THE RELATIONSHIP BETWEEN THE PERSONALITY TRAITS OF INTROVERSION-EXTRAVERSION IN TEACHERS AND STUDENT TALK IN SPEAKING CLASSES, AND EFFECTS OF TEACHER'S GENDER ON THIS RELATIONSHIP

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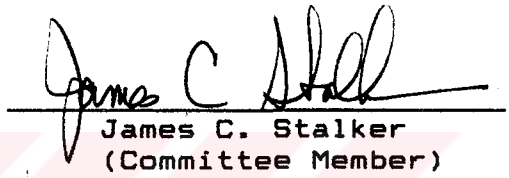

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ABSTRACT

Focusing on teachers, research has revealed that teacher effectiveness in teaching is in part related to personality traits in teachers. According to the advocates of this aspect of language teaching, personality traits represent each person's biological and psychological characteristics that either foster or inhibit success in teaching and learning.

In this study, the personality dimension of Introversion-Extraversion was examined in its relation to student talk in terms of turn-taking, the number of students who participated, and direction of talk--teacher-student or student-student--in speaking classes. Two hypotheses--that there is a relationship between the personality traits of introversion-extraversion in teachers and student talk, and that student participation would be higher in the classes of female teachers--were tested.

The study was carried out with eight teachers--two extraverted and two introverted males, and two extraverted and two introverted females. They were identified as introverts and extraverts based on the results of the Maudsley Personality Inventory (Eysenck, 1970). After this, each teacher's class was observed twice using the verbal flow chart (Richards and Nunan, 1990) to identify student talk in terms of turn-taking, the number of students who

participated, and direction of talk. The data collected were analyzed with percentages and Chi-Square Tests. In addition, for post hoc analyses students' gender and type of teacher questions were also coded and compared with percentages.

The results of the first hypothesis revealed that there is a significant difference ($p<.001$) between the classes of introverted and extraverted teachers in terms of turn-taking. In terms of the number of students who participated, a higher percentage of students (71.5%) participated in the classes of extraverted teachers than those of introverted teachers (64%). As for direction of talk, introverted teachers were found to have a higher ratio of teacher-student interactions (94% versus 74%), and extraverted teachers were found to have a higher ratio of student-student interactions (26% versus 6%). This indicates that students in classes of extraverted teachers had more opportunity to interact with each other.

The results of the second hypothesis that student participation would be higher in the classes of female teachers revealed that in terms of turn-taking, the difference between extraverted males and females is not significant, while the difference between introverted male and female teachers is significant at the $p<.005$ level. As for the participation in terms of the number of students who participated, the highest participation was observed

in the classes of extraverted female teachers (79%), and the lowest in the classes of introverted female teachers (54%). A comparison of student participation in the classes of male and female teachers as a whole indicated that student participation is higher in the classes of male teachers than female teachers (72.5% versus 66.5%). The results related to gender were contrary to what was hypothesized; that is, student participation was found to be higher in the classes of male teachers.

Post hoc analysis of the data revealed that in the classes of male teachers, female student participation was higher than male student participation (81% versus 67%), and male student participation was higher than the female student participation (71% versus 56%) in the classes of female teachers. The second observation was that introverted teachers tended to ask more short-answer type questions, and extraverted teachers tended to ask more discussion type questions. In this study, the findings are expected to attract the attention of EFL teachers and curriculum designers in Turkey.

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CHAPTER I

INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

Personality traits in language learning have been found to be an important factor in both student success and teacher effectiveness. For example, extraverted people may have an obvious advantage over their introverted counterparts in learning a second language because extraverts may exploit more opportunities to communicate with others (Rubin, 1975). On the other hand, introverted persons rarely avail themselves of such opportunities and are less communicative (Seligar, 1977). As for teachers, Brown (1973) states that it is a commonly held belief among teachers that introversion is an undesirable attribute for a teacher, and that it is better to be an outgoing and talkative person.

While the assumption of a positive relationship between extraversion and oral proficiency in a foreign language is widely supported by teachers, researchers and students of second languages (Bush, 1982), this principle may also apply to teachers who teach conversational classes. In the case of a speaking class an introverted teacher may not be able to communicate with his students, not because of a lack of knowledge, but because of his personality. Perhaps a speaking course is not suited to this teacher's personality. While extraversion may be a good personality trait in a person, to what

extent is it advantageous for the students to have such a teacher in their speaking course? Will the students be given enough time to speak and practice the language or will such a teacher monopolize class time with his own conversation? There are other considerations as well. For example, does an introverted teacher really demotivate his students? If he is not that much interested in speaking, how does it affect student talk in the class? Will students have more time to speak, or will they be totally unmotivated to speak in such a class?

One purpose of the speaking courses is to provide students with practice in asking and answering questions, and oral proficiency in these skills is expected within a period of eight months. In most of the Turkish universities which have English language programs, speaking is a part of the curriculum, but the way it is handled may differ from university to university. For example, in some of these universities, the skills are segregated and a particular course may be devoted entirely to the development of speaking as a skill. At the same time, in some of the universities speaking is integrated into reading courses. In this case, reading course materials which are selected are those which include practice in the speaking skills.

Oral proficiency in a foreign language is related to the amount of practice that a learner is

provided. Spolsky (1989) states that the outcome of language learning depends on the amount and kind of learner exposure to the target language. If teachers spend large amounts of time with explanations and management instructions, learners will not be given enough time to produce the language that they are learning. Likewise, if teachers spend too much time on mechanical exercises, learners will not have enough time to evaluate what is said and be productive (Chaudron, 1988).

Past research shows that different variables alter the nature of the learner's exposure to the target language, and one of these factors is considered to be the teacher talk in the classroom. Dunkin and Biddle (1974) reported that in first language classrooms teachers do most of the talking. This was reported to be about 60% of the total talk in the classroom. In L2 classrooms the same tendency was observed, and it was reported that teachers dominate classroom speech. However, two studies in bilingual classes, Legaretta (1977) and Enright (1984), report different findings, with the amount of teacher talk in Enright's study significantly less than that in Legaretta's. Chaudron (1988) argues that this contradiction may be attributed to teachers' individual differences in

terms of different personalities and behaviours, and to differences in the academic program studied.

In addition to teacher talk, another factor which psychologists and educational researchers have focused on is cognitive measures of personality traits, particularly the dimension of introversion-extraversion. Stern (1983) states that in language learning personality factors relate to the social and communicative nature of language:

> As a second language learner moves into a new linguistic, cultural and social environment, certain social and emotional predispositions can either help or hinder him in coping with this aspect of language learning and in meeting the affective demands that a new language imposes on a language learner (p. 380).

The distinction between introversion-extroversion was first measured by Eysenck in 1959. According to Eysenck (1970), introversion refers to the tendency to withdraw from social interaction and be preoccupied with inner thoughts and feelings, while extraversion refers to the tendency to be outgoing and interested in people and things in the environment.

The effect of gender on this personality dimension may be a function of culture. While Lalonde et al. (1987) contend that introversion-extraversion is not gender-related in Western societies, this may not be the case in Eastern societies. In fact, according to Page and Rosenthal (1990), the research studies in Asia show a

significant relationship between a teacher's gender and student success while similar studies in Western societies did not yield any relationship between these factors. In Turkey, males tend to be more dominant and assertive. This role behaviour may lead to extraversion, while the female role may lead to introversion. The male role may permit men to exhibit extraverted behaviour in the classroom either as a teacher or as a student. On the other hand, females may manifest the opposite tendencies because of their status in society. Erdal (1990) states that in Turkish society women are now aspiring to higher positions in government and industry as the result of equal rights legislation. On the other hand, tradition is an obstacle to women's progress. She also states that though women should be treated equally according to law, society has not yet accepted them as equal to men. Thus, men continue to be more authoritative while women tend to be submissive and introverted. The implication of this for class interaction may be that especially male students may feel more dominant and free to speak, and this may increase student participation in the classes of female teachers.

Research findings show that the personality dimension of introversion-extraversion is an important factor in terms of a teacher's effectiveness in the classroom. At the same time,

due to the different social status of males and females in Eastern Societies, a teacher's gender may also influence patterns of teacher and student talk in speaking classes.

1.2 PROBLEM STATEMENT

Is there a relationship between the self-rated personality traits of introversion-extraversion in teachers and student talk in speaking classes? If there is a significant relationship, to what extent does the teacher's sex affect this relationship?

1.3 VARIABLES

The dependent variable is the student talk in terms of turns taken by the students, the number of the students who participate and the direction of talk--teacher-student or student-student.

The independent variable is the self-rated personality traits of introversion-extraversion in teachers.

The moderator variable is the teacher's sex.

1.4 HYPOTHESES

The following hypotheses are examined:

Experimental Hypotheses:

1. There is a relationship between the self-rated personality traits of introversion-extraversion in teacher and amount and direction of student talk in speaking classes.

2. Student participation in terms of turns taken and the number of the students who participate

will be higher in speaking classes taught by female teachers.

Null Hypothesis:

1. There is no significant relationship between the self-rated personality traits of introversion-extraversion in teachers and the amount and direction of student talk in speaking classes.

2. There is no relationship between the gender of the teacher and the student talk in speaking classes.

1.5 DEFINITIONS

Extraversion and Introversion can be defined from two points of view:

1.5.1 Biological Definition

The most comprehensive theory comes from Eysenck (1970) who contends that the basic difference between extraverts and introverts is biological and rooted in the reticular activating system of the brain. Morris (1979) defines this as follows:

> This system which monitors incoming neural impulses resulting from environmental stimulation controls the arousal level of the cortex of the brain. Introverts are held to have higher levels of cortical arousal compared with extraverts. These different arousal levels cause introverts and extraverts to have a different behavioral and attitudinal preferences and tendencies. Assuming that both groups function best at a moderate level of arousal, extraverts tend to seek stimulation from the environment to increase arousal level while introverts attempt to seek a reduction of stimulation. (p. 7)

1.5.2 Psychological Definition

The behavioral differences are such that extraverts seek out the presence of other persons, enjoy social activities and talking, tend to act aggressively and impulsively, and crave excitement. On the other hand, introverts learn social inhibitions since social situations are most likely to be overstimulating for them. They tend to be introspective, reserved, unimpulsive, unaggressive, and prefer reading to talking with people (Eysenck and Eysenck, 1968).

1.6 PURPOSE OF STUDY

In recent years there has been an increasing interest and need for considering individual differences in students and teachers and their possible effects on learning and teaching. For this reason, it is hoped that the findings of this study will contribute to our knowledge of the teaching and learning of the speaking skill in English classes so that the language department coordinators and curriculum designers can take personality factors into consideration when appointing teachers for speaking courses.

1.7 LIMITATIONS

The study was limited to Turkish EFL teachers and students in English classes specifically where the speaking skill is taught and where English is used as a medium of instruction, but its findings

may be applicable outside of Turkey in educational settings with similar cultural norms.

1.8 OVERVIEW OF METHODOLOGY

The subjects were the English instructors at Erciyes University in Kayseri, Turkey. All the instructors who were teaching the same level speaking classes were administrated the Maudsley Personality Inventory. Among the subjects, the two male and two female instructors receiving the highest scores on this measure were considered extraverts and those receiving the lowest scores in both groups were considered introverts. The verbal flow technique (Richards and Nunan, 1990) was used to determine who was talking to whom, how many students participated and how often they participated in the speaking classes. In addition, the gender of the student and the type of teacher questions were coded.

1.9 OVERVIEW OF ANALYTICAL PROCEDURES

Data analyzed include turns taken, the number of the students who participated, and the direction of talk--whether student-student, or teacher-student. Subjects were divided into four groups: male introverts, female introverts, male extraverts and female extraverts. After this, the Chi-square Test of Probability, which analyzes the difference between observed and expected frequencies among groups and determines whether these differences are

larger than expected by chance, was used to determine the differences among the four groups of teachers. Percentages of the student participation in terms of the number of students who participate was also calculated.

1.10 ORGANIZATION OF THESIS

The first chapter of the study includes the introduction and statement of the research topic. The second chapter includes the review of the relevant professional literature. In this chapter, the biological and psychological aspects of introversion-extraversion in general is described, as well as studies which have focused on this dimension of personality in teachers and learners. In the third chapter, the methodology of the study is explained, and includes a description of the subjects, the instruments or techniques used for collection of data, and the methodological and analytical procedures. Chapter four includes the presentation and analysis of the data. Finally, Chapter five includes the summary, discussion, implications and conclusions of the study.

CHAPTER II

REVIEW OF LITERATURE

2.1 INTRODUCTION

Recent studies on personality have shown that the personality dimension of introversion-extraversion is an important variable in academic achievement in school and in language learning, in particular. The present study aims to investigate whether this dimension of personality is an effective factor in teachers who teach speaking classes in English language programs in Turkey. At the same time, it is a fact that though men and women are declared equal by law, as males and females their roles differ in Turkish society. The extent to which gender influences their effectiveness as language teachers in a speaking class is also examined in this study.

The investigation of personality as a factor in language learning is complicated by the fact that personality, as the German psychologist Herrmann points out, "is a hypothetical construct several steps removed from observable behaviour" (cited in Mitzel, 1969, p.1399). While personality cannot be observed or measured directly, particular characteristics of behaviour may be recorded and interpreted in terms of specific personality variables--for example, introversion-extraversion or external-internal (Mitzel, 1969).

The impact of a teacher's personality on

teaching effectiveness has recently attracted the attention of researchers. Pfeifer (1983) states that the "age of accountability" has brought into the school system not only the demand for documented student success, but also a demand for quantifiable, observable, and documentable teacher success as well. While it is not easy to quantify and document teacher success, the efforts in research in that direction have yielded some important findings.

Who are the successful teachers? Why are they labelled as such? Is it the curriculum or teaching method they use that makes these teachers successful? Actually, all these factors may influence a teacher's success, but research shows that what is perceived as success in the classroom is determined in part by the teacher's personality, attitudes, self-concept, expectations of self and others, and perceptions of life and learning (Pfeifer, 1983).

In this section the literature on the two personality traits--introversion-extraversion-- in teachers and learners will be reviewed as well as theories on the biological and psychological development of these two personality traits and the relationship between this dimension and other personality dimensions.

2.2 BIOLOGICAL AND PHYSIOLOGICAL ASPECTS OF INTROVERSION-EXTRAVERSION

The concept that individual differences in personality are determined, in part, by biological factors as well as psychological factors is supported by research studies (Stelmack, 1990). For example, research investigating the relationship between arousal level and response to stimulation for introverts and extraverts has been conducted by Smith (1983). In his research, high, medium and low dosages of caffeine were administrated to introverts and extraverts, and electrodermal responses to tones of different intensities were recorded. Skin conductance level (SCL) increased with increasing caffeine dosage and introverts exhibited higher mean SCL than extraverts. Skin conductance response decreased for the introverts as caffeine dosage level increased, while the extraverts exhibited the exact opposite effect.

In addition, there is evidence that introverts exhibit greater sensitivity to physical stimulation than extraverts. This view is endorsed by psychophysical studies which indicate that introverts have lower threshold levels for both low and high intensity painful stimulation than extraverts (Kohn, 1987).

Besides these physiological indications, the differences between extraverts and introverts can be

observed in a range of motor activities that are evident in the social environment. For example, extraverts tend to be more impulsive, more physically active, more involved in athletic activities (Eysenck, Nias and Cox, 1982), and more restless in restricted environments (Gale, 1969) than introverted individuals, while introverts tend to perform more effectively under these conditions.

As for studies focusing on the relationship between personality and intelligence, most have produced mixed results. However, the most recent studies related to the relationship between the personality traits of Introversion-Extraversion and intelligence support the view that intelligence is not related to these personality dimensions (Eysenck, 1971). Another recent study by Robinson (1985) of children classified as introverts, ambiverts and extraverts supported Eysenck's (1971) hypothesis that intelligence and the personality dimension of introversion-extraversion are unrelated.

2.3 INTROVERSION-EXTRAVERSION IN LANGUAGE TEACHING AND LEARNING

A review of the literature shows that, although the relationships between introversion-extraversion and foreign language learning and teaching have been well-publicized, only a small number of studies have been undertaken to investigate this topic. In

addition, most of the personality studies undertaken have focused on these two traits in learners (Bush, 1982; Naiman, Frohlich, Stern and Todesco, 1978; Naiman, Frohlich and Stern, 1985). The studies on introversion-extraversion in language learning can be divided into two groups: studies on learners and studies on teachers.

2.3.1 Introversion-Extraversion in learners

The rationale for investigating the role of personality in second language learning was to learn whether certain personality characteristics might affect learning strategies and outcomes, i.e., second language proficiency (Cekic, 1991). The study done by Naiman, Frohlich and Stern (1985) represents the most ambitious attempt to identify the characteristics of good second language learners. The purpose of their study was to investigate teachers' perceptions of the successful second langauge student. An attempt was also made to determine whether teachers agree on the traits and behaviours important for the good language learner, and if so, the nature of these attributes. In addition to identifying these traits and classroom behaviours that teachers believe characterize the successful language student, they investigated whether individual differences in such perceptions are related to factors such as sex of the teacher, teaching experience, percentage of

males in the classroom, and teaching method. This study indicates that teachers most often characterized the good language learner as being perfectionistic, mature, responsible, and self-confident; such students regularly completed homework, and demonstrated a good memory and a good ear for sound. Some other variables were also included, and those variables were teacher's sex, experience in teaching, grade taught and percentage of male students in the classrooms. Those variables were found to have no significant influence on teachers' perception of the good language learner.

Nevertheless, a correlation between introversion-extraversion and oral proficiency has been found in a number of studies (Bush, 1982; Rossier, 1975). In the study by Bush (1982) it was hypothesized that in an EFL situation, extraverted students would attain a higher proficiency in English because they may take advantage of opportunities to practice the language with native speakers. However, the results of the study reveal no significant correlation between introversion-extraversion and performance in written tests. Nevertheless, in the oral interview there was a positive correlation between extraversion and oral proficiency, and a subcorrelation between intraversion-extraversion and pronunciation showed that introverts were significantly better in English

pronunciation. A similar study was undertaken by Rossier (1975) to determine whether introversion-extraversion was a significant variable in learning English as a second language by Spanish-speaking high school students in the United States. Here, too, a positive correlation was found between extraversion and oral English proficiency.

In addition, several investigations have been made into the relationship between introversion, neuroticism and IQ. In a study by Entwistle and Cunningham (1968), 13-year old children were administrated the Eysenck Personality Inventory. School attainment was measured by the students' average rank order in class, and the relationship between attainment and the personality dimensions of neuroticism and extraversion were examined with sex as a moderator variable. The results identified girls who were stable extraverts and boys who were stable introverts as superior in academic achievement.

Age has also been found to be another moderating factor in this relationship between introversion-extraversion and academic achievement. Extraverts from preschool age to age 15 have been found to be superior to introverts. After this age, however, introverts became superior to extraverts (Anthony, 1973; Entwistle and Cunningham, 1968; Morris, 1979). Entwistle and Cunningham found

extraverts, particularly stable extraverts, to be superior to introverts until age 13 in Great Britain. Although the majority of studies in the United States have focused on the older age groups, the same trend can be observed in younger children (Morris, 1979).

2.3.2 Introversion-Extraversion in Teachers

Most classroom research has identified teacher personality as one of many factors in determining teacher effectiveness or teacher success in the classroom. Studies of the influence of teachers' personality dimensions on learning have found extraversion to be an important part of teacher effectiveness (Erdle et al., 1985; Feldman, 1986; Murray et al., 1990; Pfeifer, 1983).

In one study (Erdle et al, 1985), classroom teaching behaviour in teachers was found to meditate the relation between personality and teaching effectiveness. In this study, colleagues rated 37 full time college instructors on 29 personality traits, and trained observers assessed the frequency with which the same instructors exhibited 95 specific classroom teaching behaviours. Instructional effectiveness was measured by student ratings and analysis revealed that approximately 50 percent of the relation between personality and teaching effectiveness was mediated by classroom behaviour. At the same time, their findings support

the hypothesis that personality traits in teachers and classroom behaviours are related.

In a follow-up study by Murray et al. (1990), colleague ratings of 29 personality traits were studied in relation to student ratings of teaching effectiveness in a sample of 46 psychology instructors. Instructors of six different types of university courses were evaluated on teacher effectiveness. The results showed that teaching effectiveness varied across different types of courses for each instructor. Teaching effectiveness in each type of course was predicted with considerable accuracy from colleague ratings of personality, and the specific personality traits contributing to effective teaching differed for different course types. They concluded that instructors tend to be differentially suited to different types of courses, and, furthermore, the compatibility of instructors who are teaching different types of courses should be determined in part by personality characteristics when deciding who will teach which class.

Besides the effectiveness of teachers, the relationship between teacher personality and success in teaching has also been investigated. For example, in his study Pfeifer (1983) focused on the relationship between the personality traits in teachers and their success in teaching. Using the

Myers-Briggs Type Indicator, he collected data for the personality traits of introversion-extraversion, sensation-intuition, thinking-feeling, and judgement-perception. He determined success by using the another teacher's evaluation of the teacher. The results of his study indicated that personality traits significantly correlated with teaching success. Of the four scores available from the data, "judgement" was related to secondary school teaching success, while "sensing" and "judgement" both related to success at the elementary level. He concluded that secondary teachers were more successful if they were extraverted and elementary teachers were more successful if they were introverted.

In another study (Feldman, 1986), differences among teachers with respect to a particular personality trait were compared with their students' average rating of their instructional effectiveness. The comparison of teachers' self-perceptions and students' perceptions showed that 4 out of 14 traits were significantly correlated.

In the same study, the perceptions of teacher's students and their colleagues were also compared, and statistically significant correlations were found between the personality traits in teachers, and perceptions of them by their colleagues and

students. The results of Feldman's syntheses showed that there is a significant correlation between colleague perception and student perception in the evaluation of teachers' personality traits.

2.3.2.1 Teachers' Self-Perception, Colleague Perception and Student Perception

When the effectiveness of teachers is compared with the way their students and colleagues perceive their personality traits, results are very different from those obtained when teachers' personality traits are measured by teachers' responses to self-report personality inventories and by their own self-descriptions (Feldman, 1986).

The differences between these three indices has led to debate on which is a more accurate measurement of teacher personality. For example, some researchers have argued that the use of self-report personality inventories and self-descriptions to measure teachers' characteristics leave too much room for distortions by the teachers themselves if they are not promised anonymity when completing the inventories and self-descriptions. Rushton et al. (1983) state that:

> Even for a sophisticated sample such as academic psychology professors, evaluation apprehension may have led to distortions or a restriction of range effect. (p. 113)

On the other hand, Morris (1979) states that differences between introverts and extraverts can be

observed, but it is not always clear what behaviours one is using to judge their level of extraversion or introversion. Two studies by Lippa (1976, 1978) indicated that observers tended to rate the extraverted subjects as more extraverted than the introverted subjects in both studies and they differed from each other in their observations. It, thus, can be stated that the perceptions of observers may differ from each other because of different personalities of the observers.

It is clear that perception of observers may differ from each other when they observe the same subject at the same time, which shows that there are factors related to the observer as well. This may be attributed to the relationship between the observer and the person who is observed, the mood that the observer is in, and even the personality of the observer. Especially when the observers are colleagues or students, the relationships between these subjects and the teacher who is observed should be taken into account. This is true because the relationship between the teacher and his colleagues, or between the teacher and his students, may lead to distortions in determining who is extraverted and who is introverted.

2.4 STUDENT TALK

Research in first language classrooms shows that teachers do most of the talking, often in the

form of soliciting and reacting moves. On the average teachers talk about 60 percent of the class time. However, this proportion reflects only the general average, and according to Chaudron (1988), it varies depending on the class content and the size of the class.

Both L1 and L2 research has found that teachers dominate classroom speech. Legaretta (1977) observed five bilingual education kindergarten classrooms using time intervals to code amounts of teacher and student talk and concluded that the student talk was between 11 and 30 percent of the total talk in the classroom. As for teachers, total teacher talk was between 70 and 89 percent of the total talk. However, a study by Enright (1984) contradicted this finding. Enright did the study again in bilingual kindergarten classes and found the amount of teacher talk less than what Legaretta found. However, Enright counted utterances and parts of utterances, which may have increased the counts of student participation (Chaudron, 1988). Finally, Chaudron (1988) found that about two-thirds of classroom speech is teacher-talk. However, he feels that the variability between the results of related studies may be attributed to some other factors, one of which may be the teacher's personality.

2.5 EXTRAVERSION-INTROVERSION AND SOME OTHER PERSONALITY DIMENSIONS

An important dimension that has been related to extraversion is sensation-seeking. There are four subcomponents that elaborate the meaning of the construct: thrill and adventure-seeking, disinhibition, experience-seeking, and boredom suspectibility (Morris, 1979). Zuckerman et al. (1972) did a study using these four subcomponents of sensation seeking, and they concluded that sensation seeking was related to an uninhibited, nonconforming, impulsive, dominant type of extraversion.

Another personality dimension, that of field dependence vs. field independence, originated in research on perceptual processes, but has been studied in relation to the extraversion dimension. Brown (1973) defines these terms as follows:

> Perceptually, field-dependent individuals are those who are dependent or reliant on external cues to an extreme degree whereas field-independent individuals are able to rely at least partially on internal cues in their perceptual processes. (p. 75)

Witkin and Goodenough (1977) claimed that field-dependent individuals make greater use of external social referents in an ambiguous situation, are more attentive to social cues, have an interpersonal orientation, and are more socially skilled than field-independent persons, who in turn have cognitive analytical skills. According to their

definition, field-dependent individuals should be clearly extraverted, and field-independent individuals should be introverted. While Lester (1974) believes there is a common psychological element in the two personality traits, other studies (Cegalis and Leen, 1977; Ghuman, 1977) have found no such relationship.

Another personality dichotomy that has been correlated with the introversion-extraversion dimension is repression-sensitization. The idea behind repression-sensitization is that individuals may be differentiated from one another on the basis of the typical defense mechanisms or coping strategies that they use in dealing with stress and negative emotion. Repressors tend to deny or try not to show their problems and emotional experiences. Sensitizers, on the other hand, tend to be very much aware of their negative emotions, stress, problems, and so on, and even to exaggerate them (Morris, 1979). Another study by Byrne (1964) shows that this dimension is related to the introversion-extraversion dimension. He found that introversion and sensitization correlated almost perfectly. At the same time, the relationship between introversion and social anxiety is so strong that Patterson and Strauss (1972) had difficulty in separating them.

In summary, the personality dimension of introversion-extraversion has been found to be related to language learning and teaching behaviour in a number of studies. For example, investigation of the biological origins of this dimension showed that what is reflected in behaviour is related to some biological features which may be different from person to person. The application to education of both psychological and biological studies on this dimension of personality has opened up a new field of investigation. Studies on this dimension in language education have shown that extraversion in students and oral proficiency are positively correlated. As for the teacher, research has been done on the relation between a number of personality dimensions in teachers and their influence on teacher effectiveness and teacher success in the classrooms. Thus, the objective of this research is to investigate one particular personality dimension--introversion-extraversion. Unlike past research, this dimension in teachers was studied independently from other dimensions in the hope that it would yield more specific results than including all dimensions in a single study.

CHAPTER III

METHODOLOGY

3.1. INTRODUCTION

Recent studies in educational psychology have shown that personality traits play an important role in a learner's success and in a teacher's effectiveness in the classroom. Recent emphasis on the psychological aspects of teaching and learning has caused some language educators to focus on the *dimension of introversion-extraversion as a factor* in foreign language acquisition.

Focusing on teachers, research has revealed that teacher effectiveness and success in teaching are in part related to personality traits in teachers. Erdle et al. (1985), using colleague and student perception in determining the personality traits in teachers, found that 50 percent of the relation between personality and teaching effectiveness was mediated by classroom behaviour, and that personality traits in teachers and their classroom behaviours are themselves related. In another study by Murray et al. (1990), which also used colleague and student perception, it was concluded that teachers tend to be suited to different types of courses and are more effective when the type of course matches their personality. In addition, Pfeifer (1983), using the Myers-Briggs Type Indicator for determining personality traits in teachers, found a positive relationship between

teachers' extraversion and success in teaching at the secondary level, and between teachers' introversion and success in teaching at the elementary level.

The present study looks at teacher effectiveness in terms of student talk in speaking classes. Here, the relationship between the personality traits of introversion-extraversion and student talk and the modifying effects of teacher gender were examined. Introversion or extraversion in teachers was determined by using Eysenck's (1970) Maudsley Personality Inventory. The speaking classes of the teachers who were identified as introverts and extraverts were observed twice in order to collect the following types of data: the number of students who participated, turns taken, and direction of talk--teacher-student or student-student--in the classroom. On the basis of these data conclusions were drawn on whether the personality dimension of introversion-extraversion in teachers was a significant factor in terms of student talk in speaking classes.

3.2. SUBJECTS

The subjects of this study were the English language instructors at the English Language School of Erciyes University in Kayseri, Turkey. This school offers an intensive English program which prepares students of medicine, economics and

business management for English-medium instruction in their major fields.

Out of 31 intermediate-level instructors who took the personality inventory, eight--four males and four females--were selected as the subjects of this study. The selection procedure is explained in Section 3.4.

3.3. MATERIALS

Materials used in this study included the Eysenck's Maudsley Personality Inventory (Eysenck, 1970), the verbal flow technique sheet (Richards and Nunan, 1990), and a tape recorder. A translation of the personality inventory into Turkish was not necessary because the subjects were all English instructors.

3.3.1. Maudsley Personality Inventory

The Maudsley Personality Inventory (see Appendix A), prepared by Eysenck (1970), is one of the most popular self-report measures of introversion and extraversion, and its reliability is supported by research which indicates that the scales have considerable equivalence across age groups and cultures.

This personality inventory has been widely used in England and Germany (Eysenck, 1970). It has two sections--the extraversion and neuroticism scales. Each of the scales has 24 items, and the items are in yes/no question form. On the extraversion scale,

answers in conformity with the key are scored two points; answers contrary to the key are scored '0' points; and '?' answers are scored one point. The highest possible score is 48 points. This instrument was chosen because it was easy to administer and does not take a long time to complete. In addition, it has been in use since 1959, and was revised later by Eysenck (1970).

3.3.2. Verbal Flow Technique:

The verbal flow technique (Richards and Nunan, 1990) (see Appendix B) is used to record teacher and student talk in the classroom in terms of who is talking to whom and how frequently. Using this technique, data for teacher questions and student questions and responses can be collected and analyzed. The reason for choosing this technique is that it is easy to classify types of talk and count the number of students who participate and the turns taken.

This technique records the participation of the teacher and students using a seating chart which provides a box for each student and the teacher. The observer marks arrows with different colours or different signs in order to identify the participants and the direction of communication. Each action or move is considered as one tally.

3.4. PROCEDURES

The instructors who were teaching speaking

courses were administered the extraversion scale of the Maudsley Personality Inventory one month before they were observed. After the evaluation of the inventory, male and female instructors who received the highest two scores and the lowest two scores were selected as extraverted and introverted subjects respectively, for a total of eight subjects.

For the first observation, all eight subjects were asked to teach the speaking material given by the researcher, and were informed and given the material one day before the observation, but the subjects were not given detailed information about the nature of the research. During the class observations, the verbal flow technique was used to classify the data to determine who is talking to whom, how frequently, the type of talk in the classroom--teacher questions and student questions and responses, and the direction of talk in the classroom. At the same time, a tape recorder was used for double-checking the flow charts at a later time. The same procedure was followed for the observation of the 16 classes, two classes per subject (eight subjects in total).

3.5. VARIABLES

3.5.1. Dependent Variable

Student talk in the speaking classes is the dependent variable of the study. For this study, in

order to evaluate "student talk", data were collected on the number of students who participated, the number of turns taken by each student, and the direction of talk--teacher-student or student-student.

3.5.2. Independent Variable

The personality dimension of introversion-extraversion in teachers is identified as the independent variable of the study, and is measured by using the Maudsley Personality Inventory (Eysenck, 1970). These two personality traits are identified by their biological and psychological characteristics (for definitions see section 1.5.).

3.5.3. Moderator Variable

It is hypothesized that the sex of teacher may be a factor that affects student talk in the classroom since the status and roles of men and women differ in Turkish society. Therefore, sex of teacher is a moderator variable in the study.

3.6. ANALYTICAL PROCEDURES

In the data collection, verbal flow sheets were used to collect the following information in each class--the number of students who participate, turns taken, and the direction of talk.

Procedures used were as follows: The first step was to classify subjects (teachers) as introverts or extraverts. Then, verbal flow charts were used to record the number of students who

participated in two of the subjects' lessons, turns taken, and the direction of talk--teacher-student or student-student. Student participation in terms of turns taken was categorized as high, low and no turn taken, and these data were analyzed by placing students into three groups according to their number of turns. The highest number of turns taken by a student was recorded to be 14, and this was divided in two and the students who had turns between one and seven were put in the "low turn-taking", and the students who had turns between eight and 14 were put the "high turn-taking" categories. The students who did not take turns were put in the "no turn-taking" category. After this,a Chi-Square test was used in order to compare the differences between the observed and expected frequencies for the turns taken in the classes of introverted and extraverted teachers. After this, the number of students who participated in the classes of extraverted and introverted teachers were compared using percentages. Then, the direction of talk was described using percentages and compared using the Chi-Square Test with Yates Correction.

After this, in order to measure the modifying effects of gender, the subjects were classified as male extraverts, female extraverts, male introverts and female introverts. These classifications were used to compare the differences between observed

and expected frequencies of student participation in terms of turns taken in the classes of extraverted males, extraverted females, introverted males and introverted females, using Chi-square analysis. Finally, the number of students in each group who participated was described with percentages.

In conclusion, the study uses both experimental and descriptive approaches to analyze the data and test hypotheses relating to the relationship between the personality traits of introversion-extraversion in teachers and student talk in speaking classes. The modifying effect of teachers' gender on this relationship is also taken into consideration.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

4.1 OVERVIEW

In this study, it was hypothesized that the personality traits of introversion and extraversion in teachers would affect student talk in speaking classes in terms of participation, number of students who participate and turns taken, and direction of talk--student-student or teacher-student. It was also hypothesized that the relationship between the personality traits in teacher and student talk in speaking classes would be affected by the teacher's gender, as male and female roles differ in Turkish society, and participation was expected to be higher in the classes of female teachers.

Two null hypotheses were tested and observations were reported in order to determine whether the personality traits of introversion and extraversion in teachers and student talk in speaking classes are related, and whether the teacher's gender has an impact on this relationship. In order to measure extraversion-introversion in teachers, the Maudsley Personality Inventory (Eysenck, 1970) was used, and those teachers who were identified as introverts and extraverts were observed in their classes using the Verbal Flow Technique (Richards and Nunan, 1990).

4.2. PRESENTATION OF THE DATA

In Chapter I, it was hypothesized that there is a relationship between the personality traits of introversion and extraversion in teachers and student talk in speaking classes. In this study student talk was examined in three different aspects: student participation in terms of turns taken by the students, student participation in terms of the total number of the students who participated, and finally, student participation in terms of direction of talk--teacher-student or student-student.

4.2.1 Turns Taken

First, student participation in terms of turns taken was analyzed for the classes of total extraverted and introverted teachers. Table 4.1 presents the total number of students who participated in 16 classes taught by four male teachers--two extravert, two introvert--, and four female teachers--two extravert and two introvert.

Table 4.1
Number and Percentage of Students Who Participated in the Classes of Introverted and Extraverted Teachers--Turn-Taking Categories

	No Trn-T		Low Trn-T		High Trn-T		TOTAL
Extr.T	41	29%	94	65%	9	6%	144
Intr.T	53	35%	69	46%	28	19%	150
TOTAL	94	32%	163	55%	37	13%	294

Trn-T= turn-taking

As shown in Table 4.1, the student

participation in the classes of total introverted and extraverted teachers was categorized as "no turn-taking", "low turn-taking" and "high turn-taking depending on the highest number of turns taken by students in all the classes. The highest number of turns taken was 14. That was divided in two and the ones who were under seven fell into the "low turn-taking" and the ones over seven fell into the "high turn-taking" categories. The students who did not take turns were put in the "no turn-taking" category. Extraverted teachers were found to have 41 students in "no turn-taking", 94 students in "low turn-taking" and nine students in "high turn-taking" categories, while in the classes of introverted teachers 53 students did not take turns at all, 69 students fell into "low turn-taking" and 28 students fell into "high turn-taking" categories. As can be seen in Table 4.1, in terms of percentages, a higher proportion of students fell into the "no turn-taking category (35%) in the classes of introverted teachers than did in the classes of extraverted teachers (29%), and a higher proportion of students were in the "low turn-taking" category (65%) in the classes of extraverted teachers than were in the classes of introverted teachers (46%). In addition, more students fell into the "high turn-taking" category (19%) in the classes of introverted teachers than did in classes of extraverted teachers

(6%). Thus, it can be observed by adding the low and high turn-taking percentages that more students took turns in the classes of extraverted teachers than they did in those of introverted teachers (65+6=71% versus 46+19=65%) even though there were fewer total students in the high turn-taking category.

In order to determine whether there was a significant difference between obtained and expected frequencies of turns taken by the students in the classes of introverted and extraverted teachers, a Chi-Square analysis was run. This Chi-Square analysis, as shown in Table 4.2, indicates a significant difference at the $p<.001$ level (X^2 =14.99) between the obtained and expected frequencies of turns taken by the students in the classes of total introverted and extraverted teachers. This confirms the experimental hypothesis that there is a significant relationship between the personality traits of introversion-extraversion in teachers and student participation in terms of turns taken by students in speaking classes. So, the first null hypothesis that there is no relationship between these two variables is rejected and the experimental hypothesis is accepted.

Table 4.2
Chi-Square Analysis of Student Participation in Terms of Turns Taken in the Classes of Introverted and Extraverted Teachers

Col.	Row	Obs.	Exp.	O-E	$(O-E)^2$	$(O-E)^2/E$
1	1	41	46.04	-5.04	25.40	0.55
1	2	94	79.83	14.17	200.78	2.51
1	3	9	18.12	-9.12	83.17	4.58
2	1	53	47.95	5.05	25.50	0.53
2	2	69	83.16	-14.16	200.50	2.41
2	3	28	18.87	9.13	83.35	4.41
	Df=2				$X^2=\sum(O-E)^2/E=$	14.9

4.2.2 Student Participation

As previously mentioned, student participation was analyzed with percentages in terms of the total number of the students who participated in the classes of introverted and extraverted teachers. As shown in Table 4.3, the percentage calculations of student participation in terms of the total number of students also supplies additional evidence that there is a relationship between the personality traits of introversion-extraversion in teachers and student talk in speaking classes; student talk is higher in the classes of extraverted teachers (71.5%) than in the classes of introverted teachers (64%).

Table 4.3
Percentages of Student Participation
in the Classes of Introverted and Extraverted
Teachers

	Extraverted T.	Introverted T.
Student Participation	71.5%	64%

T= teacher

A comparative analysis of the results in Tables 4.1 and 4.3 is necessary to understand the patterns of student participation. The fact that the number of the students who fell into "low turn-taking" category is higher in the classes of extraverted teachers means that the participation in these classes was more evenly distributed; that is, a higher proportion of students in classes of extraverted teachers had a chance to take turns and to participate.

4.2.3 Direction of Talk

As for the third aspect, direction of talk in the classroom--teacher-student or student-student--the advantages of taking classes with extraverted teachers can also be observed. Here, it was found that in the classes of extraverted teachers there were 259 teacher-student interactions and 67 student-student interactions. As for the classes of introverted teachers, there were 329 teacher-student interactions and 22 student-student ones. Thus, in the classes of both introverted and extraverted

teachers, the frequency of teacher-student interactions was higher than that of student-student interactions. In terms of percentages, the ratio of the two types of interactions was significantly different between the two types of teachers with introverted teachers having a higher ratio of teacher-student interactions (94% versus 74%), and extraverted teachers having a higher ratio of student-student interactions (26% versus 6%). This implies that students in classes of extraverted teachers had more opportunity to interact with each other.

Table 4.4
Direction of Talk--Teacher-Student or Student-Student--in the Classes of Introverted and Extraverted Teachers

	Teacher-Student		Student-Student	
Extraverted T.	259	74%	67	26%
Introverted T.	329	94%	22	6%

T=teachers

The data in Table 4.4 was tested by using the Chi-Square Test with Yates Correction since there was only one degree of freedom. The skeleton for this correction was provided by Hatch and Farhaday (1982), and is shown in Figure 4.1.

Figure 4.1
The Skeleton of The Chi-Square Test
with Yates Correction

	Variable X		
Variable Y	a	b	a+b
	c	d	c+d
	a+c	b+d	

The Chi-Square Formula with Yates Correction is as follows:

$$X = \frac{N([ad-bc]-N/2)}{(a+b)(c+d)\ (a+c)(b+d)}$$

The results of the analysis of the Chi-Square Test with Yates correction revealed that the difference between the classes of introverted and extraverted teachers in terms of direction of talk is significant at the $p<.001$ level ($X^2=31.47$).

4.2.4 Effects of Gender

In the second experimental hypothesis, it was predicted that teachers' gender would affect the relationship between introversion-extraversion in teachers and student talk in terms of turns taken by students and the number of students who participated in their classes. It was hypothesized that student participation in terms of the number of students who participated and turns taken would be higher in the classes of both introverted and extraverted female teachers than in their male counterparts. The results which are shown in Table 4.5 indicate that the highest student participation was in the classes

of extraverted female teachers (79%), while the lowest participation was observed in the classes of introverted female teachers (54%). An opposite pattern was observed in the classes of introverted male teachers since their participation was higher than those in the classes of extraverted male teachers (78% versus 67%).

Table 4.5
Percentages of Student Participation in the Classes of Introverted and Extraverted Male and Female Teachers

	Extraverted	Introverted	Mean Total
Male T.	67%	78%	72.5%
Female T.	79%	54%	66.5%

Observing these data, it can be argued that gender does affect patterns of student participation since there are differences between extraverted and introverted teachers in total. Even though total participation was higher in classes of male teachers (72.5% versus 66.5%), an event which was not anticipated, student participation was higher in classes of female teachers if these teachers were extraverted.

In gauging the effect of teacher gender, student participation was also analyzed using the Chi-Square Test in terms of turns taken by the students in the classes of extraverted male and female, and introverted male and female teachers. Tables 4.6 and 4.7 reveal that the opposite pattern

of participation occured; that is, more students participated in classes of extraverted female teachers than in classes of extraverted male teachers.

Table 4.6
Number and Percentage of Students who Participated in the Classes of Male Extraverted and Female Extraverted Teachers--Turn Taking Categories

	No Trn-T		Low Trn-T		High Trn-T		TOTAL
Extraverted Male T.	30	33%	57	63%	4	4%	91
Extraverted Female T.	11	21%	37	70%	5	9%	53
TOTAL	41	28%	94	65%	9	7%	144

As shown in Table 4.6, students who participated in the classes of extraverted male and female teachers were categorized as previously described as "no turn-taking", "low turn-taking" and "high Turn-taking" students. It was observed that in the classes of all extraverted male teachers 30 (33%) students were in the "no turn-taking' category, 57 students (63%) were in "low turn-taking" and four students (4%) were in "high turn-taking" categories, while in the classes of all extraverted female teachers 11 (31%) students were in "no turn-taking", 37 students (70%) were in "low turn-taking" and five students (9%) were in "high turn-taking" categories. The results indicate that turns are more evenly distributed in the classes of

extraverted female teachers in comparison with extraverted male teachers' classes and a greater percentage of students participated (70+9=79% versus 63+4=67%).

Based on these data, a Chi-Square analysis was run on the difference between turns taken in the classes of extraverted male and extraverted female teachers to determine whether the difference was significant. The results of this analysis as shown in Table 4.7 indicated that there was not a significant difference (X =3.44) between the obtained and expected frequencies of turns taken by the students in the classes of extraverted male and extraverted female teachers.

Table 4.7
Chi-Square Analysis of Student Participation in Terms of Turns Taken in the Classes of Extraverted Male and Extraverted Female Teachers

Col.	Row	Obs.	Exp.	O-E	$(O-E)^2$	$(O-E)^2/E$
1	1	30	25.62	4.38	19.18	0.74
1	2	57	59.40	-2.40	5.76	0.09
1	3	4	5.68	-1.68	2.82	0.49
2	1	11	15.09	-4.09	16.72	1.10
2	2	37	34.59	2.41	5.80	0.16
2	3	5	3.31	1.69	2.85	0.86
Df=2				$X^2=\sum(O-E)^2/E=3.44$		

The same procedure as described above was followed for turns taken by the students in the classes of introverted male and female teachers.

Here, participation was higher in the classes of male teachers. As shown in Table 4.8, 15 students were in "no turn-taking", 34 students were in "low turn-taking" and 18 students were in "high turn-taking" categories in the classes of introverted male teachers. In the classes of introverted female teachers the same categories included 38, 35 and 10 students, respectively.

Table 4.8
Number and Percentage of Students Who Participated in the Classes of Introverted Male and Introverted Female Teachers--Turn Taking Categories

	No Trn-T		Low Trn-T		High Trn-T		TOTAL
Introverted Male T.	15	22%	34	51%	18	27%	67
Introverted Female T.	38	46%	35	42%	10	12%	83
TOTAL	53	35%	69	46%	28	19%	150

Trn-T= Turns Taken

In terms of percentages, as shown in Table 4.8, in the classes of introverted male teachers, 22% of the students did not take turns at all, 51% fell into "low turn-taking" category and 27% were in "high turn-taking" category. On the other hand, in the classes of introverted female teachers, in comparison with male teachers, a higher proportion of students did not participate at all (46%), a lower proportion of students (42%) fell into the "low turn-taking" category, and in the same way, a lower proportion of the students (12%) were in "high

turn-taking" category.

Table 4.9
Chi-Square Analysis of Student Participation in Terms of Turns Taken in the Classes of Introverted Male and Introverted Female Teachers

Col.	Row	Obs.	Exp.	O-E	$(O-E)^2$	$(O-E)^2/E$
1	1	15	23.67	-8.67	75.16	3.17
1	2	34	30.82	3.18	10.11	0.32
1	3	18	12.50	5.50	30.25	2.42
2	1	38	29.32	8.68	75.34	2.56
2	2	35	38.18	-3.18	10.11	0.26
2	3	10	15.49	-5.49	30.14	1.94
Df=2					$X^2=\sum(O-E)^2/E=$	10.67

In order to determine whether there was a significant difference between obtained and expected frequencies of turns taken by the students in the classes of introverted male and introverted female teachers, a Chi-Square analysis was run, and as shown in Table 4.9, the results indicated that there is a significant difference at the $p<.005$ level ($X^2 = 10.67$). So, the second hypothesis has been partly confirmed; that is, gender difference does in fact affect student participation.

4.2.5 Other Observations

Post hoc analyses of the data also revealed two other differences that may be related to gender and personality differences. As can be seen in Table 4.10, in the classes of male teachers the female student participation was higher than the male

student participation, whereas in the classes of female teachers, the male student participation was higher than the female student participation.

Table 4.10
Male and Female Participation in the Classes of Male and Female Teachers

	Male St. Part.	Female St. Part.
Male Teachers	67%	81%
Female Teachers	71%	56%

Another observation, which was not anticipated in the hypotheses of this study involves the types of teacher questions observed. Extraverted teachers asked fewer "short-answer" type questions (127) than introverted teachers (232), while introverted teachers asked fewer "discussion" type questions (45) than extraverted teachers (72). As shown in Table 4.11, this difference may also be related to the personality traits of introversion-extraversion in teachers.

Table 4.11
Type of Teacher Questions in the Classes of Introverted and Extraverted Teachers

	Short-Answer	Discussion	TOTAL
Extravert T.	127	72	199
Introvert T.	232	45	277

4.3 CONCLUSION

As an overall conclusion, it can be postulated that there is a relationship between the personality traits of introversion-extraversion in teachers and

student talk. Student talk or participation in speaking classes was analysed in terms of turn taking, the number of students who participated, and direction of talk. In this regard, the most important result was that student participation was more evenly distributed (higher variance) in classes of extraverted teachers. So, the first null hypothesis of no difference between participation in the two types of classes was rejected and the experimental hypothesis was confirmed.

However, the effect of teacher gender on the latter relationship is more difficult to interpret based on the results. While participation was generally higher in the classes of male teachers, this was not true if the female teachers were extraverted. When participation is measured in terms of turns taken, a different pattern emerges. Introverted males had a higher percentage of highly participating students than introverted females. However, the ratio was not significantly different between extraverted males and extraverted females. Thus, while the introversion and extraversion dimension in teachers appears to be a function of class participation, teacher gender is an important moderating variable in this relationship.

In addition to the results based on the experimental hypotheses, it was observed that in the classes of male teachers the female student

participation was higher while the pattern was reversed in the classes of female teachers. It was also observed that extraverted teachers asked more discussion type questions than introverted teachers, whereas introverted teachers asked more short-answer type question than extraverted teachers. The discussion of the implications of these results will be presented in the next chapter.

CHAPTER V

CONCLUSION

5.1 SUMMARY OF THE STUDY

The first and second chapters introduced the topic of the study- the relationship between the personality traits of introversion-extraversion in teachers and student talk in speaking classes, and the effect of teachers' gender on this relationship. At the same time, the problem of the study was stated and the variables were identified.

In the third chapter, the procedure for collecting data and analyzing data, the subjects, the instruments used for collecting data, and tasks were explained. In the fourth chapter, a descriptive and a quantitative analysis of how the personality traits of introversion-extraversion in teachers affected student talk, and the effect of teachers' gender on the relationship between these personality traits in teachers and student talk in speaking classes were presented.

5.2 STATISTICAL RESULTS AND IMPLICATIONS

In this study, two hypotheses were tested, and some other observations on classroom interaction which were not related to these hypotheses were also made. First, teachers at the English language programme at Erciyes university in Kayseri were administered the Maudsley Personality Inventory (Eysenck, 1970), and eight of them--two extraverted and two introverted males and two extraverted and

two introverted females--were selected as the subjects of the study depending on the results of the personality inventory. After this, the Verbal Flow Chart (Richards and Nunan, 1991) was used to observe each class twice to determine the turns taken by the students, the number of students who participated, and direction of talk in the classroom. In addition, students' gender and type of teacher questions were also coded.

5.2.1 First Hypothesis: Introversion/Extraversion versus Student Talk

In the first hypothesis, it was stated that the personality traits of introversion-extraversion in teachers would affect student talk in speaking classes. Student talk was examined in three aspects: student participation in terms of turns taken by the students, student participation in terms of the number of the students who took turns (participated), and direction of talk--teacher-student or student-student.

The results of Chi-Square analysis revealed that there is a significant difference ($p<.001$) between the classes of introverted and extraverted teachers in terms of turns taken by the students. In terms of the number of students who participated, a higher percentage of students (71.5%) participated in the classes of extraverted teachers than those of introverted teachers (64%). As for the direction of

talk, it was observed that while teacher-student interaction was higher in the classes of introverted teachers (94% versus 74%), student-student interaction was higher in the classes of extraverted teachers (26% versus 6%). The results of the Chi-Square Test with Yates Correction also indicated that the difference between the classes of introverted and extraverted teachers is significant in terms of direction of talk ($p<.001$).

It can be concluded that in classes where there is considerable student-student interaction overall, student participation tends to increase because students have more chance to speak and take turns. It can also be inferred that where there is a great amount of student-student interaction, there is also a higher quantity of student motivation. In analyzing the findings related to the direction of talk, the fact that student-student participation was higher in the classes of extraverted teachers implies that extraverted teachers gave more chance for students to participate in their classes, whereas introverted teachers engaged in 2-way interactions which were mostly between themselves and a select number of students. These teacher-student interactions were mostly mechanical and included only the students who wanted to participate. For the students who were reluctant to participate, taking a class with an extraverted

teacher was an advantage since these teachers seemed to give them more opportunity to participate and distributed the turns more equally. On the other hand, introverted teachers gave turns mostly to the students who seemed to be self-motivated from the start and wanted to participate. In this case, perhaps taking students' personality into consideration, it may be argued that when a majority of the students are talkative and extraverted in a group, it may be ideal to have an introverted teacher since they can use class time to speak and improve their oral practice without needing the teachers' stimulation. On the other hand, for a group of students who are introverted, an extraverted teacher may be ideal since he/she will try to motivate all the students to participate in class discussions and to interact among themselves.

5.2.2 Second Hypothesis: The Gender Factor

In the second hypothesis, it was stated that student participation would be higher in terms of turns taken and the number of students who participate in classes of female teachers. Looking at the classes of male and female teachers as a whole, student participation in terms of the number of students who participated is higher in the classes of male teachers than in the classes of female teachers (72.5% versus 66.5%).

The results related to gender were contrary to

what was hypothesized, that is, student participation was found to be higher in the classes of male teachers. An important reason for this result might have been the proportion of male and female students in the classes of both male and female teachers. In general, the number of female students was higher than the number of male students in all the classes. Since this study has shown that students tend to participate more in classes that are taught by teachers of the opposite sex, it is logical that the classes taught by male teachers would reflect the highest levels of participation due to the greater proportion of female students in these classes. Thus, future researchers may want to control for gender by using equal proportions of male and female student subjects.

In terms of student participation as turn taking, the results of the Chi-Square analysis revealed that while no differences were found between the classes of extraverted male and extraverted female teachers (X^2 =3.44), differences were found between the classes of introverted male and introverted female teachers ($p<.005$). Therefore, for introverts, gender is indeed an important factor.

As for the student participation in terms of the number of the students who participated, similar results were found. Again, no large differences

were found between the classes of extraverted males and females (67 versus 79 percent) while the opposite was true in classes of introverted males and females, where large differences were found (78 versus 54 percent). Therefore, while teacher gender does not impact on class participation for extraverted teachers, it does for introverted teachers. Finally, if teachers' classes are ranked in terms of the number of students who participated, the following order, from highest to lowest, would be observed: extraverted female (79%), introverted male (78%), extraverted male (67%), and introverted female (54%).

5.2.3 Other Observations

Besides the hypotheses included in the study, post hoc analysis of the data also revealed some other differences that may be related to gender and personality differences. The first observation was that female student participation in terms of the number of students who participated was higher in the classes of male teachers (81%), while it was the opposite for the classes of female teachers' classes, that is, male student participation was higher (71%). In this case, it may be argued that if the teacher is male and students are female, teacher's gender will have a positive effect on student participation, and it will be the same if the teacher is female and students are male. The

results also imply that when a higher proportion of the students are of the teacher's gender, this will have a negative effect on student participation in speaking classes.

Another post hoc observation was related to the type of questions teachers asked. Extraverted teachers were found to ask more discussion type questions than introverted teachers, and introverted teachers asked more short-answer type questions than extraverted teachers.

In all these cases, it was observed that teacher characteristics such as being extraverted or introverted or being male or female affected student participation. Classroom interaction was investigated in terms of the following criteria: turns taken by the students, the number of students who participated, the direction of classroom interaction, the proportion of male and female student participation in the classes of male and female teachers, and the type of teacher questions.

5.3 IMPLICATIONS BASED ON OBSERVATIONS

The hypotheses of the study were based on the psychological and biological definitions of introversion-extraversion and gender related roles in Turkish society. The results show that personality traits of introversion-extraversion in teachers affect groups of teachers in different ways.

In the classes of extraverted male teachers it was observed that teachers were more formal and lectured to the students, and monopolized most of the class time with their own talk. However, they had a way of assigning turns equally for student participation. In their classes, a limited number of the students were in the high turn-taking category, that is, the extraverted and talkative students were not given the chance to monopolize the whole class time; instead, all the students were expected to participate and were given a chance to speak. This is why a higher proportion of the students took turns in their classes. At the same time extraverted male teachers appeared to encourage the students to work in groups. This may be a reason why participation was higher in the classes of extraverted male teachers.

As for the extraverted female teachers, it was observed that students were all interested in the class activities, they were given a chance to work in groups, and the teachers seemed to be organizing the activities and motivating students to participate. However, in the classes of introverted female teachers, the teachers were directing questions to a select number of students who wanted to participate, and the majority of the students were passive listeners. As for introverted male teachers, in their classes students were more active

than in the classes of introverted female teachers. They were trying to be more democratic and trying to give a chance for everybody to participate. However, it may have occurred because students in these classes asked more short-answer type questions.

On the whole, many of the questions relating to the relationship between personality and teacher effectiveness that were posed in the first chapter have been answered. If an ideal EFL speaking course is defined as one which gives the maximum chance for students to speak and practice their target language, extraverted female teachers would be the ideal teachers for such a course. The results lend support to statements by Murray et al (1990) that teachers who are selected for different types of courses should be evaluated on a broad range of criteria, including their language competence and personality traits, specifically introversion-extraversion.

5.4 ASSESSMENT OF THE STUDY

Due to the limited number of subjects and the short time span of this study, the results should not be generalized for all EFL teachers in Turkey. Ideally, in a study like this, several persons should be assigned to collect the data in order to avoid the problem of researcher expectancy. So, further research with more than one researcher, over

a longer period of time and with a larger number of subjects is needed to make generalisations for all EFL teachers in Turkey.

5.5 IMPLICATIONS FOR FUTURE RESEARCH

As the results were different for each of the four groups, extraverted male and female and introverted male and female teachers, further research might focus on some other personality traits which may be related to the dimension of introversion-extraversion, such as field-dependence and field-independence. At the same time, further research should also study the personality traits of introversion-extraversion in students as well as teachers and investigate the possible interaction between these personality traits in these two groups of subjects.

BIBLIOGRAPHY

Anthony, W. S. (1973). The development of extraversion, of ability, and of the relation between them. British Journal of Educational Psychology, 43, 223-227.

Brown, H. D. (1973). Affective variables in second language acquisition. Language Learning, 23, 231-244.

Bush, D. (1982). Introversion-extraversion and the EFL proficiency of Japanese students. Language Learning, 32, 109-132.

Byrne, D. (1964). Repression-sensitization as a dimension of personality. In B. Mahrer (Ed.), Progress in experimental personality research. Academic Press: New York.

Cegalis, J. A., & Leen, D. (1977). Individual differences in responses to induced perceptual conflict. Perceptual and Motor Skills, 44, 351-361.

Chaudron, C. (1988). Second language classroom-research on teaching and learning. Cambridge: Cambridge University Press.

Cekic, H. (1991). Matching teaching and learning styles in a Turkish university EFL classroom and its effect on foreign language development. Unpublished master's thesis, Institute of Economic and Social Sciences of Bilkent University, Ankara.

Dunkin, M. J., & Biddle, B. J. (1974). The study of teaching. New York: Holt, Rinehart and Winston.

Enright, D. S. (1984). The organization of interaction in elementary classrooms. In J. Handscombe, R. A. Orem, and B. P. Taylor, (Eds.), On TESOL 1983: The question of control. Washington, D.C.: TESOL.

Entwistle, N. J., & Cunnigham, S. (1968). Neuroticism and school attainment--A linear relationship? British Journal of Educational Psychology, 38, 123-132.

Erdal, S. (1990). Turkiye'de sosyio-ekonomik yapi qeqisimi ve kadinin konumundaki degismeler [Socio-economic changes and the changes in women's status in Turkey]. Unpublished master's thesis, Uludag Universitesi Sosyal Bilimler Enstitusu, Bursa.

Erdle, S., Murray, H. G. & Rushton, J. P. (1985). Personality, classroom behaviour and college teaching effectiveness: A path analysis. Journal of Educational Psychology, 77, 394-407.

Eysenck, H. J. (1967). The biological basis of personality. Springfield: Thomas.

Eysenck, H. J. (1970). Theoretical and methodological issues. New York: Wilkey-Interscience.

Eysenck, H. J. (1971). Readings in extraversion-introversion II.: Fields of Application. New York: Wilkey-Interscience.

Eysenck, H. J., & Eysenck, S.B. (1968). Manual for the Eysenck personality inventory. San Diego: Educational and Industrial Testing Service.

Eysenck, H. J., Nias, D. B. K., & Cox, D. N. (1982). Sports and personality. Advances in Behaviour Research and Teraphy, 4, 1-56.

Feldman, K. A. (1986). The perceived instructional effectiveness of college teachers as related to their personality and attitudinal characteristics: A review and synthesis. Research in Higher Education, 24, 139-213.

Gale, A. (1969). "Stimulus hunger": Individual differences in operant strategy in a button pressing-task. Behaviour Research and Teraphy, 7, 263-274.

Ghuman, P. A. S. (1977). An exploratory study of Witkin's dimension in relation to social class, personality factors and Piagetian Tests. Social Behaviour and Personality, 5, 87-91.

Hatch, E., & Farhady, H. (1982). Research design and statistics for applied linguistics. New York: Newbury House.

Kohn, P. M. (1987). Issues in the measurement of arousability. In J. Srelau, & H.J. Eysenck (Eds.), Personality dimensions and arousal. New York: Plenum.

Lalonde, R. N., Lee, P. A., & Gardner, R. C. (1987). The common view of the good language learner: An investigation of teachers' beliefs. The Canadian Modern Language Review, 44, 16-34.

Legaretta, D. (1977). Language choice in bilingual classrooms. TESOL Quarterly, 11, 9-16.

Lester, D. A. (1974). A psychological basis for personality traits. Springfield: Thomas.

Lippa, R. (1976). Expressive control and leakage of dispositional introversion-extraversion during role-played teaching. Journal of Personality, 44, 541-559.

Lippa, R. (1978). Expressive control, expressive consistency, and the correspondence between expressive behaviour and personality. Journal of Personality, 46, 438-461.

Mitzel, H. E. (1969). Encyclopedia of educational research, vol. 3. London: Collier Macmillan Publishers.

Morris, W. M. (1979). Extraversion and introversion: An interactional perspective. New York: Halstead Press.

Murray, H. C., Rushton, J. P. & Paunonen, S. V. (1990). Teacher personality traits and student instructional ratings in six types of university courses. Educational Psychology, 82, 250-261.

Naiman, N. M., Frohlich, M. & Stern, H. H. (1985). The good language learner. Toronto: Ontario Institute for Studies in Education.

Naiman, N., Frohlich, M., Stern, H. H. & Todesco, A. (1978). Research in education series no.7. The good language learner. Toronto: The Ontario Institute for Studies in Education.

Page, S., & Rosenthal, R. (1990). Sex and expectations of teachers, and sex and race of students as determinants of teaching behaviour and student performance. Journal of School Psychology, 28, 119-131.

Patterson, M. L., & Strauss, M. E. (1972). An examination of the discriminant validity of the social avoidance and distress scale. Journal of Counsalting and Clinical Psychology, 39, 169.

Pfeifer, J. (1983). The effects of personality on success in student teaching. Paper presented at the National Field Directors, Orlando. (ERIC Document Reproduction Service No. ED 228199)

Richards, J. C., & Nunan, D. (1990). Second language teacher education. Cambridge: Cambridge University Press.

Robinson, D. L. (1985). How personality relates to intelligence test performance: Implications for a theory of intelligence, aging research and personality assessment. Personality and individual Differences, 6, 203-206.

Rossier, J. C. (1975). Extraversion-Introversion as a significant variable in the learning of English as a second language. (Doctorial Dissertation, University of Southern California, 1975). Dissertation Abstracts International, 36, 7308-7309A.

Rubin, J. (1975). What the good language learner can teach us. TESOL Quarterly, 9, 41-51.

Rushton, J. P., Murray, H. J., & Pauronen, S. V. (1983). Personality, research creativity, and teaching effectiveness in university professors. Scientometrics, 5, 93-116.

Saklofske, O. H., & Kostura, D. D. (1990). Extraversion-introversion and intelligence. Personality and Individual Differences, 11, 547-551.

Seligar, H. W. (1977). A study of interaction patterns and L2 competence: Condensed version of oral presentation. Los Angeles: Los Angles Second Language Research Forum, UCLA.

Smith, B. D. (1983). Extraversion and electrodermal activity: Arousabiliy and the inverted-U. Personality and IndividualDifferences, 4, 411-420.

Spolsky, B. (1989). Conditions for second language learning. Oxford: Oxford University Press.

Stelmack, R. M. (1990). Biological bases of extraversion: Psychophysical Evidence. Journal of Personality, 58, 293-311.

Stenberg, G., Risberg, J., Warkentin, S., & Rosen, I. (1990). Regional patterns of cortical blood flow distinguish extraverts from introverts. Personality and Individual Differences, 11, 663-673.

Stern, H. H. (1983). Fundemental concepts of language teaching. Oxford: Oxford University Press.

Witkin, H. & Goodenough, D. (1977). Field dependence and interpersonal behaviour. Psychological Bulletin, 84, 661-689.

Zuckerman, M., Bone, R. N., Neary, R., Mangelsdorff, D., & Brustman, B. (1972). What is the sensation-seeker? Personality trait and experience correlates of the sensation-seeking scales. Journal of Consulting and Clinical Psychology, 39, 308-321.

APPENDIX A
MAUDSLEY PERSONALITY INVENTORY

Dear colleague,

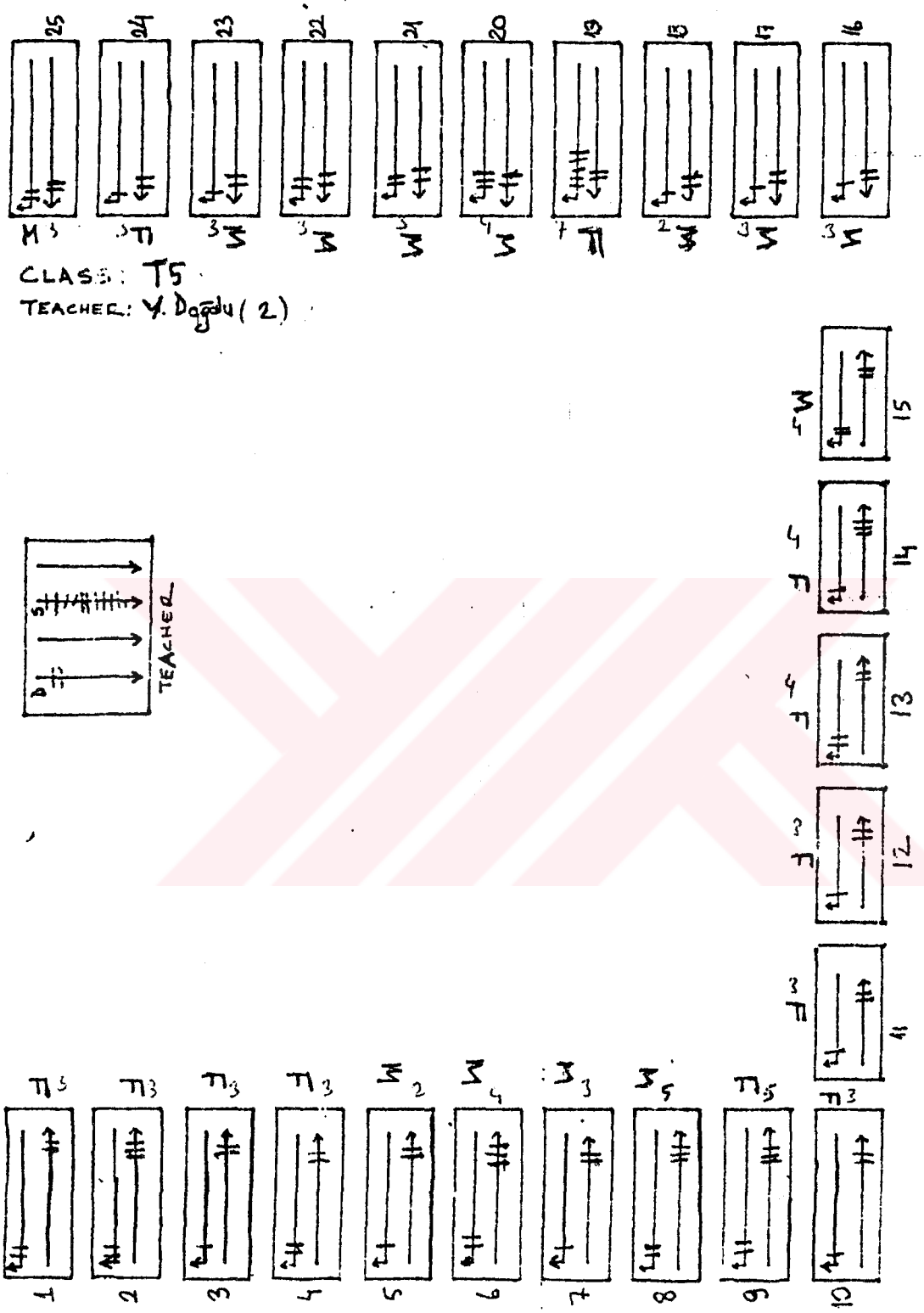
I am doing a research on the personality traits of Introversion-Extraversion in teachers. Please, spend a few minutes to fill out this questionnaire and do not write your name.

Dogan BULUT

EXTRAVERSION SCALE	YES	NO
1. Are you inclined to keep in the background on social occasions?		
2. Is it difficult to lose yourself even at a lively party?		
3. Are you inclined to be overconscientious?		
4. Do you like to mix socially with people?		
5. Are you inclined to limit your acquintances to select a few?		
6. Are you inclined to be quick and sure in your actions?		
7. Do you ever take your work as if it were a matter of life or death?		
8. Do you like to have many social engagements?		
9. Do you generally prefer to take the lead in group activities?		
10. Are you inclined to be shy in the presence of the opposite sex?		
11. Do you nearly always have a ready answer for remarks directed at you?		
12. Would you rate yourself as a happy-go-lucky individual?		
13. Are you inclined to keep quiet when out in social group?		

14.	Can you let yourself go and have a good time at a gay party?	
15.	Do you like work that requires considerable attention?	
16.	Would you rate yourself as a lively individual?	
17.	Would you be unhappy if you were prevented from making contacts?	
18.	Are you happy when you get involved in projects that call for action?	
19.	Are you inclined to take your work casually, as a matter of course?	
20.	Do other people regard you as lively individual?	
21.	Do you usually take the initiative in making new friends?	
22.	Would you rate yourself as a talkitive individual?	
23.	Do you like to play pranks upon others?	
24.	Do you prefer action to planning for action?	

APPENDIX B
A SAMPLE VERBAL FLOW CHART



D ⟶ Discussion type teacher question
S ⟶ Short-answer type teacher question
⟶ Student-student interaction
⟶ teacher-student interaction