

## Institute of International Education

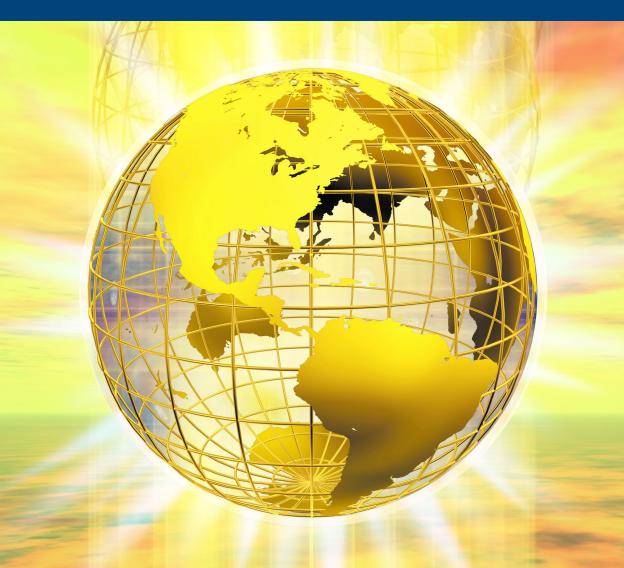
Report 121

# Public Primary School Teachers' Perceptions of Their Working Conditions and Job Stress

Cases from Istanbul and Stockholm

Gülay Öztürk

Stockholm, Sweden 2011



# Institute of International Education Department of Education

# Public Primary School Teachers' Perceptions of Their Working Conditions and Job Stress: Cases from Istanbul and Stockholm

Gülay Öztürk

June 2011



### **Foreword**

The Yellow Report Series is an integral part of the Institute of International Education (IIE) strategy to promote and to disseminate academic writings of national and international nature since the 1970s. This series allows first and foremost academic and research staff as well as visiting researchers to publish valuable research material acquired in the course of research and projects at IIE. This series as all other IIE series, namely: (1) IIE Studies in International and Comparative Education; (2) IIE Master's Degree Studies; and (3) IIE Work-In Progress Reports serve to keep updated the institution's extensive programmes, projects and activities for research, education, training, scholarship, and networking in the field of International and Comparative Education which are always inclusive and connect the Northern with the Southern, the Eastern and the Western hemispheres.

The present report, "Public Primary School teachers' Perceptions of Their Working Conditions and Job Stress: Cases from Istanbul and Stockholm" is the 121<sup>st</sup> such report. Comparative research in developing countries is also a valuable contribution to the vision of IIE. I would like to express my deep appreciation for its contribution. Most of all, I would like to thank Gülay Öztürk for this contribution to the series.

Vinayagum Chinapah, Professor and Head of IIE

## **Table Of Contents**

## **Contents**

Foreword	ii
Table Of Contents	iv
List of Abbreviations	vi
Table of Figures	vii
Acknowledgements	viii
1. Introduction	2
1. 1 Background	2
1. 2 Aim and Research Questions of the Study	2
1. 3 Limitations of the Study	3
1. 4 Overview of the Compulsory School Education in Turkey and Sweden	3
2. Literature Review	5
2. 1 Working Conditions of Teachers	5
2. 2 Stress and Teachers' Job Stress	8
2. 3 Effects of Job Stress on Teachers	10
3. Methodology	11
3. 1 Research Design	11
3. 2 Sample and Research Setting	11
3. 3 Data Collection	13
3. 3. 1 Interviews	13
3. 4 Research Procedure	13
4. Results	14
4. 1 Physical Environment and Resources	14
4. 2 Workload and Time Pressure	15
4. 3 Changes in Educational Policies	17
4. 4 Students	19
4. 5 Parents	20
4. 6 Rewards	22
4. 7 Relations with Colleagues and Principals	23
4. 8 Role Conflict	23
4. 9 School Structure and Management	24
4. 10 Effects of Stress on Teachers	25
4. 11 Summary of the Findings	29
5. Discussion and Conclusions	32

References	. 38
Appendix 1	. 44
Index of Reports from the Institute of International Education, Department of Education, Stockholm University	. 46

## **List of Abbreviations**

MoNE Ministry of Education, Turkey

OECD Organization for Economic Cooperation and Development

G Pass

VG Pass with distinction

MVG Pass with special distinction

# **Table of Figures**

Table 3.1 Gender Distribution of Turkish and Swedish Teachers	. 12
Table 3.2 Age Distribution of Turkish and Swedish Teachers	. 12
Table 3.3 Position Distribution of Turkish and Swedish Teachers	
Table 4.1: Percentages of the Teacher Samples Mentioning Physical Environment an	
Resources that cause Job Stress	
Table 4.2 Percentages of the Teacher Samples Mentioning Workload and Time Press	
that cause Job Stress	
Table 4.3 Percentages of the Teacher Samples Mentioning Changes in Educational	
Policies that Cause Job Stress	. 18
Table 4. 4 Percentages of the Teacher Samples Mentioning Students that Cause Job	
Stress	. 19
Table 4. 5 Percentages of the Teacher Samples Mentioning Parents that cause Job Str	ress
	. 21
Table 4. 6 Percentages of the Teacher Samples Mentioning Rewards that cause Job	
Stress	. 22
Table 4. 7 Percentages of the Teacher Samples Mentioning Relations with Colleague	S
and Parents that cause Job Stress	. 23
Table 4. 8 Percentages of the Teacher Samples Mentioning Role Conflict that cause I	Job
Stress	. 23
Table 4. 9 Percentages of the Teacher Samples Mentioning School Structure and	
Management that Cause Job Stress	. 24
Table 4. 10 Percentages of the Teacher Samples Mentioning Effects of Stress on	
Teachers	. 27
Table 4.12 Summary of the Findings: Effects of Jobs Stress	. 32

## Acknowledgements

I would like to thank the Swedish Institute which played a very important role during my research in Sweden, and supported me economically. I also appreciate the support of the Stockholm University, Institute of International Education that provided the necessary conditions to conduct my research.

My great thanks go to my supervisor Prof. Holger Daun, for his expertise, support, and guidance throughout my study. I am grateful for all his valuable comments, and feedbacks. I would also like to thank my dear colleagues at the Institute of International Education; Görel Husen-Strömqvist, Reza Arjmand, Zhao Shangwu, Kiwako Okuma-Nyström, Vinayagum Chinapah, Zenia Hellström, Shuting Gao, Christelle Garrouste Norelius, and Marika Ljungdahl.

Above all, I wish to express many thanks to my parents, brother and sisters for their unconditional love, support, and encouragement throughout my educational life. I love you all.

Gülay Öztürk Stockholm, December, 2008

## 1. Introduction

## 1. 1 Background

Education is an important issue for the development of countries, and teachers are the most significant factor of the education process. Primary education has a crucial role in individuals' improvement. During primary education, children gain the basic knowledge and skills, and teachers are the basic role models for primary school pupils (Baloğlu, 2001; Erdem, 1998; Ko, 2003; Nichols, 2002; Velez-Arias, 1998).

There have been constant changes in educational, economical, and cultural policies of many countries including Turkey and Sweden. Globalization and developments in technology have had effects on organizations and also on employees' working conditions. In many countries, teachers are confronted with occupational, pedegogical, and technological changes which have caused alterations in their working conditions. In both Turkey and Sweden, educational innovations, which have been implemented in recent years, have impacts on working conditions of teachers.

The changes in teachers' working conditions influence their degree of job stress. The teaching profession is one of the most stressful professions, it includes constant interaction with students, parents, colleagues, and school principals (Kyriacou, 1997). Besides this constant interaction, the changes in the role of teachers have also influenced teachers' job stress.

Stress has great importance for all organizations including schools; it can negatively affect teachers' physiological and psychological well-being which can adversely affect schools' effectiveness. Students' learning is also negatively influenced by teachers' job stress (Milbourne, 2006).

Teachers have a significant role in the development of countries, because they educate new generations. Improving the working conditions in schools may positively affect teachers' physiological and psychological well-being (Lee, 2001; as quoted in Öztürk, 2008). That is why there has been an increasing interest in studies about working conditions and job stress of teachers.

Turkey is going through a process of political, economic, and legal reforms for accession to the European Union; many reforms have also been implemented in education for the same reason. The researcher of this study wanted to compare Turkey's education system with a member country of European Union, for this reason Sweden's education system was chosen, and Turkish and Swedish teachers' perceived working conditions, job stress and effects of job stress were studied.

## 1. 2 Aim and Research Questions of the Study

The overall aim of this study is to identify and compare the perceived working conditions (physical and psychosocial aspects of the work place), job stress, and effects of job stress among public compulsory school Turkish teachers working in Istanbul, and public compulsory school Swedish teachers working in Stockholm. The overall aim is specified into the following research questions:

- 1. Which factors of working conditions are perceived as reasons for job stress by the Turkish teachers working at public compulsory schools in Istanbul, and Swedish teachers working at public compulsory schools in Stockholm?
- 2. What are the perceived effects of job stress on public compulsory school Turkish teachers working in Istanbul, and Swedish teachers working in Stockholm?

## 1. 3 Limitations of the Study

In this study, the concepts of working conditions, job stress and effects of job stress are limited to the perceptions of selected public primary school Turkish teachers working in Istanbul, and Swedish teachers working in Stockholm. Therefore the results are not generalizable to other settings. There is also a specific time limitation, the data for this study was collected between 2006-2008. The gender differences in teachers responses are not studied, because there were not an equal distribution among male and female participants.

# 1. 4 Overview of the Compulsory School Education in Turkey and Sweden

In Turkey, formal education is provided mainly by public education institutions. The Ministry of National Education (MoNE) is responsible for the administrative legislation and supervision of formal and non-formal education except higher education which is autunomous in terms of teaching and research. The Higher Education Council is responsible for the planning and coordination of higher education.

There are public and private education institutions in Turkey, the former is free of charge and provided by the state, the latter is paid, and provided by independent institutions owned by private organizations, foundations, or other entities. In both public and private institutions, at pre-primary, primary, and secondary levels, MoNE is responsible for preparing curriculum, maintaining coordination between educational institutions, regulating the opening, and closing time for the schools, summer and midterm holidays, constructions of school buildings, and preparing textbooks (Eurydice, 2008).

In Turkey, education is provided at four levels: pre-primary education, compulsory education (primary and lower secondary education), post-compulsory education (upper secondary level) and higher education. Primary education is compulsory for all citizens, and it is free of charge at public education institutions. Compulsory education lasts for eight years for the children between ages of six and fourteen, and it is full-time, coeducational, and single-structured. Elementary education with grades one to five, and lower secondary education with grades six to eight are included in compulsory education. In compulsory and post compulsory education, textbooks are free of charge (MoNE, 2001).

In primary schools national curriculum is applied, and a comprehensive education is provided as in pre-primary and secondary education. The curriculum and textbooks are determined by Turkish Board of Education which is a board under MoNE. In

primary schools, there are compulsory and elective courses, and teachers are free to choose their teaching methods.

In compulsory education, the term of school year is not less than 180 work days, it is divided into two semesters, and the schools are open five days a week, from Monday to Friday. The number of lessons per week is 30, and the average number of lessons in a day is six. A full school day, in general, is from 9 a.m. to 3 or 4 p.m. However, in order to increase the capacity of public schools in crowded places, there can be two separate shifts of schooling (morning and afternoon) (MoNE, 2001).

Classrooms include the same age group of students with the exception of late starters or repeaters. In grades one to five, class teachers are individually responsible for their classes, except for some subjects in grades four and five. In grades six to eight, and in grades four and five, subject teachers (field specialists) are responsible for certain lessons.

Pupils are assessed on a descending scale from five to zero, marks from two to five correspond to a "pass", and marks 0 or 1 correspond to a "fail". There are no exams for the pupils in 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> grades, their evaluation is based on teachers' observations of students' performances during the lessons. In grades four to eight, there are two or three exams according to the course hours in a week per term. Pupils receive a primary education diploma at the end of compulsory education (Eurydice, 2008).

In Sweden, students attend publically funded schools. There are also grant-aided independent schools which have the same curricula, and get grants from the municipalities. Grant-aided independent schools are organized by associations, companies, individuals or foundations, and they cannot charge fees. There are some private higher education institutions. The Government has the main responsibility for education at all levels, but the municipalities are responsible for providing and operating schools for compulsory, secondary, and adult education levels (OECD, 2003).

The Swedish National Agency for Education is responsible for evaluation, followup, and monitoring pre-schools, schools, and adult education. The National Agency for Higher Education is responsible for those issues in tertiary education. Most of the public education below university level is under the responsibility of municipalities, and most of the higher education institutions, which are autonomous, are organized by the Government (OECD, 2003).

The compulsory education is free of charge, and it lasts for nine years. It is coeducational, and organized in a single structure. Children between the ages of 6/7, and 15/16 attend compulsory schools. In Sweden, education is provided at four levels: preprimary education, compulsory education (primary and lower secondary education), post-compulsory education (upper secondary level) and higher education. Compulsory education has two parts: primary education (grades one to six) and lower secondary education (grades seven to nine) (OECD, 2003).

The school year lasts at least 178 days, and it is divided into two terms. The exact date of the school year changes from one municipality to another. The schools are open five days a week. Each school determines the length of the school day, number of hours in a day, and the schools opening and closing hours. In the lower grades of primary school, normal hours are from 8 a.m. to 13.30 p.m., the length of the school day

increases with the pupil's age. National regulations specify the minimum number of hours taught during the compulsory education(Eurydice, 2008).

In classes, pupils are mostly grouped according to their age. In first three years, the class teacher is responsible for all subjects except some branches such as music, and physical education. In grades four and five, specialized teachers teach languages, mathematics, craft and art. From classes six, all teachers are specialized for teaching two or three subjects.

There is a national curriculum which is the basis for the municipalities` general aims for school activities, and each school has a work plan based on the national curriculum and local priorities. Teachers and institutions have the freedom to choose teaching methods and materials. The books, tools, and other necessary materials for education are free of charge. Pupils have free lunch, and free school transportation in compulsory schools; municipalities are responsible for those issues.

Pupils automatically move to a higher grade each year, grades are given at the eight grade with a three-point scale: pass (G), pass with distinction (VG), and pass with special distinction (MVG). Pupils who successfully complete the compulsory education are awarded with a school leaving certificate (Eurydice, 2008).

## 2. Literature Review

## 2. 1 Working Conditions of Teachers

Working conditions can be regarded from different perspectives. In general, they can be defined as the physical and psychosocial aspects of the workplace. Working life is important for all individuals, it contributes to a person's wellbeing, helps people to have social relations, develop skills, and earn their living. Working life may also have negative effects on individuals; physical and psychosocial aspects of work may have some hazards for individuals (Haggqvist, 2004).

Education is accepted as the most crucial element of development. Schools as social organizations have significant effects on teachers. For this study, working conditions of teachers are defined as the physical and psychosocial aspects of schools. Some examples of the physical conditions are resources of school, number of students per class, and noise level at school. Some of the psychosocial conditions are relations with pupils, parents, colleagues and school principals, constant changes, time pressure, workload, and role conflict (Direk, 2003; Holloway, 2002). Both physical and psychosocial aspects of the work place have great importance on teachers' well-being which has effects on students' well-being (Dollard, et al., 2003).

Teachers' perception of their working conditions includes teachers' evaluations and observations of their physical and psychosocial working conditions, it is dependent upon the individual teacher and individual school. Working condition elements in a school perceived by a teacher may not be the same as the ones perceived by another teacher in an another school. That is why factors of working condition are accepted as context and person specific (Zhao, 2007; as quoted in Öztürk, 2008; Skolverket, 2004).

There have been changes in working conditions of people, because of the socio-economic, technological, and educational changes in recent years. Working conditions of schools also have been influenced by those changes. In the past, teachers were only responsible for transmitting knowledge and information to students, but today, teachers' role has changed as a result of advanced technology, globalization, and educational changes. Now, a teacher's role is described as being a mentor and a coach, helping students to develop his or her motivation, and search for knowledge (Daun, 2004).

Teachers have to consider the technological, organizational, and pedagogical changes, and also the changes in students` relationship to information and knowledge; they have to take into account both the academic development of students, and their social and psychological well-being (Greenglass & Burke, 2003).

Good working conditions such as good relationships and a suitable workload at schools have positive influences both on schools and teachers. Some of these positive influences are reducing teachers' stress, turnover, absence, sickness, and are increasing teachers' motivation, job satisfaction, cooperation, and effectiveness in classrooms, and increasing student achievement (Direk, 2003; Erken, 2002; Skolverket, 2004; Tye & O'Brien, 2002; Velez-Arias, 1998; Williams, 1995). On the other hand, bad working conditions such as work overload, crowded classrooms, low salary and status, students' behaviour and motivation problems, poor physical conditions, lack of necessary resources, low support from administrators, colleagues, and parents have a negative impacts on teachers. Some of the negative impacts are high level of stress, poor morale, and low job satisfaction (Işıkhan, 2004; as quoted in Sümer, 2007; Ko, 2003; Pehlivan-Aydın, 2002; Vogel, 2004). Good psychosocial working environment has positive effects on students' learning and satisfaction in school (OECD, 2003).

Erjem (2004) found that a significant percentage of public high school teachers working in Istanbul did not feel committed to their work places, because of the working conditions at schools. Most of the teachers were not happy with their school administration, physical conditions, crowded classrooms, and workload.

Turkey has a centralized educational system established by the MoNE. Turkish teachers' working conditions are controlled by the government, and teachers working at public schools are employed by MoNE. Teachers mainly have three types of working status: permanent, contracted or temporary status. Permanent status is the most common one. At public schools, mostly permanent teachers work full-time as public officials (civil cervants), and their service conditions are regulated by the Constitution and Civil Servants Law no 657. This law regulates the recruitment, qualifications, promotion, social rights, salaries, and undertakings of public officials (Eurydice, 2008).

In Turkey, there have been educational reforms in recent years, and globalization and socio-economic demands have affected educational policies. Some of the educational changes in primary education are the development of new curriculum, increasing the duration of compulsory education from five to eight years, changes in central examinations for access to secondary education, use of information technology and computers, and elimination of settlement-based differences in education. Because of these changes, teachers have new responsibilities and new roles (Eurydice, 2008).

Crowded classrooms, double shift education, lack of equipment and finance, problems related to the training, economic conditions, and social status of teachers are some of the problems of education in Turkey. At primary level, classrooms are on

average more crowded, and there are more students per teacher than in nearly all other OECD countries (OECD, 2007).

In Sweden, there have been educational changes also, and those changes have altered the nature and conditions of teachers' work. One of the major educational change in Sweden is the decentralization process in education. From the beginning of 1990s, the level of decision-making and management of schools has became highly decentralized, and the schools have been given new tasks and different conditions. Local authorities, school principals, and teachers have new and broader responsibilities. Now, the teaching profession is more demanding and is seen as more important than before (OECD, 2003; Skolverket, 2004). Teachers' workload has also increased after decentralization. Besides lesson planning and teaching, teachers need to be involved in curriculum development, arranging progress of students at least once a semester where not only the academic performance of a student is discussed but also his/her social development (Daun, 2004).

Sweden has became a multi-cultural society, as a result of immigration, and that creates the need to understand, and respect different cultural identities. Now, teachers are expected to have broader sociocultural skills (OECD, 2003). There have been changes in the frequency of collaboration between teachers as well, teachers are expected to work together in small groups, and teamwork has became more important (Daun, 2004; Skolverket, 2005). Teachers are expected to jointly take responsibility for the learning and development of students. The social and administrative aspects of teachers' work has increased in significance and scope (Skolverket, 2004).

In Sweden, a study (Skolverket, 2006), which comprised 120 schools, 1866 teachers and 6788 students, found that some proportions of teachers' workload has increased such as parental contact, students' individual needs, students with special needs and interventions for them, team meetings, and joint conferences; teachers also mentioned that the content of their work and responsibility in teaching have increased. The study showed that almost half of the teachers sometimes or always experience poor discipline or disruptive noise during the lessons, and teachers sometimes had negative relationships with their administrators, colleagues, and students. The study also revealed that for teachers, happiness with the administrators and students are more important than happiness with the colleagues and work team.

An OECD (2003) report clarified that in Sweden in order to reduce the absence among teachers and making the teaching profession more attractive, it is necessary to improve the status of the profession, raise teachers' pay, improve teachers' opportunities for greater participation, reduce their workload in order to improve their work environment and working conditions. Better school management, sufficient resources, and smaller groups of students are some other suggestions for retaining and attracting effective teachers. In this report, it is also stated that some teachers were frustrated about the poor working conditions such as large groups of students, heavy workload, not effective management, the problem of substitute teachers, and increased administrative duties.

For public compulsory schools in Sweden, teachers are employed by municipalities, and they are municipal employees, each school has the freedom to decide on employing teachers. Most of the teachers have indefinite term contracts, and some of them are

employed under fixed-term contracts. Teachers employed under indefinite term contracts are covered by the Employment Security Act (OECD, 2003).

Salaries, working time and working conditions of teachers are decided by collective agreements between the employers and teacher unions. The Swedish Association of Local Authorities and Regions (SALAR) negotiates with the teacher unions for the rights of teachers (Eurydice, 2008).

### 2. 2 Stress and Teachers' Job Stress

There is no agreement on a single definition of stress, but there have been some common views about it. First, stress is accepted as a multidimensional concept, there are different dimensions of stress, and it consists of many variables and processes. Second, stress is defined as meaning a group of related but distinct constructs which differ from person to person, that is why, stress is a perceptual concept (Cooper & Dewe, 2004). In general, stress can be defined as the physiological and psychological state that results when the resources of the individual are not sufficient to cope with the demands and pressures of the situation (Dollard, et al., 2003).

There is no comprehensive theory that fully defines job stress. Although it has been used in many research articles, researchers still discuss the meaning of it. In general, job stress is accepted as an on-going process with multiple and continuous interaction between a number of elements (Bradley, 2004; Hollifield, 2005).

For this study, teachers' job stress is defined as teachers' physiological, psychological, and behavioral responses resulting from the demanding aspects of their work as a teacher (Dollard, et al., 2003). Stress levels of teachers are dependent on the individual teacher and the individual school, what is stressful for one teacher in one school may not be stressful for another teacher in an another school (Dunham & Varma, 1998).

Stress at work costs a great deal of money to organizations including schools. Aspects of the working conditions at schools, besides the personal characteristics of teachers influence the degree of teachers' perceived job stress (Griffith, et al., 1999). Since this study considers the effects of stress in terms of perceived working conditions of teachers, their personal characteristics are not considered.

School is an environment of continuous interactions and social relations which may generate a psychosocially stressful work environment for teachers. Changes in teachers' profession and role have impacts on teachers' job stress. Now, teachers have to consider not just providing on-site education but also providing a life-long learning for students, and they have to motivate students for their own individual learning (Dunham & Varma, 1998).

According to previous research<sup>1</sup> on teachers` stress, reasons of teachers' job stress related to their working conditions are poor physical environment, crowded classrooms, noise level, lack of resources and facilities, students with low ability and low motivation,

8

<sup>&</sup>lt;sup>1</sup> Previous research includes Black, 2003; Blase, 1986; Certo & Fox, 2002; Dunham & Varma, 1998; Goddard, 2000; Hoffman, 2000; Holloway, 2002; Ko, 2003, Pierce & Molloy, 1990; Wilson & Hall, 2002.

increased workload, behavioral problems of pupils, low salary, lack of professional regard, paperwork, time pressure, low status, too many duties not related to teaching, few or no breaks, school management and administration, lack of time for lesson preparation, changes of educational policies, taking work home, guidance related aspects of work, covering lessons for absent teachers, a growing shift of responsibility from family to school; sources related to the relations with pupils-parents-school principals-colleagues; and sources related to the role of the teacher.

Teachers have to handle demands and pressures from society, media, pupils, parents, school principals, and colleagues, and those demands may cause role conflict for teachers. Constant changes in educational policies is also a major source of stress, since teachers have to acquire new skills and responsibilities at an unrealistic speed (Conley & Woosley, 2000; Dollard et al., 2003; Goddard, 2000).

Previous studies<sup>2</sup> in Turkey about teachers' stress state that some of the teachers' stress is related to educational policies, inspections, students, work overload, poor relations with colleagues, low salary, poor career opportunities, noise, time pressure, paperwork, overcrowded classrooms, frequent changes in educational policies, lighting, no spare time, role complexity, low status, ventilation, cleaning, inadequate resources and facilities, centralized administration, instructional problems, no opportunities for involvement in educational decisions, not enough lesson hours, bureaucracy, lack of administration-teacher-student-parent cooperation, responsibility for students, higher pressure and demand on teachers, law administrative and parental support, organizational structure and organizational climat and poor appreciation of the teaching profession.

Research in Sweden about teachers' stress reveales that some of the reasons of teachers' stress are related to poor working conditions, work overload, teamwork, bad air, noise, low salary levels and social status, class size, lack of resources, the problems of substitute teachers, no effective management, extracurricular activities, increase in administrative duties, evaluations, documentation, and paperwork, demanding teaching situation, budget problems, and lack of opportunities for professional development. According to research carried out by the Swedish Teachers' Union, about 35,000 qualified teachers between 20-55 years old, who worked as teachers before are no longer working work in the public schools; men left the teaching profession because of low pay, and women because of high stress levels (Arbetsmiljöverket, 2003; OECD, 2003; Skolverket, 2006).

Teacher stress became a major area of stress from the start of the 1990s. The teaching profession is one of the most stressful professions, it demands active involvement and commitment (Kyriacou, 2001; Mendelson, 1990; Travers & Cooper, 1993). Especially, teaching in public schools is characterized as a high stress occupation, because in public schools there are pupils from more heterogeneous backgrounds than in private schools. Previous researchers indicated that teachers' job stress has affected the physiological, psychological and behavioral well-beings of teachers, the school as an organization, welfare of pupils, attainment of educational objectives, and quality of education in general (Black, 2003; Weidner, 2002).

9

<sup>&</sup>lt;sup>2</sup> Previous studies include Acar, 2006; Alemdar, 2002; Aslan, 1995; Ataklı, 1999; Ay, 2003; Bilek, 2001; Bulut, 2005; Direk, 2003; Ekinci, 2006; Erden, 1998; Ertekin, 1993; Karadavut, 2005; Kırılmaz et al., 2000; Önsan, 1996; Özdayı, 1990; Pehlivan-Aydın, 2002; Tufan 1997; Yıldırım, 2008; Zoraloğlu, 1998.

#### 2. 3 Effects of Job Stress on Teachers

Individuals may show some negative responses when they face job stress (Wallius, 1982). There are many studies of effects of job stress on teachers. According to those studies, job stress, which results from working conditions at schools, mostly cause psychological problems for teachers (Milbourne, 2006).

Effects of stress on individuals, which are called strains, can be categorized as physiological, psychological, and behavioral effects (Cooper & Dewe, 2004). Some of the examples of **physiological effects** are stomachache, headache, being tired, digestion and ulcer problems, physical exhaustion, increased heart rate, sweating, chest pain, back ache, and being out of breath; some of the psychological/emotional effects are anxiety, anger, depression, boredom, frustration, job dissatisfaction, emotional exhaustion, feelings of inadequacy, hostility, burnout, avoiding cooperation, having a quick temper, being tense, being lonely, no time for leisure or family, reductions in morale and general well-being, feeling unhappy about job, disturbed cognitive functioning, feeling panic, withdrawing from supportive relationships, inability to concentrate, not being able to psychologically relax from work during leisure time, poor decision making and bad judgement. Some of the behavioral effects are restlessness, over/under eating, use of cigarette, alcohol and drugs, taking sedatives, absenteeism, sick leave, tardiness, and sleeping problems (Bradley, 2004; Conley & Woosley, 2000; Cox et. al., 2000; Dollard, et al., 2003; Dworkin et al., 1990; Griffith et al., 1999; Hargreaves, 2001; Travers & Cooper, 1993; Younghusband, 2005). Black (2003) mentioned physical and emotional exhaustion as one of the most important stress outcomes for teachers. Younghusband (2005) mentioned that as the teachers experienced pressures and demands without adequate resources and supports, they had physical, and psychological/emotional effects of stress.

According to Brown & Ralph (1998; as quoted in Reategui, 2006), there are some main effects of stress on teachers: Stress adversely affects teachers` work performance, it may cause job dissatisfaction, low productivity level, concentration problems, having problems in managing time and meeting deadlines, and feelings of inadequacy. The relationship with colleagues is also negatively affected by job stress; not being willing to cooperate, low level of motivation, role conflict, not being willing to have supportive relationships, having aggressive and irritative feelings, becoming more introverted, inability to communicate with colleagues, and having conflicts. Teachers also have behavioral problems as a result of job stress such as poor appetiate, increased consumption of alcohol, cigarettes, coffee, etc., sleeping problems, having nightmares, inability to feel relaxed, and being too fussy.

According to previous studies in Turkey, effects of stress can be classified into physiological, psychological, and behavioral effects. Some examples of *physiological effects* of teachers' job stress are health problems, sore throat, feeling chest pain and back ache, high blood pressure, loss of voice, indigestion, ulcers, migraine, digestive disorders, headache, fatigue, psychosomatic illness, muscular tension, and skin disease; *psychological effects* are anxiety, tension, frustration, anger, hostility, job dissatisfaction, reductions in morale, burnout, emotional and mental exhaustion, poor personal relations, inability to concentrate, irritability, low motivation, forgetfulness, pessimism, unwillingness, depression, poor cooperation, and feelings of incompetence;

behavioral effects are smoking, drinking alcohol, under/over eating, sleeping problems, violence, injures at work, and taking sedatives. There are also some organizational effects of job stress such as low level of performance and productivity, too much expenses for health problems, turnover, absenteeism, failures and accidents at work, feelings of alienation to work (Baltaş & Baltaş, 2002; Kırel,1994; Pehlivan-Aydın, 2002, Sabuncuoğlu, & Tüz, 2001; Telman & Ünsal, 2004; Tınar, 1996).

Research in Sweden demonstrated that job stress may cause physiological problems such as heart diseases, psychosomatic illness, fatigue, mascular tension, indigestion; psychological and emotional problems such as anxiety, dissatisfaction, dejection, depression, fear and frustration, burnout, helplessness, insecurity, vulnerability and inadequacy, general uneasiness, irritability, emotional fatigue, resentment towards administration, negative self-concept and low self-esteem, nervousness, aggressiveness, concentration difficulties, and apathy; behavioral problems such as appetite disorders, excessive smoking and drinking alcohol, drug abuse, violence, and inability to sleep (Arbetsmiljöverket, 2003).

## 3. Methodology

## 3. 1 Research Design

This study is comparative, it compares perceived working conditions, job stress, and effects of job stress of public compulsory school teachers working in Istanbul, Turkey, and in Stockholm, Sweden. The qualitative research method chosen for this research is a case study using semi-structured interviews for data collection.

Case study provides an opportunity to study a topic in depth and to gain understanding from the perspective of sampled people, and it is an ideal design for understanding and

interested in how teachers make sense of their working conditions, job stress, and effects of job stress. Because of this, case study is the appropriate method for this research.

## 3. 2 Sample and Research Setting

The sample taken from the population was 36 Turkish teachers working at public compulsory schools in Istanbul, and 32 Swedish teachers working at public compulsory schools in Stockholm. In the Turkish sample, there were 22 female and 14 male class and branch teachers teaching from grade one to grade eight, and in the Swedish sample, 23 female and 9 male class and branch teachers working with pupils from grade one to grade nine (Table 3.1).

The interviews in Istanbul were conducted only at one district with a low socio economic status. Most of the schools in Istanbul had two-shift education, and there were overcrowded classrooms. The research settings in Stockholm were five districts mostly with a high socio economic status. The classrooms in Stockholm were not as crowded as the ones in Istanbul. Most of the schools both in Istanbul and Stockhom had some basic facilities such as laboratories, classrooms for arts, restrooms for teachers etc., but

since there are diffferences in the curriculums of Turkey and Sweden, the schools in both countries had specific certain subjects for different reasons. For example in Stockholm, there were classrooms for home and consumer studies.

The research setting was chosen on the basis of a quick establishment of researcher-participant relationship, because of time and cost issues.

In neither Istanbul or Stockholm were the guidance counsellors, special education teachers, school principals, and vice principals not included in the research, because they do not have the same working conditions as class and branch teachers.

Table 3.1 Gender Distribution of Turkish and Swedish Teachers

Gender	Turkish	%	Swedish	%
	Teachers <sup>3</sup>		Teachers <sup>4</sup>	
Female	22	61	23	72
Male	14	39	9	28
TOTAL	36	100	32	100

With respect to age (Table 3.2), Turkish teachers were mainly young, while the Swedish teachers were middle-aged.

Table 3.2 Age Distribution of Turkish and Swedish Teachers

Age	Turkish	%	Swedish	%
	Teachers		Teachers	
25-29	20	55	3	9
30-34	11	30	5	16
35-39	5	15	5	16
40-44	0	0	6	18
45-49	0	0	5	16
50-54	0	0	5	16
55-59	0	0	0	0
60-	0	0	3	9
TOTAL	36	100	32	100

Considering the teachers' position, working as class or branch teacher (Table 3.3), there were 20 class teachers, and 16 subject teachers in the Turkish case, while the majority of the Swedish sample was class teachers.

<sup>&</sup>lt;sup>3</sup> Teachers in the Turkish sample

<sup>&</sup>lt;sup>4</sup> Teachers in the Swedish sample

Table 3.3 Position Distribution of Turkish and Swedish Teachers

Position	Turkish	%	Swedish	%
	Teachers		Teachers	
Class Teacher	20	56	25	78
Branch Teacher	16	44	7	22
TOTAL	36	100	32	100

#### 3. 3 Data Collection

For this study, the literature references, library books, PhD, and Master's theses, internet, documents from Skolverket, Eurydice, and OECD have been used, and interviews have been conducted.

#### 3. 3. 1 Interviews

Interviewing is the best data collection method when conducting intensive case studies of a few selected individuals. It allows the researcher to respond to the situation at hand, to the emerging worldview of the respondents, and to new ideas on the topic (Merriam, 1998).

Interview is probably the most widely used method in qualitative research, the interview process is flexible and the emphasis is on how the interviewee understands issues and events (Bryman, 2004). Conducting interviews is relevant in this research, because this study focuses on how teachers interpret and perceive their working conditions, job stress, and effects of job stress.

A semi-structured interview with open-ended questions was employed (Appendix 1). In-depth, person-to-person interviews were conducted with the volunteered teachers. Interview questions were prepared according to the research objectives and the related literature review. The first part of the interview was about teachers' background characteristics such as gender, age, marital and parental status, total and present tenure, and position in the school. The second part of the interview was about teachers' working conditions, job stress, and effects of job stress.

Interviews with Turkish teachers were conducted in Turkish, and interviews with Swedish teachers were conducted in English, by the researcher.

#### 3. 4 Research Procedure

For selection of Turkish sample, the researcher visited schools in one district in Istanbul in the school year of 2006-2007. The researcher first met with the school principal, and gave information about the study, then met with the teachers, and conducted the interviews with the volunteered teachers.

For sample selection of Swedish teachers, the web page of Swedish National Agency for Education (Skolverket) was used as a source. The public compulsory schools of Stockholm municipality were selected, and teachers were randomly selected

from the name lists on Skolverket's web page. The researcher sent e-mails to 74 teachers in the school year of 2006-2007. In the e-mails, the researcher gave information about herself, her study, and the reason for the interview. Nine teachers volunteered, and interviews were conducted with them in March/April 2007. The researcher sent e-mails to 276 teachers in the school year of 2008-2009, but since few teachers volunteered the researcher found contact persons to reach more teachers. 23 of the Swedish teachers were interviewed in October/November 2008.

For both the Turkish and the Swedish sample, the date, place, and length of the interviews were decided by the teachers. The duration of the interviews varied from 30 minutes to one hour and 45 minutes, on average, the interviews lasted 40 minutes.

During the interviews, the researcher took notes for preserving the information. After each interview, the researcher grouped the data into categories. All interview transcripts were read several times, and possible connections between the categories were taken into account, until the dominant categories were decided. These categories were based on the research questions and the related literature.

#### 4. Results

The findings of the study related to working conditions that cause job stress were categorized into nine themes for the Turkish and Swedish samples. This categorization was done according to the responses of teachers to open-ended questions. After all the interviews had been conducted, the researcher consructed nine themes which were physical environment and resources, workload and time pressure, changes in educational policies, students, parents, rewards, relations with colleagues and principals, role conflict, school structure and management.

Results related to effects of job stress were categorized in three themes both for the Turkish and Swedish samples. These three consequences of job stress were grouped as: physiological, psychological and emotional, and behavioral effects. This categorization was done after finishing all the interviews.

## 4. 1 Physical Environment and Resources

Concerning physical environment and resources (Table 4.1), both Turkish and Swedish teachers pointed out noisy, and crowded environment, number of students in class, physical conditions (light, cleaning, ventilation etc.), resources of the school (laboratories, computers etc.), and teaching materials as job stress reasons in their work places. Differently to Swedish teachers, Turkish teachers mentioned lack of space in classes as a stress factor, and differently from Turkish teachers, Swedish teachers stated school's situation, small/old buildings, teachers' restrooms and work rooms, and lunch time as stress sources.

Table 4.1: Percentages of the Teacher Samples Mentioning Physical Environment and Resources that cause Job Stress

Categories	Turkish	Swedish

	Teachers %	Teachers %
Noisy, and crowded environment	85	84
Number of students in class	83	71
Physical conditions of school, i.e.: light, cleaning, air-condition, dirth, ventilation	83	81
Physical facilities, and resources; laboratories, projector, computers, equipments, photocopy machines	79	72
Teaching materials	53	48
Lack of space in classes	29	
School's situation, small/old school buildings		31
Teachers' restrooms, kitchen		28
Teachers' working rooms, desks, chairs, computers		18
Lunch time		11

Teachers' responses to physical environment and resources were mostly the same between the two groups. They mentioned their feelings of this theme as:

"The main reason for my job stress is the overcrowded classrooms, there are too many students in a class. This is the major cause of my tiredness. I have to talk more, I have to work more, and I have to explain more" (Turkish teacher).

"Inadequate or unusable equipment" (Turkish teacher).

"Too much noise, and dust, classrooms are not clean enough. It negatively affects my health" (Turkish teacher).

"Noise at school is a big problem, noise from students at breaks, and noise from other classes. The walls and windows are not well isolated, I can hear the noise from the next class, when they watch TV, I hear them. The location of the school is also important, it is too close to the main road, so there is traffic noise from outside, and this is disturbing" (Swedish teacher).

"Too much noise, the school is too crowded, the students are everywhere" (Swedish teacher).

"The school building is very old, not enough lights in corridors. The personnel room is not clean, the light in the personnel room is not working, but we need light" (Swedish teacher).

#### 4. 2 Workload and Time Pressure

In terms of workload and time pressure (Table 4.2), too much work, taking work to home, less time, paperwork and computer work, number of teachers, changes in educational policies and new responsibilities, lots of things to remember and focusing on many things were indicated by both Turkish and Swedish teachers as sources of stress at work place. Unconcerned parents, and no time for professional development were stated as stress factors by Turkish sample, while none of the Swedish sample

stated them as stress reasons. Differently from Turkish teachers, *meetings with colleagues and parents, tight deadlines*, and *non teaching hours and things to do apart from teaching* were pointed out as sources of job stress by Swedish teachers.

Table 4.2 Percentages of the Teacher Samples Mentioning Workload and Time Pressure that cause Job Stress

Categories	Turkish Teachers %	Swedish Teachers %
Too much work, take work to home	88	90
Less time	88	90
Paperwork, computer work	85	93
Number of teachers	79	40
Unconcerned Parents	76	
Lots of things to remember, focusing on many things	71	68
Changes in educational policies new responsibilities	64	56
No time for professional development	32	
Meetings with colleagues and parents		93
Tight deadlines		78
Non-teaching hours, things to do apart from teaching		70

Several participants described the difficulties of workload and time management as:

"I do not have enough time for my family, because of my job. I have to work at home also. I do not feel as I raise my children by myself" (Turkish teacher).

"There is a lots of paperwork in this curriculum, it is a reason of work overload. I have to teach a certain amount of curriculum in a short time, and this creates ressure" (Turkish teacher).

"Too many things to remember, and this causes stress. Sometimes all the small things come together and take lots of time. We have to decide very quickly, the feeling that I have to make many decisions in a very short time causes stress" (Turkish teacher).

"We have a lot of things to do, but have no time to do them. I have to take work to home. Lots of paperwork to do. Psychological problems of students increase day by day, and this increases the workload. There is time pressure, working time is same but the responsibilities have increased" (Swedish teacher).

"Much more work to do; more administrative works to do, paperwork, computer work, filing students' presence-absence papers and development reports, calling parents for meetings, sending e-mails to them, writing reports etc, all of these are very stressful" (Swedish teacher).

"I have to attend to meetings, almost every day there is a meeting, and it makes me feel stressed, because it takes extra time. Teaching profession is always continuous, you never finish your work. It is a good job, but there is no end" (Swedish teacher). "We have the same working hours, 45 hours per week, but the demand on us getting higher and higher; government, parents, principals want more and more from us, when can we do all those things that they want from us" (Swedish teacher)?

"Extra things apart from teaching cause stress. Time is everything, I want to do the things that I am responsible for, but when I have extra things to do, I get stressed, because I can not do my real job, teaching my subject" (Swedish teacher).

"I think, teaching is a hard job, because each day you have to do some different things, and for being satisfied, you have to do more. The time is not enough for all the things, you some kind live with your work. Meetings with parents take a long time. Having meetings, preparing for them, and trying to be a happy teacher, all of these things stress me a lot" (Swedish teacher).

## 4. 3 Changes in Educational Policies

When examining changes in educational policies (Table 4.3), it is found that too much paper work, administrative things, computer work etc. were pointed out as a job stress reason by the large majority of the respondents; new responsibilities and higher pressure, and demand stated as a job stress factor by almost the same percentages of the Turkish and Swedish teachers. Student centered education was mentioned as a stress factor by almost the same percentages of the Turkish, and Swedish respondents. New curriculum and lots of topics to cover, and in service training were mentioned as job stress sources by only Turkish teachers. Differently from Turkish sample, too many meetings and conferences, more responsibility than parents, being more responsible for social and psychological well-being of students, increased working hours, national goals, decentralization, and teaching status were pointed out as job stress reasons by the Swedish teachers.

Table 4.3 Percentages of the Teacher Samples Mentioning Changes in Educational Policies that Cause Job Stress

Categories	Turkish Teachers %	Swedish Teachers %
Too much paper work, administrative things, computer work, photocopy, filing etc.	88	90
New responsibilities, higher demands and pressure	78	79
New curriculum, lots of topics to cover	68	
Student-centered education	65	56
In-service training	29	
Too many meetings, conferences		90
More responsibility than parents		81
Being more responsible for psychological and social well-being of students		78
Increased working hours		53
National goals		46
Decentralization		43
Teacher status		37

Teachers reported their thoughts about changes in educational policies as:

"The pressures on us have been growing, the government have high demands on teachers, it was less before. Teaching hours have increased; working time is the same, but teachers responsibilities have increased. Now, the teaching profession is student-centered, before it was teacher-centered" (Turkish teacher).

"These days there are much more demands on teachers than before" (Turkish teacher).

"Too many changes in educational policies, and too often, there have been lots of changes in selection exams of pupils, in curricula etc" (Turkish teacher).

"Now, we have many meetings, and there has been an increase in non-teaching hours in school. The main job of teaching is shrinking, other things take longer time, this causes stress. Now, teachers have lots of things to do outside the classroom" (Swedish teacher).

"Working hours are longer now, you work more with the parents ie: inform parents much more than before, sending e-mails, meetings with them etc. There is more paperwork than before, and it is more time consuming, you work more" (Swedish teacher).

"When I started teaching in 70s, I was a telling-explaining-talking teacher, but now, less time for this, I always have to take the attention of students, because they lose interest and attention very quickly. Many young teachers quit working, because it is hard" (Swedish teacher).

"When I was a young teacher, I had more time for my teaching, but nowadays there are lots of other things to do. Now, there are more documentation, call the parents for students evaluation, get in touch with other colleagues, more responsibility for pupils' pedagogy etc. For me documentation and administrative tasks are not good, time you spent for it can be used for students. I prefer to use my time for my students and for my teaching not for documentation. Now, teachers are not for teaching, but for dealing with papers" (Swedish teacher).

"Nowadays the emphasis is moving from teaching to students' special needs, we are more responsible for teaching them what is right or wrong. Instead of focusing on teaching my subject, I focus on students' well-being" (Swedish teacher).

#### 4. 4 Students

Considering students (Table 4.4), relations with students, psychological and social well beings of students, behavior problems, motivation level, discipline issues at class, ability level, rewards and punishment, and effects of changes in society were stated as job stress reasons by both Turkish and Swedish teachers. Attitudes and interests of students was mentioned as a stress source only by Turkish teachers. Achieving individual goals, and demands on children from their parents were pointed out as job stress factors only by Swedish teachers.

**Table 4. 4 Percentages of the Teacher Samples Mentioning Students that Cause Job Stress** 

Categories	Turkish Teachers %	Swedish Teachers %
Relations with students	94	93
Psychological and social well-being	91	90
Attitudes, interests of students	88	
Behavior problems, fights, accidents etc.	85	81
Motivation level of students	82	81
Hold discipline in class	76	78
Ability level of students	73	68
Rewards and punishment for students	61	34
Effects of changes in society	51	56
Achieving individual goals		86
Demands on children from their parents		25

Participants expressed their feelings about students as following:

"Responsibility of the students is a big issue, and it makes me feel stressed" (Turkish teacher).

"Students not prepared for lessons causes stress" (Turkish teacher).

"Students with discipline problems, emotional problems are major sources of my job stress" (Turkish teacher).

"I have problems with disrespectful and disobedient students. Sometimes it can be difficult to teach the lesson, because of the students with behavioral problems" (Turkish teacher).

"When the pupils do not progress, and when I do not know what to do for them, I feel very stressed. I feel that I am not enough for them. When you have so many responsibilities, but do not have enough time, it causes problems" (Turkish teacher).

"Try to help students reach their goals makes me feel stressed, I am responsible for it. Pupils think that the teacher has to help me to pass my class, I do not have to achieve, my teacher has to help me" (Swedish teacher).

"I think I am full of with my job. It is really an important profession, one of the most important profession, you affect students' lives, and their opinions about school in general. I teach how to behave also, so it is important, teachers have to be good role models" (Swedish teacher).

"When the students are noisy in the classroom, I feel stressed" (Swedish teacher).

"Instead of teaching, having to deal with pupils' personal, and behavioral problems is not nice. I want children have nice opinions about the school, I do not want them have negative ideas when they go home" (Swedish teacher).

"When I see unhappy pupils, it causes stress, students' personal problems make me feel stressed, I have to deal with pupils' personal problems, some parents can not take care of their children. Basically, it is the kids that makes me feel stressed" (Swedish teacher).

#### 4. 5 Parents

When examining the issue of parents (Table 4.5), it was found that relations and cooperation, demands and pressures on teachers, unconcerned and uninterested parents, attitudes towards teachers, relations with and attitudes towards their child were mentioned as job stress factors by Turkish and Swedish teachers. Parents' education level was revealed as a reason of job stress only by Turkish teachers. Meetings with parents, problems in parenting role, parents' demands on their child, and parents' personal problems were stated as job stress sources only by Swedish teachers.

**Table 4. 5 Percentages of the Teacher Samples Mentioning Parents that cause Job Stress** 

Categories	Turkish Teachers %	Swedish Teachers %
Relations and cooperation	94	87
Demands on teachers, pressures from them, put responsibilities on teachers	92	90
Unconcerned, uninterested parents	91	62
Attitudes towards teachers	88	88
Relations with and attitudes towards their children	76	46
Parents' education level	67	
Meetings with parents		93
Problems in parenting role		40
Parents' demands on their children		25
Parents' personal problems		19

Teachers mentioned the problems related with students as:

"Indifferent parents are reasons of work overload, because we have to spend more time with their children" (Turkish teacher).

"Although some parents do not take any responsibility for their child's education, they interfere in our duties, they give advice to us about our teaching etc. They believe teachers are responsible for everything" (Turkish teacher).

Not having a good cooperation among parents, teachers, and the school is a major reason of job stress" (Turkish teacher).

"Some parents can not set boundaries with their children. So, if the child does not have any boundaries at home, they mostly do not have at the school too" (Swedish teacher).

"Parents do not help much for the students' well-being, today people believe that the school is more responsible for students' well-being than the parents" (Swedish teacher).

"Parents make pressures on their children, they have high expectations and high demands on their children" (Swedish teacher).

"Parents have high demands on us. Here, you have to be the best, all the parents are aware of the importance of the education, and they are very interested in their children's education." (Swedish teacher).

"Parents are both good and bad; they are interested in their child's education, this is good, but they think that they can say what I should do in my job, they tell me what to do, and this is bad" (Swedish teacher).

"Responsibility of parents went from parents to teachers. Teachers have to think about students much more than their parents. There is a big pressure from parents" (Swedish teacher).

"We have too many meetings with parents, and those meetings are very stressful. I have to write comments for each child, it takes too much time" (Swedish teacher).

#### 4. 6 Rewards

Rewards (Table 4.6) were stated as stress sources by teachers. Both Turkish and Swedish respondents mentioned *low salary, low status and recognition* as stress factors. *No opportunity for professional development* was also mentioned as a stress source only by Turkish teachers.

**Table 4. 6 Percentages of the Teacher Samples Mentioning Rewards that cause Job Stress** 

Categories	Turkish Teachers %	Swedish Teachers %
Low salary	92	78
Low status, and recognition	86	75
No opportunity for professional development	51	

Participants stated their feelings about rewards as:

"The status of teachers in the society is not good, everybody thinks that teachers work less, teachers do not have the same authority as before, salary is very low." (Turkish teacher).

"It is a very important job, but it is not valued in the society. Not enough salary, not having good working conditions. There is no encouragement for professional development" (Turkish teacher).

"Salary is not high, comparing to the other jobs. With low salary, it means that you do not have high status, respect, and reputation" (Swedish teacher).

"Teachers have low salary and reputation, long years ago teaching profession was better in terms of both salary and reputation. The responsibility of schools went from the state to the municipalities, this is the reason of low salary and low reputation" (Swedish teacher).

## 4. 7 Relations with Colleagues and Principals

Concerning relations with colleagues and principals (Table 4.7), Turkish and Swedish teachers stated relations and cooperation, and attitudes of principals i.e.: consideration and support level of principals as stress factors. Differently from the Turkish sample, Swedish teachers mentioned team work with colleagues, and pressures and demands from principals as job stress reasons.

**Table 4. 7 Percentages of the Teacher Samples Mentioning Relations with Colleagues and Parents that cause Job Stress** 

Categories	Turkish Teachers %	Swedish Teachers %
Relations and cooperation	77	68
Attitudes of principals towards teachers i.e.:consideration and support level of principals	64	60
Team work with colleagues		75
Pressures and demands from principals		45

Teachers mentioned relations with colleagues and principals in the following way:

"Sometimes there can be problems among teachers, because of the non cooperative teachers" (Turkish teacher).

"The relationship with colleagues is important. Sometimes there can be problems with them, because we all have stress and lots of working" (Swedish teacher).

"I have to cooperate with so many colleagues, if I do not have time to do the things that my colleagues want from me, I get stressed" (Swedish teacher).

#### 4. 8 Role Conflict

With role confict (Table 4.8), being a role model, and difficulties in teacher role i.e.: having parenting role, being sister and friend etc. were stated as stress factors by Turkish and Swedish teachers. Demands from different sources was mentioned as a stress reason only by Swedish respondents.

Table 4. 8 Percentages of the Teacher Samples Mentioning Role Conflict that cause Job Stress

Categories	Turkish Teachers %	Swedish Teachers %
Being a role model	81	69
Difficulties in teacher role; being authoritative or friendly, having parenting role, being sister, friend, being teacher etc.	76	68
Demands from different sources		46

Some examples of teachers' feelings about role conflict are:

"I cannot decide how to behave towards students, to be authoritative or friendly" (Turkish teacher).

"Teachers have too many roles. I am a teacher, a parent, a sister, a friend etc., and this is very stressful" (Turkish teacher).

"It is not just teaching, you also have to have a parental role. I do not have to teach what is right or wrong, I only have to teach my subject. This parenting role makes me feel stressed. Because of it, I lose three or four lesson hours, and I can not have time for teaching my subject" (Swedish teacher).

"If I can just teach my subject, it is not a problem, but dealing with social and psychological problems of students makes a problem, because it increases workload. I think the government should change this. Social responsibility is really a big area, it is difficult" (Swedish teacher).

## 4. 9 School Structure and Management

Most of the differences between Turkish and Swedish teachers are found in the category of school structure and management (Table 4.9). With the Turkish sample, two shifts in education, guarding duty, and length of break are stated as job stress reasons. With the Swedish teachers, pressure on teachers, schedule, competition for students, budget problems, and having different break times are pointed out as stress elements. Both Turkish and Swedish respondents stated teacher shortage and changing classes for each lesson as job stress sources.

Table 4. 9 Percentages of the Teacher Samples Mentioning School Structure and Management that Cause Job Stress

Categories	Turkish Teachers %	Swedish Teachers %
Two shifts in education	81	
Guarding duty	75	
Teacher shortage	74	66
Length of break	64	
Changing classes for each lesson	60	31
Pressure on/demands from teachers		65
Schedule		43
Competition for students		40
Budget problems		37
Having different break times		34

Some of the participants' opinions about school structure and management are:

"Guarding duty is a problem, having to do it twice a week is very stressful, it negatively affects my work performance. It causes physical tiredness, and headache" (Turkish teacher).

"The school management is authoritative and bossy. I wish, there were more cooperative administrators" (Turkish teacher).

"Dual education is an important problem, lessons start very early in the morning, it is early both for students and teachers. Students are sleepless in first lessons, and also they come without having breakfast. So, it takes time for students to adapt to lessons" (Turkish teacher).

"There are not enough number of teachers, sometimes class teachers are responsible for the lessons of branch teachers" (Turkish teacher).

"There are lots of official announcements, I do not have time to read all of them" (Turkish teacher).

"Length of break is not enough both for teachers and students" (Turkish teacher).

"Why do we need to change the classrooms for each lesson. I think, if students change the classes, it would be better, the classrooms would be more clean, and the lessons would be more efficient" (Turkish teacher).

"I have to teach lessons different from my teaching subject, and this is a reason of stress for me" (Turkish teacher).

"It would be better, if I can be at the same classroom for the same lesson. I teach the same subject, but I have to change three or four classes on the same day. Why I have to change classes for the same course? I have to carry the necessary materials, books all the time, this is a problem for me. Who makes the schedule should consider this" (Swedish teacher).

"There are high demands on us from principals, they want teachers to do more and more things, but we still have the same working hours, when can we do all of these things" (Swedish teacher).

"Here, in this school, principals change too often. Administrative staff do not understand teachers. Budget is not enough. Administrators decide how to use the budget" (Swedish teacher).

"Not enough lights in corridors, the lights in the personnel room is not working. The personnel room is not clean enough, photocopy machine has not been working for four days. The relationship with principals is a reason of stress for me. I do not have a good schedule, I do not have enough break time and lunch time in my schedule. Small things cause stress, for example, I want to show a movie to students, but the TV does not work etc" (Swedish teacher).

#### 4. 10 Effects of Stress on Teachers

Concerning stress effects on teachers (Table 4.10), there are mostly similar results for both Turkish and Swedish teachers. *Tiredness, loss of energy, headache,* and *voice* 

problems, sore throat were mentioned as physiological effects of job stress for Turkish and Swedish teachers. Stomach ache was reported as a physiological effects of job stress by only Swedish sample.

With the psychological and emotional effects of job stress, mentally exhausted, need silence, feeling disappointed, getting asocial, avoding to have contact with others, less time for family, friends etc., no time for leisure, feeling unhappy about work, feeling tense, reflecting anger, and problems on others i.e.:family, friends etc., bad mood, loss of motivation, getting angry easily, feeling too much anger were stated as job stress effects by both Turkish and Swedish respondents. Differently from Swedish teachers, Turkish teachers pointed out burnout, worrying about the success of students, feeling uneasy, unwillingness, and feeling incompetent (professionally) as effects of job stress. Forgettingto do things to do, always thinking about the job, feeling empty, cannot make long terms plans, and loss of patience were mentioned as job stress results only by Swedish teachers.

For both Turkish and Swedish respondents, behavioral effects of job stress were drinking problems, over consumption of cigarette, alcohol, coffee, eating disorder, and sleeping problems. In this category, there were no differences between the two groups of teachers.

**Table 4. 10 Percentages of the Teacher Samples Mentioning Effects of Stress on Teachers** 

	Categories	Turkish Teachers %	Swedish Teachers %
Physiological	Tiredness	85	87
	Loss of energy	82	63
	Headache	76	88
	Voice problems, sore throat	39	37
	Stomach ache		47
	Mentally exhausted	79	84
	Need silence	76	86
	Burnout	58	
	Feeling disappointed	58	9
	Getting asocial, avoding to have contact with others, less time for family, friends etc., no time for leisure	58	65
	Worrying about the success of students	55	
æ	Feeling unhappy about work	55	43
Psychological and Emotional	Feeling tense	52	71
	Reflecting anger, and problems on others i.e.: family, friends etc.	50	53
cal a	Bad mood	41	62
ologi	Loss of motivation	35	75
sycho	Getting angry easily, feeling too much anger	29	59
ŭ	Unwillingness	29	
	Feeling incompetent (professionally)	23	
	Feeling uneasy	17	
	Forgetting things to do		62
	Always thinking of job		56
	Can not make long term plans		43
	Feeling empty		25
	Loss of patience		25
Behavioral	Drinking problems, over consumption of cigarette, alcohol, coffee	41	59
	Eating disorder	35	37
	Sleeping problems	29	56

Teachers mentioned their feelings about physiological effects of job stress as:

"Trying to control the noisy students, having to talk loudly in crowded classroom cause tiredness, headache, and sore throat" (Turkish teacher).

"Having to do the guarding duty causes tiredness, and headache" (Turkish teacher).

"Almost always, I have a physical tiredness, and I do not have energy" (Turkish teacher).

"I do not have energy, I feel like empty. I do not feel energetic to do other things. I do not feel to call friends, go outside. The students are difficult, they are weak and problematic, they take all my energy. I just can make daily plans, I can not make plans for the next week. I have energy just for now" (Swedish teacher).

"I have stomachache, and I have to take pills" (Swedish teacher).

"I have headaches, so many people ask questions, students, colleagues, parents etc. I have to speak a lot, talk fast, and I do not like that, you get out of focus, it causes tiredness" (Swedish teacher).

"I have headaches in evenings, I need to sleep early" (Swedish teacher).

"The older I get, the more I feel tired" (Swedish teacher).

"I feel tired, sometimes I have a sore throat because of talking loudly" (Swedish teacher).

"I have headaches, I feel tense, and tired, but I try to sleep seven-eight hours a night, so that helps a lot" (Swedish teacher).

Teachers mentioned their feelings about psychological effects of job stress as:

"When I am stressed, I can not be social. I think, I am not a good mother and wife, when I have job stress. (Turkish teacher).

"I do not want to do anything. I want to sleep, when I go home" (Turkish teacher).

"I feel tense, and I get angry very easily" (Turkish teacher).

"I want to be at silent places, I do not want any kind of noise" (Turkish teacher).

"I lose motivation for the job, sometimes I feel in a bad mood, feel disappointed, and I lose my patience" (Swedish teacher).

"I always think about my job, my social life gets worse. I forget to do the things, because there are lots of things to do" (Swedish teacher).

"I feel sad, and down, I feel bored, I feel as I must do more and more, and it causes stress. I get easily angry with students" (Swedish teacher).

"I always think about the job. My students' lessons are weak, I want them to be better, I am worrying about them. It is not their fault, it is my fault, I want to do my best. It is me who creates the problem, I am so worried about my students" (Swedish teacher).

"I want to rest at home, and do not want any noise, I want silence. I do not want to call anyone. It is very tiring to have continuous communication, relations with students, colleagues, parents etc" (Swedish teacher).

Teachers mentioned their feelings about behavioral effects of job stress as:

"I have sleeping problems, I can not sleep, when I have meetings with parents. Sometimes I have nightmares. I wake up at nights, because of thinking of job." (Swedish teacher).

"When I have job stress, I drink coffee a lot, and I eat much" (Swedish teacher).

"I get tense. I do not want to eat much, because when I feel tense, I can not eat" (Turkish teacher).

"When I have job stress, I smoke, and sometimes I have an eating disorder" (Turkish teacher).

## 4. 11 Summary of the Findings

In summary, the results (Table 4.11) indicate that both Turkish and Swedish teachers experience mostly similar stress reasons, and stress effects. In terms of stress sources, the two groups mainly have similar opinions about *physical environment and resources*, workload and time pressure, students, parents, rewards, relations with collegues and principals, and role conflict. They have different views about changes in educational policies, and school structure and management.

With the stress effects, both Turkish and Swedish teachers have mostly psychological and emotional effects of job stress, and this theme is the one with different responses from the participants. Concerning physiological, and behavioral effects, the two groups of teachers have mostly the same opinions with different percentages. As a result, the inteviews show that teaching is a stressful profession with increasing pressure.

**Table 4.11 Summary of the Findings: Job Stress Reasons** 

Job Stress	Similarities between Turkish and Swedish Teachers	Differences between Turkish and Swedish Teachers	
Reasons		Turkish	Swedish
Physical Environment and Resources	Noisy, and crowded environment  Number of students in class  Physical conditions of the school, i.e.: light, cleaning, air-condition, dirt, ventilation  Physical facilities, and resources i.e.: laboratories, projectors, computers, equipments, photocopy machine  Teaching materials	Lack of spaces in classes	School's situation, small/old school buildings  Teachers' restrooms, kitchen  Teachers' working rooms, desks, chairs, computers  Lunch time
Workload and time Pressure	Too much work, take work to home  Less time  Paperwork, computer work  Number of teachers  Changes in educational policies, new responsibilities  Lots of things to remember, focusing on many things	Unconcerned parents  No time for professional development	Meetings with colleagues and parents  Tight deadlines  Non-teaching hours, things to do apart from teaching
Changes in Educational Policies	Too much paper work, administrative things, computer work, photocopy, filing etc.  New responsibilities, higher demands and pressure  Student-centered education	New curriculum, lots of topics to cover In-service training	Too many meetings, conferences  More responsibility than parents  Being more responsible for psychological and social wellbeing of students  Increased working hours  National goals  Decentralization  Teaching status
Students	Relations with students Psychological and social well-being Behavior problems, fights, accidents etc. Motivation level Hold discipline at class Ability level of students Rewards and punishment for students Effects of changes in society	Attitudes, interests of students	Achieving individual goals  Demands on children from their parents

Parents	Relations and cooperation  Demands on teachers, pressures from parents, put responsibilities on teachers  Unconcerned, uninterested parents  Attitudes towards teachers  Relations with and attitudes towards their children	Parents' education level	Meetings with parents Problems in parenting role Parents' demands on their children Parents' personal problems
Rewards	Low status, and recognition	No opportunity for professional development	
Relations with Colleagues/P rincipals	Relations and cooperation  Attitudes of principals towards teachers i.e.:consideration and support level of principals		Team work with colleagues  Pressure and demands from principals
Role Conflict	Being a role model  Difficulties in teacher role; being teacher, having parenting role, being sister, friend etc.		Demands from different sources
School Structure and Management	Teacher shortage Changing classes	Two shifts in education Guarding duty Length of break	Pressure on/demands from teachers Schedule Competition for students Budget problems Having different breaks

**Table 4.12 Summary of the Findings: Effects of Jobs Stress** 

Effects of Job	Similarities between Turkish and Swedish Teachers	Differences between Turkish and Swedish Teachers	
Stress	Teachers	Turkish	Swedish
Psychological and Emotional	Tiredness  Loss of energy  Headache  Voice problems, sore throat  Mentally exhausted  Need silence  Feeling disappointed  Getting asocial, avoding to have contact with others, less time for family, friends etc., no time for leisure  Feeling unhappy about work  Feeling tense  Reflecting anger&problems on others i.e.:family, friends  Bad mood  Loss of motivation  Getting angry easily, feeling too much anger	Burnout Worrying about the success of students Unwillingness Feeling incompetent (professionally) Feeling uneasy	Forgetting things to do Always thinking of job Feeling empty Can not make long term plans Loss of patience
Behavioral	Drinking problems, over consumption of cigarette, alcohol, coffee etc.  Sleeping problems  Eating disorder		

### 5. Discussion and Conclusions

The overall aim of this study is to identify and compare the perceptions of working conditions and job stress among public compulsory school Turkish teachers working in Istanbul, and public compulsory school Swedish teachers working in Stockholm, and perceptions of effects of job stress on these teachers. It is necessary to mention that Turkey and Sweden are different in demographic, economic, political, social, and cultural aspects, but there are some similarities in teachers perceptions of their working conditions and job stress.

The working condition factors that cause job stress according to the interviewed teachers are grouped into nine categories: physical environment and resources, workload and time pressure, changes in educational policies, students, parents, rewards, relations with colleagues and principals, role conflict, and school structure and management. Effects of job stress are grouped into three categories: physiological, psychological and emotional, and behavioral effects. Categories of job stress, and effects of job stress have sub-dimensions.

Both Turkish and Swedish teachers conveyed similar responses about the first category which is *physical environment and resources*. The two groups of teachers noted *noisy and crowded environment; number of students in a class; physical conditions of the school, ie: light, cleaning, air-condition, dirth, ventilation; physical facilities, and resources ie: laboratories, projectors, computers, equipments, photocopy machine; and teaching materials* as job stress sources related with physical environment and resources. Different from Swedish respondents, Turkish respondents also mentioned *lack of space in classes* as a stress factor, and for these participants this factor had the lowest percentage. On the other hand, Swedish teachers stated *school's situation, small/old school buildings; teachers' restrooms, kitchen; teachers' working rooms, desks, chairs, computers; and lunch time as stress reasons, and these teachers specified lunch time as the least stressful factor. The two groups of teachers stated <i>noisy, and crowded environment* as the main reason of stress resulted from physical environment and resources.

Concerning workload and time pressure as a job stress factor, Turkish and Swedish teachers had mainly common views. It was found that workload and time pressure are of great concern for both groups of teachers. Too much work, take work to home; less time; paperwork, computer work; number of teachers; changes in educational policies, new responsibilities; lots of things to remember, focusing on many things were stated by Turkish and Swedish participants as stress sources. For Turkish participants unconcerned parents, and no time for professional development were also indicated as stress factors, and the latter one was revealed as the least stressful factor. These teachers noted that too much work, take work home was the most significant stress reason related with this theme, whereas, Swedish teachers mentioned paperwork, computer work as their first stress factor, and unlike Turkish teachers, pointed out meetings with colleagues and parents; tight deadlines; non-teaching hours, things to do apart from teaching as job stress reasons. For Swedish participants, number of teachers was the least stressful element.

The third category, changes in educational policies was mentioned as a reason of stress by the teachers, but there were significant differences between the two groups of teachers. According to both groups of teachers, too much paper work, administrative things, computer work, photocopy, filing etc.; new responsibilities, higher demands and pressure; student-centered education were the main stress factors. Turkish teachers also noted new curriculum, lots of topics to cover, and in-service trainins as stress reasons, and for these teachers the latter one has the lowest percentage. Different from Turkish participants, Swedish respondents indicated too many meetings, conferences; more responsibility than parents; being more responsible for psychological and social well-being of students; increased working hours; national goals; decentralization; and teaching status as job stress sources, and the latter one has the lowest rating. Too much paper work, administrative things, computer work, photocopy, filing etc. was stated by the two groups of participants as the major stress factor related with the category of changes in education.

With respect to the fourth category, *students*, Turkish and Swedish teachers revealed similar opinions. Both of the groups mentioned *relations with students*; *psychological and social well-being; behavior problems, fights, accidents etc.; motivation level; keep discipline in class; ability level of students; rewards and punishment for students; effects of changes in society* as the stress factors resulted from

their job. Turkish teachers also noted *attitudes, interests of students* as a stress reason, and unlike them, Swedish teachers noted *achieving individual goals* and *demands on children from their parents* as stress sources. *Relations with students* was stated as the most important stress reason related with this category by both Turkish and Swedish participants. The lowest rated stress reason for Turkish teachers was the *effects of changes in society*, and for Swedish teachers, it was the *demands on children from their parents*.

There were some discrepancies between the perspectives of Turkish and Swedish teachers about the category of parents as a job stress factor. Two groups of teachers reported relations and cooperation; demands on teachers, pressures from parents, put responsibilities on teachers; unconcerned, uninterested parents; attitudes towards teachers; relations with and attitudes towards their children as sources of job stress. Parents' education level was noted only by Turkish teachers, and it was the least stressful factor for them. Different from Turkish teachers, Swedish teachers reported meetings with parents, problems in parenting role; parents' demands on their children; parents' personal problems as causes of job stress. Parents' demands on their children was stated as the least stressful factor by Swedish teachers. The highest stress reason for Turkish teachers was relations and cooperation with parents, and for Swedish teachers, it was meetings with parents.

Rewards was another category reported by the interviewed teachers as a job stress factor. Turkish and Swedish teachers reported *low salary; low status, and recognition* as stress sources. In this category, the highest stress reason among teachers in Istanbul and in Stockholm was *low salary*. Different from Swedish teachers, Turkish teachers noted also *noopportunity for professional development* as a cause of job stress with the lowest rate. According to Swedish teachers, *low status, and recognition* was less stressful than *low salary*.

Relations with colleagues and principals was another category of working conditions which, according to the interviewees caused job stress. Both Turkish and Swedish teachers revealed relations and cooperation; attitudes of principals towards teachers ie:consideration and support level of principals as stress sources. Besides these sources Swedish teachers stated also team work with colleagues, and pressure and demands from principals as job stress reasons. Relations and cooperation with colleagues and principals had the highest rate for Turkish participants, and attitudes of principals towards teachers, i.e:consideration and support level of principals was the least stressful factor for them. Team work with colleagues had the highest rate for Swedish teachers, and pressure and demands from principals had the lowest rate for them.

Concerning the eight category, *role conflict*, responses were mostly similar between Turkish and Swedish teachers. *Being a role model; difficulties in teacher role; being teacher, having parenting role, being sister, friend etc.*. were noted as job stress causes by teachers both in Istanbul and in Stockholm. The main stress reason among Turkish and Swedish teachers was *being a role model*. Unlike Turkish teachers, Swedish teachers noted also *demands from different sources* as a job stress reason, and it was the least stressful factor for them in this category.

The most different responses between Turkish and Swedish teachers were in the category of school structure and management. Turkish teachers mentioned two shifts in

education as a major stress source, whereas, Swedish teachers stated teacher shortage as a main stressor. Both Turkish and Swedish teachers pointed out number of teachers, and changing classes as stress reasons. Two shifts in education, guarding duty, and length of break were indicated by only Turkish teachers. Pressure on/demands from teachers, schedule, competition for students, budget problems, and having different breaks were stated by only Swedish teachers. Changing classes was reported as the least stressful reason by two groups of teachers.

There were differences between Turkish and Swedish teachers in the categories of changes in educational policies, and structure and management, this can be due to the differences in Turkey's and Sweden's economical, political, social, and cultural characteristics.

The findings presented here have support in the research literature<sup>5</sup>. For example, crowded classrooms, poor physical conditions, disruptive noise, bad classroom conditions, low support from administrators, workload and time pressure, inadequate facilities, equipments and teaching materials, low salary and status have been mentioned working condition aspects that cause job stress. Studies frequently mention students, and parents as the major job stress reasons for teachers. It is also claimed that there was a growing shift of responsibility from families to schools. In the literature, the changing role of teachers has also been documented (Conley & Woosley, 2000; Hargreaves, 2001; Younghusband, 2005).

Teachers in Istanbul and teachers in Stockholm gave similar responses to the first category of job stress effects which is *physiological effects*. Both of the two groups stated that their job stress resulted in *tiredness; headache; voice problems, sore throat;* and *loss of energy*. Besides these effects, Swedish respondents mentioned also *stomach ache* as a job stress consequence. Turkish teachers reported *tiredness* as their main stress effect, whereas, for Swedish teachers, it was *headache*. Both of the two groups stated *voice problems, sore throat* as the least important job stress result.

With respect to the second category of stress effects, psychological and emotional effects, both Turkish and Swedish teachers gave mainly similar responses. Mentally exhausted; need silence; feeling disappointed; getting asocial, avoding to have contact with others, less time for family, friends etc., no time for leisure; feeling unhappy about work; feeling tense; reflecting anger and problems on others ie: family, friends etc.; bad mood; loss of motivation; getting angry easily, feeling too much anger were mentioned by two groups of teachers as job stress consequences. Burnout; worrying about the success of students; unwillingness; feeling incompetent (professionally); feeling uneasy were noted by only Turkish teachers, and forgetting things to do; always thinking of job; can not make long term plans; feeling empty; loss of patience were reported by only Swedish teachers. The highest stress effect among teachers in Istanbul was feeling mentally exhausted, and the highest stress effect among teachers in Stockholm was the need of silence. Feeling uneasy was the lowest rated stress effect among Turkish

1997; Wilson & Hall, 2002; Yıldırım, 2008; Zoraloğlu, 1998.

<sup>&</sup>lt;sup>5</sup> The research literature includes Alemdar, 2002; Arbetsmiljöverket, 2003; Aslan, 1995; Ataklı, 1999; Ay, 2003; Bilek, 2001; Black, 2003; Blase, 1986; Bulut, 2005; Certo & Fox, 2002; Direk, 2003; Dunham & Varma, 1998; Ekinci, 2006; Erden, 1998; Erjem, 2004; Ertekin, 1993; Goddard, 2000; Hoffman, 2000; Holloway, 2002; Karadavut, 2005; Kırılmaz et. al., 2000; Ko, 2003; Kyriacou, 1997; OECD, 2003; Önsan, 1996; Özdayı, 1990; Pehlivan-Aydın, 2002; Pierce & Molloy, 1990; Skolverket, 2006; Tufan

participants, but unlike them, *feeling disappointed* was noted as the least important stress effect by Swedish participants.

The last category of stress effects, behavioral effects, were same for both Turkish and Swedish teachers, but the ratings were different. Drinking problems, over consumption of cigarette, alcohol, coffee etc.; sleeping problems; eating disorder were the main effects of job stress for both Turkish and Swedish teachers. Drinking problems, over consumption of cigarette, alcohol, coffee etc. was the most significant stress result for both two groups of participants. Sleeping problems had the lowest rate among Turkish teachers; on the other hand, Swedish teachers, reported eating disorder as the least important job stress result.

Milbourne (2006) revealed that teachers mostly had psychological effects of stress resulting from their working conditions. The present study found the same result; both Turkish and Swedish teachers mentioned mostly the psychological effects of job stress.

This study found that for teachers working in Istanbul, the main reasons of job stress were relations with students and their psychological and social well-being; relations and cooperation with parents and the demands from teachers; unconcerned, uninterested parents, and low salary; the least stressful working condition factors were lack of space in classes and in-service trainings. According to teachers working in Stockholm, the major job stress reasons were paperwork, computerwork, administrative duties; meetings with colleagues and parents, too many conferences; too much work, take work to home; less time; relations with students and their psychological and social well-being, and parents' demands from teachers; the least stressful elements were lunch time, parents' demands on their children, and parents' personal problems.

In terms of job stress effects, Turkish teachers stated tiredness as the most important effect of job stress, and sleeping problems as the least important one, whereas, for Swedish teachers, headache, tiredness, need silence, mentally exhausted were the most significant job stress effects; and feeling disappointed was the least important one.

Literature <sup>6</sup> indicated that the educational environment at schools can adversely affect teachers. Researchers have found that job stress of teachers result in headache, chest pain, backache and stomachache, fatigue, anxiety, frustration, anger, burnout, low level of motivation, poor cooperation, inability to concentrate, unwillingness, emotional and physical exhaustion, withdrawing from supportive relationships, eating disorders, sleeping problems, alcohol and/or cigarette consumption

The findings of the present study showed that the teaching profession has some common characteristics in Turkey and in Sweden, although, these countries have different characteristics in terms of economy, politics, society, and culture. For example, in these countries student numbers in class were not same, but teachers had mostly similar job stress sources and job stress effects. It seems that no matter where teachers work in the world, every teacher deals with students, parents, colleagues, and administrators. So, teachers' working condition factors may change, but they may have similar job stress reasons and stress effects.

\_

<sup>&</sup>lt;sup>6</sup> Literature includes Baltaş & Baltaş, 2002; Bradley, 2004; Conley & Woosley, 2000; Cox et. al., 2000; Dollard, et al., 2003; Dworkin et al., 1990; Griffith et al., 1999; Hargreaves, 2001; Kırel, 1994; Pehlivan-Aydın, 2002, Sabuncuoğlu & Tüz, 2001; Telman & Ünsal, 2004; Tınar, 1996; Travers & Cooper, 1996.

The interviews indicated that teaching is a stressful profession. Effects of job stress need to be monitored, because they impact not only the teachers, but indirectly affect students and schools. Improvements in the working conditions, understanding the needs, and feelings of teachers could possibly lead to improved student achievement, productivity at schools, and quality in education.

In conclusion, there were more similarities than differences between Turkish and Swedish teachers. But it is necessary to mention that the sample selection method of the study, and the participants willingness to provide information in both countries might have biased the collected data and the results of the study.

Job stress reasons of teachers need to be clarified, in order to reduce the adverse influences of stress. Stress can negatively affect the health, productivity and effectiveness of teachers, the well-being of students, and the implementation of educational goals. Preventing and reducing stress may benefit teachers, students, administrators, parents, and schools in general.

## **References**

- Acar, H. (2006). Orta Öğretim Okul Müdürlerinin Çatışma Yönetim Stilleri ve Bu Çatışma Yönetim Stillerinin Öğretmenlerin Stres Düzeylerine Etkisi. (Conflict Management Style of the School Principles and the Impact of These Styles on the Stress Levels of Teachers). Unpublished Master's Thesis. Ankara: Gazi University.
- Alemdar, T. (2002). Stresin Çalışma Verimliliği Üzerine Etkisi: Anadolu Otelcilik ve Turizm Meslek Liseleri Yönetici ve Öğretmenleri Üzerine Bir Araştırma. (The Impact of Stress on the Productivity of the Work: A Research on the Administrators and the teachers of Anatolia Hotel and Tourism Vocational High School). Unpublished Master's Thesis. Ankara: Gazi University.
- Arbetsmiljöverket. (2003). *Systematic Work Environment Management*. Solna: Work Environment Authority Publication Services.
- Aslan, M. (1995). Öğretmenlerin Örgütsel Stres Kaynakları. (The Sources of Occupational Stress for Teachers). Unpublished Doctoral Dissertation. Malatya: İnönü University.
- Ataklı, A. (1999). Stresin Kaynakları, Stresin Öğretmenlik Mesleğindeki Yeri, Okul Yöneticisi ve Velilerin Anlayışlılık Düzeyi. (Stress Sources, The Position of Stress in Teaching Occupation, The Understanding Level of School Principals and Parents. *Public Administration Journal*, 32(2), 59-67.
- Ay, H. (2003). Stres Yönetimi ve Örgütsel Verimlilik: Uygulamalı Bir Çalışma. (Stress Management and Organizational Productivity: A Study with a Field Research). Unpublished Master's Thesis. Ankara: Hacettepe University.
- Baloğlu, N. (2001). *Etkili Sınıf Yönetimi*. (*Effective Class Management*). Ankara: Baran Printing.
- Baltaş, A. & Baltaş, Z. (2002). *Stres ve Başa Çıkma Yolları*. (*Stress and Ways of Coping with It*). 21. Edition. İstanbul: Remzi Bookstore.
- Bilek, İ. (2001). Ortaöğretim Kurumlarında Görev Yapan Branş Öğretmenlerinin İş ve Okul Yöneticileriyle İlişkilerinden Kaynaklanan Stres Düzeyine İlişkin Görüşleri. (The Secondary School Branch Teachers' Stress Levels that are caused by Work Stress and Harmony Problems with the Administrators). Unpublished Master's Thesis. Eskişehir: Anadolu University.
- Black, S. (2003). Stressed out in the Classroom. *American School Board Journal*, Vol. October, 36-38.
- Blase, J. (1986). A Qualitative Analysis of Sources of Teacher Stress: Consequences for Performance. *American Educational Research Journal*, Vol. 23(1), 13-40.
- Bradley, G. (2004). *Job Strain, and Healthy work in Teachers: A Test of the Demands-Control-Support Model*. Doctoral Thesis. Griffith University. Retrieved May 18, 2007 from <a href="http://www4.gu.edu.au:8080/adt-root/uploads/approved/adt-QGU20050725.125838/public/02Main.pdf">http://www4.gu.edu.au:8080/adt-root/uploads/approved/adt-QGU20050725.125838/public/02Main.pdf</a>.
- Bryman, A. (2004). Social Research Methods. New York: Oxford University Press.
- Bulut, N. (2005). İlköğretim Öğretmenlerinde Stres Yaratan Yaşam Olayları ve Stresle Başa Çıkma Tarzlarının Çeşitli Değişkenlerle İlişkisi. (The Relationship Between Life Events that Produce Stress in Primary School Teachers and Teachers' Styles in Handling Stress). *Kastamonu Education Journal*, *Vol.* 13(2), 467-478.
- Certo, J. L. & Fox, J. E. (2002). Retaining Quality Teachers. *High School Journal*, *Vol.*86, 57-76.
- Conley, S. & Woosley, S. (2000). Teacher Role Stress, Higher Order Needs and Work Outcomes. *Journal of Educational Administration*, Vol.38, 179-201.

- Cooper, C. L. & Dewe, P. (2004). Stress: A Brief History. Oxford: Blackwell Publishing.
- Cox, T., Griffiths, A., & Rial-Gonzalez, E. (2000). *Research on Work-Related Stress*. Belgium: European Agency for Safety and Health at Work.
- Daun, H. (2004). Privatization, Decentralization and Governance in Education in the Czech Republic, England, France, Germany and Sweden. *International Review of Education*, Vol.50, 325-346.
- Direk, A. (2003). Farklı Kurum ve Branşlarda Çalışan Öğretmenlerin İş Doyumları: Zonguldak İli Örneği. (The Job Satisfaction of Teachers Workimg at Different Institutions and Branches: Cases from Zonguldak). Unpublished Master's Thesis. Ankara: Turkey and Middle East Public Administration Institute.
- Dollard, F., Winefield. A. H., & Winefield, H. R. (2003). *Occupational Stress in the Service Professions*. New York: Taylor & Francis.
- Dunham, J. & Varma, V. (1998). *Stress in Teachers: Past, Present and Future*. London: Whurr Publishers Ltd.
- Dworkin, A., Haney, C. Dworkin, R. & Telscher, R. (1990). Stress and Illness Behavior among Urban Public School Teachers. *Educational Administration Quarterly*, *Vol.* 26(1), 60-72.
- Ekinci, Y. (2006). İlköğretim Okulu Yöneticilerinin Sosyal Beceri Düzeylerine Göre Öğretmenlerin İş Doyumu ve İş Stresinin Karşılaştırılması. (The Comparison of Job Satisfaction and Work Stress Levels of the Teachers Based on the Level of the Social Skills of the Administrators of Primary Schools). Unpublished Master's Thesis. Gaziantep: Gaziantep University.
- Erdem, A. (1998). 21. Yüzyıla Girerken Nasıl Bir İnsan Modeli Yetiştirelim. (How to Raise a Human Model while Approaching to 21<sup>st</sup> Century). Ankara: Anı Publishing.
- Erden, M. (1998). Öğretmenlik Mesleğine Giriş. (Introduction to the Teaching Profession). İstanbul: Alkım Publishing.
- Erjem, Y. (2004). Eğitimde Yabancılaşma Olgusu ve Öğretmen: Lise Öğretmenleri Üzerine Sosyolojik Bir Araştırma. (The Concept of Alienation in Education and Teachers: A Sociologic Research on High School Teachers.) Retrieved January 8, 2008, from <a href="http://www.tebd.gazi.edu.tr/arsiv/2005\_cilt3/sayi\_4/395-417.pdf">http://www.tebd.gazi.edu.tr/arsiv/2005\_cilt3/sayi\_4/395-417.pdf</a>.
- Erken, V. (2002). *Sunf Yönetimi. (Class Management)*. Ankara: Berikan Publishing. Ertekin, Y. (1993). *Stres ve Yönetim. (Stress and Management)*. Ankara: TODAİE Publishing, No: 253.
- EURYDICE (2008). *National Summary Sheets on Educational Systems in Europe and Ongoing Reforms: Turkey: July 2008*. Retrieved October 8, 2008 from the web: <a href="http://eacea.ec.europa.eu/ressources/eurydice/pdf/047DN/047">http://eacea.ec.europa.eu/ressources/eurydice/pdf/047DN/047</a> TR TR.pdf.
- EURYDICE (2008). *National Summary Sheets on Educational Systems in Europe and Ongoing Reforms: Sweden: September 2008*. Retrieved October 8, 2008 from the web: http://eacea.ec.europa.eu/ressources/eurydice/pdf/047DN/047\_SE\_EN.pdf.
- EURYDICE (2008). *The Education System in Turkey*. Retrieved October 8, 2008 from the web:
  - http://eacea.ec.europa.eu/ressources/eurydice/eurybase/pdf/0\_integral/TR\_EN.pdf.
- Goddard, J. T. (2000). Teaching in Turbulent Times: Teachers' Perceptions of the Effects of External Factors on their Professional Lives. *The Alberta Journal of Educational Research*, Vol. XLVI, 4, 293-310.
- Greenglass, E. R. & Burke, R. J. (2003). Work and Family Precursors of Burnout in Teachers: Sex Differences. *Sex Roles*, *Vol.*18, 215-229.

- Griffith, J., Steptone, A., & Cropley, M. (1999). An Investigation of Coping Strategies Associated with Job Stress in Teachers. *British Journal of Educational Psychology*, *Vol.* 69, 517-531.
- Haggqvist, S. (2004). Working Conditions and Development at School Preconditions for Pupil and Personnel Collaboration. Unpublished Doctoral Dissertation. Stockholm: National Institute for Working Life, Royal Institute of Technology.
- Hargreaves, A. (2001). Emotional Geographies of Teaching. *Teacher's College Record*, Vol. 103(6), 1056-1080.
- Hoffman, A. (2000). Technology Built for Teachers. The Journal, Vol. 28, 56-59.
- Hollifield, S. T. (2005). An Examination of Teacher Job Satisfaction, Work Related Stress and Organizational Culture in Three School District. Unpublished Doctoral Thesis. Detroit: Wayne State University.
- Holloway, J. (2002). Do Smaller Classes Change Instruction? *Educational Leadership*, Vol. 59(56), 91-92.
- Karadavut, Y. (2005). İlköğretim Okulu Öğretmenlerinin Örgütsel Stres Kaynakları, Stres Belirtileri ve Stresle Başa Çıkma Yolları. (The Primary School Teachers' Occupational Stress Reasons, Symptoms of Stress and the Ways of Coping with Stress). Unpublished Master's Thesis. Ankara: Gazi University.
- Kırel, Ç. (1994). Stresin Bireysel Sonuçları, Stres Yönetimi. (The Individual Results of Stress, Stress Management). Ankara: AÜ AOF Publishing.
- Kırılmaz, A. Y. & Çelen, Ü. & Sarp, N. (2000). İlköğretimde Çalışan Bir Öğretmen Grubunda Tükenmişlik Durumu Araştırması. (A Study on Teacher Burnout with a Group of Primary School Teachers). Retrived in December 2005 from <a href="http://www.ilkogretim-online.org.tr/vol2say1/v02s01a.htm">http://www.ilkogretim-online.org.tr/vol2say1/v02s01a.htm</a>.
- Ko, W. (2003). The Effects of Compensation Structure and Working Conditions on the Retention Tendency of English Subject Teachers in Hong Kong Secondary Schools. Unpublished Doctoral Dissertation. Hong Kong: The Chinese University of Hong Kong.
- Kyriacou, C. (1997). Teaching and Stress. Philedelphia: Open University Press.
- Kyriacou, C. (2001). Teacher Stress: Directions for Future Research. *Educational Review*, *Vol.* 53(1), 27-35.
- Mendelson, G. (1990). Occupational Stress. Parts 1-3. *Journal of Occupationa Health and Safety- Australia and New Zeland*, Vol. 6, 175-197.
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass Publishers.
- Milbourne, S. A. (2006). *The Effect of Ambiant Working Conditions on Teacher-Child Interactions and Teacher Stress and Wellness*. Unpublished Doctoral Dissertation. Newark: The University of Delaware.
- MoNE (2001). *The Turkish Education System and Developments in Education*. Retrieved in May 2009 from http://www.ibe.unesco.org/International/ICE/natrap/Turkey.pdf.
- Nichols, V. I. (2002). *The Impact of Workplace Conditions on Teacher Commitment, Teaching and Learning*. Unpublished Doctoral Dissertation. Ohio: The Union Institute Graduate School.
- OECD (2003). *Attracting, Developing and Retaining Effective Teachers*. Retrieved in March 2007 from <a href="http://www.oecd.org/dataoecd/10/60/2962250.pdf">http://www.oecd.org/dataoecd/10/60/2962250.pdf</a>.
- OECD (2007). Reviews for National Policies for Education: Basic Education in Turkey Background Report. Retrieved in October 2008 from www.oecd.org/edu/reviews/nationalpolicies

- Önsan, Ö. (1996). Öğretmenlerde İş Stresi Ölçeği Geliştirme Çalışması. (A study on the Development of Teachers' Job Stress Scale). Unpublished Master's Thesis. Ankara: Hacettepe University.
- Özdayı, N. (1990). Resmi ve Özel Liselerde Çalışan Öğretmenlerin İş Tatmini ve İş Streslerinin Karşılaştırmalı Analizi. (A Comparative Analysis of Job Satisfaction and Job Stress of Teachers Working at Private and Public High Schools). Unpublished Doctoral Dissertation. İstanbul: İstanbul University.
- Öztürk, G. (2008). *The Relationships among Public Primary School Teachers*` *Working Conditions, Self-Efficacy and Professional Self-Esteem*. Unpublished Master`s Thesis. İstanbul: Marmara University.
- Pehlivan-Aydın, İ. (2002). *İş Yaşamında Stres. (Stress at Work Life)*. 2. Edition. Ankara: Pegam A Publishing.
- Pierce, M. B., & Molloy, G. N. (1990). Psychological and Biographical Differences Between Secondary School Teachers Experiencing High and Low Levels of Burnout. *British Journal of Educational Psychology*, Vol. 60, 37-51.
- Reategui Vigil Gonzalez, M. (2006). Stress Perception, Stressful Experiences and Stress Management Strategies. Unpublished Master's Thesis. Stockholm: Institute of International Education, Stockholm University.
- Sabuncuoğlu, Z. & Tüz, M. (2001). Örgütsel Psikoloji. (Organizational Psychology). Bursa: Ezgi Bookstore.
- Skolverket (2004). *National Evaluation of the Compulsory School in 2003: A Summary Main Report*. Retrieved in October 2008 from <a href="https://www.skolverket.se/sb/d/193/url/...pdf1404.pdf">www.skolverket.se/sb/d/193/url/...pdf1404.pdf</a>.
- Skolverket (2005). *National Assessment and Grading in the Swedish School System*. Retrieved in February 2008 from www.skolverket.se/sb/d/193/url/.../pdf1524.pdf.
- Skolverket (2006). Competence and Opportunity: The importance of Teachers, Their Working Situation and Conditions. Retrieved in March 2007 from <a href="http://www.skolverket.se/sb/d/355">http://www.skolverket.se/sb/d/355</a>.
- Sümer, T. K. (2007). İlköğretim Okullarında Yönetici Davranışlarının Öğretmenler Üzerindeki Etkilerinin Oluşturduğu Stres. (The Level of Stress Caused by the Effects of School Managers' Attitudes on Teachers). Unpublished Master's Thesis. İstanbul: Yeditepe University.
- Telman, N. & Ünsal, P. (2004). *Çalışan Memnuniyeti. (Workers' Satisfaction)*. İstanbul: Epsilon Publishing.
- Tınar, M.Y. (1996). *Çalışma Psikolojisi*. (*Working Psychology*). İzmir: Nokta Publishing. Travers, C. J. & Cooper, C. L. (1993). Mental Health, Job Satisfaction, and Occupational Stress among UK Stress. *Work and Stress*, *Vol.*7, 203-219.
- Tufan, Ş. (1997). Ankara İli Çankaya İlçe Merkezindeki Devlet ve Özel Liselerde Görevli Öğretmenlerin İşlerinde Stres Yaratan Etmenler ve Bunlarla Başa Çıkma Yolları Konusundaki Görüşleri. (Sources of Occupational Stress and Coping Strategies for Teachers Working at Public and Private High Schools Located in Ankara City Çankaya County). Unpublished Master's Thesis. Ankara: Hacettepe University.
- Tye, B. B., & O'Brien, L. (2002). Why are Experienced Teachers Leaving the Profession? *Phi Delta Kappan*, 84,1.
- Velez-Arias, H. O. (1998). A Multi Case Study of Physical Education Teachers and Working Conditions in Inner City Schools. Unpublished Doctoral Dissertation. New York: Colombia University.

- Vogel, T. L. (2004). An Analysis of the Working Conditions Experienced by Beginning Teachers in an Urban School District. Unpublished Doctoral Dissertation. Tennessee: The University of Mephis.
- Wallius, E. (1982). Work, Health and Well-Being for Teachers in Swedish Comprehensive Schools: X: Teacher Stress: Theory and Research. Stockholm: Laboratory for Clinical Stress Research.
- Weidner, P. E. (2002). Stress and the Teacher: A Comparison of Job Related Stress among Public and Private Elementary Teachers. Unpublished Doctoral Dissertation. Chicago: Loyola University.
- Williams, C. (1995). An Investigative Study of the Relationship of the Physical Environment to Teacher Professionalism in the State of Mississippi Public Schools. Unpublished Doctoral Dissertation. Mississippi: Jackson State University.
- Wilson, V., & Hall, J. (2002). Running Twice Fast? A Review of the Research Literature on Teachers' Stress. *Scottish Educational Review*, Vol. 34(2), 175-187.
- Yıldırım, F. D. (2008). Sınıf Öğretmenlerinin Stres Kaynakları ve Baş Etme Yolları: Kilis İli Örneği. (Primary School Teachers' Stress Sources and Ways of Coping with Stress: Cases from Kilis). Unpublished Master's Thesis. Ankara: Gazi University.
- Younghusband, L. J. (2005). *High School Teachers' Perceptions of Their Working Environment in Newfoundland: A Grounded Theory Study*. Unpublished Doctoral Dissertation. Newfoundland: Memorial University of Newfoundland.
- Zoraloğlu, Y. (1998). Öğretmenlerin Mesleki Stres Kaynakları ve Stresin Örgütsel Doğurguları. (The Sources of Occupational Stressfor Teachers and Organizational Consequences of Stress). Unpublished, Doctoral Dissertation. Ankara: Hacettepe University.

Public Primary School Teachers' Perceptions of their Working Conditions and Job Stress

## Appendix 1

#### A. Background Questions:

- **1.** Age:
- 2. Gender:
- **3.** Marital Status:
- 4. Number of children, if any:
- **5.** Education level:
- **6.** What subjects do you teach?
- **7.** Grade level of present teaching (Branch or class teacher):
- **8.** Number of years as a teacher:
- **9.** Number of years in present school:
- 10. Number of students as a whole in the school and per class?

#### **B.** Interview Questions:

- 1. How do you define your working condition, what are the factors of it?
- 2. What is job stress for you, how do you define it?
- 3. Do you feel any job stress, if yes please explain.
- **4.** Do you think that your working conditions have any effects on your job stress, if yes which factors of working conditions have effects on your job stress?
- 5. How does your job stress affect you, what are the consequences of it?
- **6.** Is there anything else that you want to add or suggest in terms of this interview?

Public Primary School Teachers' Perceptions of their Working Conditions and Job Stress

# **Index of Reports from the Institute of International Education, Department of Education, Stockholm University**

- 1. **Husén, Torsten** Multi-National Evaluation of School Systems. Purposes and Methodology. March 1973
- 2. **Brucefors, Agneta; Emanuelsson, Ingemar & Johansson, Per-Olof** Skolan som jämlikhetsinstrument. Några funderingar och förslag till forskning. March 1973
- 3. **Bergsten, Urban; Borgsten, Lena; Lindgren, Gunilla & Sjöberg, Gun** Återkommande utbildning. Bakgrund och utveckling. June 1973
- 4. **Mälck, Lars** Från gymnasium till högre studier. Några analyser av olika bakgrundfaktorers samband med valet att gå vidare till universitet och högskolor. March 1974
- 5. **Bulcock, Jeffrey W.** Achievement in Mother Tongue Literature. Some Strategies in Causal Analysis. April 1974
- 6. **Bulcock, Jeffrey W**. Fägerlind, Ingemar & Emanuelsson, Ingemar: Education and the Socioeconomic Career. U.S. Swedish Comparisons. May 1974
- 7. **Finn, Jeremy D. & Mattsson, Ingrid** Multivariate Analysis in Educational Research. Some Applications. June 1974
- 8. **Husén, Torsten** International Evaluation of Educational Systems. Its Role in Building Research Competence in Developing Countries. October 1974
- 9. **Husén, Torsten**: Reshaping the Upper Secondary School Curriculum. November 1974
- 10. **Bulcock, Jeffrey W.; Fägerlind, Ingemar & Emanuelsson, Ingemar**: Education and the Socioeconomic Career II. A Model of the Resource Conversion Properties of Family, School and Occupational Environments. March 1975
- 11. **Bergling, Barbro**: Föräldraintressets betydelse för utbildningens längd. Några multivariata analyser samt jämförelser USA Sverige. March 1975.
- 12. **Kifer, Edward W.; Mattsson, Ingrid & Carlid, Mats**: Item Analysis Using the Rasch Model. An Application on IEA Data. June 1975
- 13. **Bergling, Barbro**: Pathanalys en kausal modell. Introduktion till en multivariat forskningsmetod. September 1975
- 14. **Mählck, Lars & Mattsson, Ingrid**: Rekrytering till högre utbildning bland gymnasister och några empiriska resultat. November 1975
- 15. **Husén, Torsten**: Policy Implications of the IEA Findings and Some of Their Repercussions on National Debates on Educational Policy. December 1975
- 16. **Mählck, Lars**: Om rekrytering till högre naturvetenskapliga och tekniska studier: Kunskapsnivå och attityder hos elever från Na- och Te-linjen. December 1975
- 17. **Engbom, Mette; Modin, Gunvor & Mählck, Lars**: Yrkesplaner och utbildningsval bland gymnasister: En studie i könsdifferenser. December 1975

- 18. **Husén, Torsten**: The Teenager and the School in Europe. December 1975
- 19. **Noonan, Richard & Wold, Herman**: NIPALS Path Modelling with Latent Variables Analysing School Survey Data Using Nonlinear Interative Partial Least Squares. February 1976
- 20. **Nyström, Astrid**: Manual for Selection, Production and Evaluation of Textbooks. November 1976
- 21. **Bulcock, Jeffrey W. & Beene, Mona J.:** Reading in the Structure of Scholastic Performance. November 1976
- 22. **Berling, Kurt**: Mätandet av det logiska tänkandet hos elever i Sverige, England, Tyskland och USA. December 1976.
- 23. **Anderson, Jonathan**: Comprehension Skills Sampled in the IEA Reading Surveys. April 1977
- 24. **Fägerlind, Ingemar & Saha, Lawrence**: Education and Development. An Evaluation of an Interdisciplinary Program at the Doctoral Level. May 1977
- 25. **Bulcock, Jeffrey W.; Clifton, Rodney & Beebe, Mona J.**: A Language Resource Model of Science Achievement. Comparisons between 14 Year-olds in England and India. May 1977
- 26. **Anderson, Jonathan & Kann, Ulla**: The Measurement of Reading Comprehension. A Follow-up of the National Education Survey in Botswana. November 1977
- 27. **Löfstedt, Jan-Ingvar:** Socialistisk utbildning i Albanien. December 1977
- 28. **Obanya, P.A.I.:** Educational Resources in Some Developed and Developing Countries. December 1977
- 29. **Beebe, Mona J. & Fägerlind, Ingemar**: The Effects of Instruction in the Native versus a Foreign Language. March 1978
- 30. **Asp, Eva & Prestegaard, Marit**: Kvinnor, arbete och inkomster. September 1978.
- 31. **Little, Angela**: Occupational and Educational Expectations. A Study of Students in Developed and Developing Countries. October 1978
- 32. **Little, Angela**: Examination Orientation and Types of Achievement. December 1978
- 33. **Gorham, Alex B**. Educational Development in a Pastoral Area. February 1979
- 34. Marklund, Sixten: Skolöverstyrelsen. Historik och nuläge. April 1979
- 35. Prestegaard, Marit; Fägerlind, Ingemar; Lennestedt, Kenneth, & Hartman, Ros Mari: The Malmö Longitudinal Study. August 1979
- 36. **Daun, Holger**: Fiskeskolan i Kelibia. En utvärdering av ett SIDA-projekt i Tunisien. August 1979
- 37. **Marklund, Sixten & Bergendal, Gunnar**: Några huvudlinjer i det svenska utbildningsväsendets utveckling efter andra världskriget. August 1979

- 38. **Noonan, Richard & Wold, Herman**: PLS Path Modelling with Latest Squares Part II. August 1979
- 39. **Chinapah, Vinayagum & Fägerlind, Ingemar**: The Role of Education in the Basic Human Needs Strategy. August 1979
- 40. **Gorham, Alex B**.: Education and Development in Kenya Maasailand 1920-1960. August 1979
- 41. **Gorham, Alex B**.: Inter-Ethnic Achievement in Reading Comprehension in Kenya Maasailand. September 1979
- 42. **Mbamba, Mauno**: The Namibia Education and Health Centres: A Study of SWAPO Schools among Namibian Refugees in Namibia and Angola. November 1979
- 43. **Löfstedt, Jan-Ingvar**: Enrollment Developments in China over Thirty Years in Relation to Industrial Development and in Comparison with the Soviet Union and Taiwan. February 1980
- 44. **Marklund, Sixten**: Internationalization of Education. Some Concepts and Questions. February 1980
- 45. **Kann, Ulla & Lecoge, Kelebogile**: The 1976 National Education Survey in Botswana: A Guide to Users. May 1980
- 46. **Kann, Ulla**: Swedish Training Policy for Third World Students: A Historical Overview. May 1980
- 47. **Marklund, Sixten**: From Assessments of Individual Students to Evaluation of School Systems. June 1980
- 48. **Daun, Holger**: Contradiction and Correspondence in Education. Cases from Senegal and Guinea-Bissau. December 1980
- 49. **Husén, Torsten**: Present Trends in Education and Their Main Determinants. April 1981
- 50. **Fägerlind, Ingemar**: Utvärdering av finskspråkig gymnasial utbildning. August 1981.
- 51. **Lind, Agneta**: Literacy Campaigns and Nation-Building in Mozambique. First Literary Campaign Including a Case-Study of One Literacy Center. August 1981
- 52. **Fägerlind, Ingemar & Munck, Ingrid**: Attitudes towards School and Education in Seven Countries. Comparisons between England, Finland, Hungary, India, Japan, Sweden and the USA Based on IEA Data. September 1981
- 53. **Chinapah, Vinayagum & Daun, Holger**: Swedish Missions and Education in the Republic of Zaire: A Description and Diagnosis. November 1981
- 54. **Chinapah, Vinayagum & Daun, Holger**: Educational Evaluation of the Swedish Sister Churches in the Republic of Zaire. December 1981
- 55. **Fägerlind, Ingemar & Leal, Leonor Cunha**: Mathematics in Portugal: The Influence of School and Family Environment on Results in Grades 7, 8 and 9. January 1982

- 56. **Löfstedt, Jan-Ingvar**: Bredare samarbete mellan Sverige och u-länder i form av person- och erfarenhetsutbyte. En kortfattad utvärdering av försöksperioden. February 1982
- 57. **Duncan, Wendy & Löfstedt, Jan-Ingvar**: School Building, Teacher Training and Village Development in Bangladesh. An Evaluation of Three Swedish Non-Government Programmes. March 1982
- 58. **Löfstedt, Jan-Ingvar**: Science Requirements in the People's Republic of China. May 1982
- 59. **Fägerlind, Ingemar**: Försöksverksamhet med finskspråkig gymnasial utbildning. Erfarenheter och uppföljning 1977-1982. September 1982.
- 60. **De Bresser, John & Fägerlind, Ingemar**: Segmentation in Career Development. A Description of Paths to and between Occupations. October 1982
- 61. **Gumo, Charles & Kann, Ulla**: A Review of the Development of the Kenya Science Teachers College. October 1982
- 62. **Strömqvist, Görel**; Goldman, Madeleine & Gutebring, Maria: Kvinnors arbetsmarknad i Sverige 1970-1980. En översikt av näringsgrenar och yrkesområden. February 1983
- 63. **Daun, Holger**: Primary Learning Systems in Sub-Saharan Africa. Indigenous, Islamic and Western Education. May 1983
- 64. Marklund, Sixten: The IEA Project: An Unfinished Audit. October 1983
- 65. **Marklund, Sixten**: Blockämnen och blockundervisning på grundskolans högstadium. December 1983
- 66. **Marklund, Sixten**: Årskurslös skola och undervisning. Några erfarenheter av alternativa arrangemang. February 1984
- 67. **Mbamba, A. Mauno & Chinapah, Vinayagum**: Training in Educational Planning. Report on a Course in Livingstone, Zambia. March 1985
- 68. **De Bresser, John**: Technical and Vocational Teachers College. Luanshya, Zambia. A Tracer Study of TVTC Graduates. April 1985
- 69. **Daun, Holger**: Primary Learning Systems in Sub-Saharan Africa. Cases from Senegal. August 1985
- 70. **Sirén, Ulla:** Språkmiljöer. En pilotstudie av barn till finsk-språkiga mödrar. August 1985
- 71. **Gustafsson, Ingemar & McNab, Christine**: Swedish Mission Education in Colonial Africa A Model for Rural Development? September 1985.
- 72. **Johnston, Anton & McNab, Christine**: Nordic Research on Education in Developing Countries 1975-1985. A Selected Bibliographic Review of Research and Dissemination. December 1985
- 73. **Lind, Agneta**: Adult Literacy in the Third World A Literature Review. December 1985

- 74. **Noonan, Richard & Engström, Jan-Åke**: Kunskaper i naturorienterande ämnen i svenska skolor: resultat från den andra IEA-undersökningen om naturorienterande ämnen. October 1986
- 75. **Noonan, Richard & Engström, Jan-Åke**: Science Achievement in Swedish Schools: Results from the IEA Second International Science Study. November 1986
- 76. **Makrakis, Vasilios**: Computers in Education: Towards a New Pedagogy? January 1987
- 77. **Mcnab, Christine**: Language Planning for Education in Ethiopia: Policy Development and Implementation Processes. October 1987
- 78. **Fägerlind, Ingemar**: Data Collection in the Malmö Longitudinal Study. October 1987
- 79. **Eriksson, Riitta & Fägerlind, Ingemar**: Erfarenheter av undervisning i svenska som andraspråk utvärdering av försöksverksamhet med finskspråkiga linjer i gymnasieskolan i Stockholm. October 1987
- 80. **Tuijnman, Albert**: Monitoring Adult Education With Special Reference to Sweden. November 1987
- 81. **Duncan, Wendy A.**: School Dropout in Botswana. Gender Differences at Secondary Level. February 1988
- 82. **Chikombah, Cowden E.M.**: Education Issues in Zimbabwe since Independence. September 1988.
- 83. **Riis, Ulla & Engström, Jan-Åke**: IEA Second International Science Study (SISS). Den Svenska Läroplansanalysen: Rational, Anvisningar och Resultat. January 1989.
- 84. **Eriksson, Riitta**: Elever som deltagit i finskspråkig utbildning i gymnasieskolan i Stockholm. En utvärderingsrapport till Skolöverstyrelsen. September 1989
- 85. **Duncan, Wendy A.**: The English Language Social Sciences Programme at Kungsholmen's Gymnasium. Interim Evaluation. September 1989
- 86. **Tuijnman, Albert**: The Emerging Welfare Society: Sweden 1930s 1980s. May 1990
- 87. **Steere, Marcia & Strömqvist, Görel**: Evaluation of the English Language Social Sciences Program at Kungsholmen Gymnasium. Report for the Swedish National Board of Education. June 1990
- 88. **Löfstedt, Jan-Ingvar; Engström, Jan-Åke & Munck, Ingrid**: Resultat- resursoch produktivitetsanalys av den samhällsvetenskapliga fakulteten vid Stockholms universitet. April 1992.
- 89. **Furu, Margareta och Furu, Johan**: Uppväxtvillkor och Hälsa Kartläggning av socioekonomiska förhållanden under tidiga barnaår och tonår i relation till några faktorer av välfärdsintresse senare i livet. October 1992
- 90. **Bang, Hanne**: Can Quality of Life be Measured? A Literature Review. December 1992

- 91. **Shangwu, Zhao**: Case Study Science Education in Chinese Secondary Schools. April 1993
- 92. **Tegborg, Maria**: The National Literacy Programme in Namibia Mobilization of Learners and Support through Communication. June 1993
- 93. **Kolouh, Lidija**: Education for Self-Reliance in Tanzania- A Case Study in Ilboru Secondary School. June 1993
- 94. **Löfving, Anna & Nordlander, Ylva**: Elimu Haina Mwisho Education Has No End. A Minor Field Study of the Literacy Work in Tanzania. September 1993
- 95. **Bang, Hanne**: Religion, etnicitet och europeisk integration Rapport Från 4 Sonderingsresor. December 1993
- 96. **Löfstedt, Jan-Ingvar**: Education in Multi-Ethnic and Disadvantaged Areas: The Case of Gansu in China. June 1994
- 97. **Gerdes, Paulus**: Ethnomathematics and Education in Africa. January 1995.
- 98. **Löfving, Anna**: Non-Governmental Organisation Partners in the Development Process. The Case of India. November 1994
- 99. **Bang, Hanne**: Retirement and the Quality of Life. October 1995
- 100. Hellström, Zenia: The Malmö Study. Data Collection 1994. April 1996
- 101. **Borges-Månsson, Alicia**: Women's Literacy and the Question of Dropout: Two Mozambican Case Studies. May 1996
- 102. **Litsgård, Leif**: Elementary Education in the Swedish Parish of Westland 1686-1899. July 1996
- 103. **Kanaev, Alexander N. & Fägerlind, Ingemar**: Citizenship Education in Central Asia: Status and Possibilities for Cooperation. April 1996
- 104. **Daun, Holger**: National Forces, Globalization and Educational Restructuring. December 1996
- 105. **Odiwour, Wycliffe**: Primary Schooling and the Language Policy Trends in Kenya:Before and After Independence. January 1997
- 106. **Daun, Holger**: Pupils' Self-Perception and School Processes: A Case Study in Swedish Lower Secondary Schools (Grades 7-9). March 1997
- 107. **Ankarsand, Anna och Fägerlind, Ingemar**: Återkommande utbildning, förvärvsliv och inkomster. En 55-årig longitudinell studie av svenska kvinnor och män. Augusti 1997
- 108. **Daun, Holger & Ruiz de Forsberg, Nuzzly:** Political-Economic Shifts and Educational Restructuring: A Comparative Study of Education in Guinea-Bissau and Nicaragua. February 1998
- 109. **Daun, Holger & Benincasa, Luciana**: Restructuring Education in Europe. Four Country Studies. May 1998
- 110. **Tuijnman, Albert**: Education, Literacy and Wages in Poland in Comparative Perspective. October 2000

- 111. **Fredriksson, Ulf & Taube, Karin**: Läsning bland elever med invandrarbakgrund: En undersökning av läsförmåga och bakgrundsfaktorer hos elever i årskurs 3 i Stockholm 1993-96. August 2001
- 112. **Löfstedt, Jan-Ingvar (Ed.):** Virtualization of Higher Education in the Era of Globalization. Issues and Trends. November 2001
- 113. **Bing, Liu & Daun, Holger**: Gender and School Inequalities in China. Case study in Five Beijing Schools. December 2001
- 114. **Daun, Holger**: Learning Skills and Life Situation: Case Studies in Guinea-Bissau, Senegal and Tanzania. February 2002
- 115. **Kolouh-Westin, Lidija**: Democracy in Education in Bosnia-Hercegovina and FR Yugoslavia. May 2002
- 116. Daun, Holger: World System, Globalization and Educational Change 2003
- 117. **Karlsson, Pia & Mansory, Amir:** Educational Reforms in the Context of Globaisation and in Afghanistan. February 2004
- 118. **Villalba, Ernest**: Knowledge Management as a Strategy for Lifelong Learning A Report for the European Social Fund Council in Sweden 2004
- 119. **Daun, Holger; Arjmand, Reza; Strömqvist, Görel & Vrethem, Karolina:** Utbildning av svenska rektorer: En Lägesbedömning 2004, maj 2005 ISBN:91-7155-099-2
- 120. **Daun, Holger & Mundy, Karen**. Educational Governance and Participation With Focus on Developing Countries. ISBN: 978-91-977959-4-4. January 2011

ISBN 978-91-977959-5-1 ISSN 0348-8381



Department of Education
Stockholm University SE-106 91 Stockholm Sweden www.interped.su.se

