Yabancı Diller   : İngilizce, Almanca

Bilimsel Faaliyetleri   : -

İş Deneyimi

Stajlar   : -

Projeler   : -

Çalıştığı Kurumlar   : Karabük Üniversitesi

İletişim

E-Posta Adresi   : esin_uysal@yahoo.com

Tarih   : 26.06.2014