The Predominance of Different Sources of Stress Among Teachers in Government Senior High Schools of Addis Ababa

Darge Wole*

Abstract: *Prompted by increased concern about teacher dissatisfaction and turnover, the researcher conducted a study to establish the levels of stress experienced by teachers in government high schools using data from 144 respondents in four centrally and peripherally located schools of Addis Ababa. The study focused on seven plausible sources of stress: Salary and Opportunities, Student Characteristics, Performance Evaluation, Time Pressure, Resources, Regulations and Relations. Differences in level of stress between groups (e.g. males and females) were also explored. The results identified problems related to Salary and Opportunities, Student Characteristics and Evaluation to be equally important origins of teacher stress. In addition, degree holders, experienced, and pedagogically trained male teachers appeared to be subject to greater stress than their female counterparts. The results suggested that, although salaries and benefits remained to be critical areas of teacher discontent and should receive due attention, it was useful to simultaneously deal with other sources of stress of equal or secondary importance.*

Introduction

Teacher drop out or brain drain has been an age-old problem in Ethiopia. As early as 1953, referring to teacher trainees who graduated from just one institution, Wrinkle (cited in Aklilu, 1967) reported a turnover rate of 67% over a nine-year period. At that time, the focus was on teacher exodus from primary schools. With the expansion of high schools, the problem has become more and more apparent at this level as well. Recent studies (Getachew, 1999; Manna and Tesfaye, 2000) pointed out the seriousness of the issue in general. For instance, Manna and Tesfaye determined that 49% of

* Associate Professor, Faculty of Education, Addis Ababa University.

the teachers included in their study were planning to leave the teaching profession. Apparently teacher burn out (Farber and Ascher, 1991) has become widespread. What indeed are the kinds of problems that frustrate teachers today, and which of those problems reign high? The issue is not simply academic. There is a practical urgency in it as well.

Review of Literature

The inequity in salary between teachers and non-teachers with similar qualifications, and the negative relationship between inadequate salary or career structure and job satisfaction has been confirmed by empirical data (Kyriacou and Sutcliffe, 1979; Ornstein and Miller, cited in Woolfolk and McCune-Nicolich, 1984). Locally, Aklilu (1967), MOE (1986), and Ayalew (1991) have also identified low or inequitable salary and inadequate chances for career advancement as critical matters in teacher job dissatisfaction. More recently, Getachew (1999) and Manna and Tesfaye (2000) have reached similar conclusions.

By way of redressing teacher dissatisfaction regarding salary and career structure, in 1994 the Ministry of Education issued new regulations about the matter (MOE, 1994). The regulations stipulated a rise of about 27% in starting salary for high school teachers with a bachelor's degree, a six-tier career structure ranging from □ማሪ መምህር (Beginning Teacher) to ዋና መምህር (Principal Teacher). Despite the above initiative, indications (e.g. Getachew, 1999) are that many teachers are dissatisfied with their salary and with the career structure, or the implementation procedures.

Evaluation of teacher performance, a process which is related to salary and career advancement, also seems to be a slippery task. Mckenna (cited in Gibson, 1976) indicates the difficulty of operationally defining evaluation criteria which involve terms such as

independence or *self-confidence*. Tolor (1973) questions the reliability of data obtained from individuals (like parents) who often have limited information about teachers, or from evaluators who may not share the same understanding of the criteria. Farber and Ascher (1991) warn against evaluations that are *tainted* by non-professional considerations.

In the present context, criteria for teacher evaluations comprising fourteen major categories appear in the revised version of the new career structure (MOE, 1999). The criteria include adequacy in general knowledge, contribution to the application of education to development, and research. It has further been promulgated that, aside from the school administration, students and parents should participate in teacher evaluation, and that committees should be set up at school, *Woreda* (district) and zone levels to process the evaluations. Still, informal discussions with high school teachers (Debebe, *et al*., 2000) suggests that some teachers are dissatisfied with the criteria (considering them to be too demanding), and with the evaluation process (e.g. evaluation by parents).

Another commonly mentioned source of disappointment for teachers pertains to deficient student academic background and misbehavior (Landsmann, 1978, cited in Woolfolk and McCune-Nicolich; Dunham, 1981). For instance, Dunham singles out rowdyism as a major factor in teacher burn out and teacher exodus. Conditions in Addis Ababa also suggest that teachers face a variety of student-related problems, including absenteeism (Darge, 2000a), low motivation (Darge, 2000b) and large class size - usually exceeding 70 - which often involves noisiness and other disciplinary problems.

Yet another frequent source of teacher stress is shortage of time . In a study that included high school teachers, Johnstone (1993) identified workload as the most frequent cause of teacher stress. Tang (1999) found that shortage of time was related to job

dissatisfaction. Chen and Miller (1997) produced similar evidence. In Addis Ababa high schools also, apparently time pressure is an issue. Some teachers carry a load of thirty periods a week, and they teach at different grade levels. That makes preparation and follow-up very difficult. Large class size demands a lot of time for marking papers and providing individual help. Yet the evaluation criteria assume that teachers can contribute noticeably in terms of research, extra-curricular programs, and other non-teaching activities. Indeed, what Getachew (1999) found in another site (i.e., workload as a source of stress) could also be true of Addis Ababa.

Empirical evidence also exists to confirm that shortage of teaching materials and facilities are a source of dissatisfaction for teachers (Kyriacou and Sutcliffe, 1979; Manthei, Gilmore, Bryan and Adair, 1996). In the context of the present study, there is apparently little or no problem concerning the availability of textbooks. However, there is a shortage of audio-visual aids. Concerning laboratories specifically, a statistical report (MOE, 2000) indicates that, nation-wide, senior high schools have adequate numbers of these facilities. However, it is not clear what proportion of the laboratories are in good working condition and how adequate they are to accommodate the large student population[1]. These issues are potential sources of disgruntlement for teachers.

The social relations of teachers has further been recognized as a source of dissatisfaction (Craig, Mehrens and Clarizio, 1975; Pettigrew and Wolf, 1982; Ayalew, 1991; Tang, 1999; Manna and Tesfaye, 2000). For instance, Craig directed attention to pro-administration and anti-administration factions among teachers themselves. Manna and Tesfaye (2000) found out that 66.5 and 35.2 per cent of the teachers involved in their study were unhappy with their relationship with the school administration and colleagues, respectively. From a broader perspective, Ayalew (1991) concluded that public regard for teachers was low.

Defective regulations or the failure to adhere to regulations is still another area of discontent for teachers (Kyriacou and Sutcliffe, 1979). In the case of Addis Ababa senior high schools, for example, unlike past practices, teachers are nowadays ordinarily assigned to both morning and afternoon shifts. There is also unofficial understanding that class size can be raised. The 10% per cent limit for permissible absenteeism for students is sometimes relaxed to accommodate pleas by students with *difficult* problems.

There are at least three general points that have to be considered in relation to the different sources of stress indicated above. First, stress levels may be mediated by individual characteristics of teachers such as sex (Cortis, 1973 ; Richardson, 1997; Getachew, 1999). Second, in spite of the apparent diversity of sources of stress, it appears that the sources can be classified into a few groups (or under a few 'factors') according to their similarity (Kyriacou and Sutcliffe, 1978; Borg and Riding, 1991; Boyle, *et al*., 1995). For instance, Kyriacou and Sutcliffe (1978) extracted four such factors: poor working conditions (including salary), time pressure, poor school ethos and pupil misbehavior. The factors that emerged from the three studies, similar as they are, provide a starting point or *framework* for additional investigation. Third, the relative importance of individual sources of stress seems to vary from context to context, as a comparison of the findings by Richardson (1997), Tang (1999), and Getachew (1999) demonstrate. A better and more precise understanding of the issue therefore requires a re-assessment of the relative predominance of selected types of stress-inducing factors in the particular situation of interest.

Problem Statement

The following questions are set forth:

- What is the degree of predominance of different sources of stress among government senior high school teachers in Addis Ababa?

- Do the levels of different kinds of stress vary according to sex, academic qualification, teaching experience, professional training or site of school?

In the present study, *stress* refers to dissatisfaction and concern teachers show as a result of working conditions that are very taxing or that exceed their capabilities (Menaghan, 1983; Farber, 1991). Identifying the predominance of different types of stress helps to determine which ones require particular attention. The inquiry also contributes to a greater understanding of the relationship between stress and educational context. Information about the association between individual characteristics and site of school with level of stress similarly provides ideas about the kinds of variables that regulate the strength of different sources of stress.

Method

Participants

Initially 159 teachers in four government senior high schools were included in the study. The number of the selected respondents from each school was: 45 (33 males and 12 females, from Higher 12 High School), 51 (42 males and 9 females from Menelik II High School), 29 (26 males and 3 females, from Shimelis Habte High school), and 34 (29 males and 5 females, from Ayer Tena High School).

The four schools were selected for the study so that they could reasonably represent the 25 government schools in the city. Jointly with a colleague teaching in the same department, the researcher first categorized the schools into *central* (i.e., at the center of the city, or in those parts of the city with relatively large population and better infrastructure) and *non-central* (i.e., at or close to the periphery of the city and with relatively smaller population and little infrastructure). Two schools were then randomly selected from each category for the study[2]. The selected schools afforded considerable variation or

representation in terms of student population and teacher qualification[3]. In addition, the *central schools*, represented by Menelik II and Shimelis Habte High schools, generally had *a* greater number of students, a more expanded evening program, and relatively less dilapidated facilities than the *non-central* schools as represented by Higher 12 and Ayer Tena schools.

The selection of the respondents was done first by collecting information on the number of teachers in each school, classified by sex, academic qualification and type of subject (matter) taught. A reasonably proportional number of teachers, representing each type of school and teacher background (i.e., sex, qualification, and subject taught) was then taken for the study. Accordingly, with an eye on both adequacy of sample and the resource available for the study, 45% of the teachers from each school were selected as respondents[4].

Data Collection: Instruments and Procedure

The researcher first developed seven scales to measure teacher stress by considering the kinds of conditions in the study context that were frequently mentioned as sources of dissatisfaction. The seven scales referred to *Salary and Opportunities* (including advancement and fringe benefits), *Student Characteristics, Performance Evaluation, Time Pressure*, *Resources* (including textbooks and facilities), *Regulations* (about staff and student assignments to classes, and about absenteeism) and *Relations* (or relationships with the staff, parents and the community) [5].

The items in the original seven scales were presented to five teachers in one of the biggest government high schools in Addis Ababa, namely, Addis Ketema High School, for their comments about the relevance of the items to teacher stress[6]. The scales were improved on the basis of the feedback thus obtained. Each of the final scales

were composed of 5-10 items. In completing the scales, respondents were asked to put a tick mark (✓) under one of the three options to indicate if the item (statement) refers to a matter which results in minimal or no stress (scored '0'), some stress (scored '1') or high stress (scored '2'). Upon administration of the scales to the respondents, the coefficient alphas ranged from 0.71 to 0.87.

In addition to the scales, the respondents were asked to provide bio-data, including information on their teaching experiences, and clarifications about the problems they face in school. The questionnaires were administered in the four schools in May 2000.

Methods of Analysis

The relative predominance of the different sources of stress was examined by using the Friedman two-way analysis of variance by ranks (Marascuilo and Serlin, 1988). This test was used because it was more appropriate to consider the obtained data (which was based on rating) as ordinal rather than interval. Again assuming the data to be ordinal, the Mann Whitney U Test (Siegel, 1956) was employed to compare the differences in level of stress between different groups, as specified in the problem statement. For all statistical tests, alpha was pre-set at 0.05.

Findings

Out of the 159 questionnaires (battery of scales) distributed to the respondents, 144 (i.e., 90.6%) were completed and returned[7]. The rate of return from each school was 73.5 - 100 %. Overall, 94.6% of the male and 75% of the female respondents completed the scales.

Predominance of Sources of Stress

The mean score and standard deviations for the different sources of stress are given in Table 1.

Table 1 suggests that *Salary and Opportunities* and *Student Characteristics* are the two most predominant sources of stress for high school teachers. The items which received the highest and lowest average scores as sources of stress in each scale were, respectively: *Salary and Opportunities* - the way the teacher career advancement guidelines are implemented, and Job security at the present place of work; *Student Characteristics* - Students' English ability in relation to their grade level, and Threats by students who want teachers to give them marks freely; *Evaluation* - Making parent representatives evaluate teachers, and the way department heads evaluate teachers; *Time Pressure* - Shortage of time to give additional help to students who have special problems, and shortage of time for lesson preparation; *Resources* - Inappropriateness of textbooks in terms of difficulty level, amount of content, etc., and Availability of textbooks; *Regulations* - Allowing students who missed a lot of classes to take examinations, and The way department heads are appointed*; Relations* - Respect shown to teachers by the community, and Relations with teachers in the school*.*

Table 1: Mean Scores and Standard Deviations for Different Sources of Stress (n = 144)

	Scores/ S.D's by Sources of Stress						
	*S and O	SC	EV	TP	Rs	Rg	Rt
Mean Score	1.58	1.58	1.42	129	1.21	1.16	0.94
S.D.	0.39	0.32	0.48	0.43	0.44	0.34	0.32

*S and O = Salary and Opportunities; SC= Student Characteristics; Ev= Evaluation; TP =Time Pressure; Rs = Resources; Rg = Regulations; Rt = Relations.

Note that the scores are based on three-point rating scales (i.e., 0-2).

As indicated earlier (in the *Methods of Analysis* section), it was deemed more reasonable to make the comparisons among the seven areas of stress using ranks. Accordingly, the average scores of each respondent for each of the seven sources of stress were ranked, and the Friedman test was applied to the rank data. The results follow:

Table 2: Summary of Data Regarding the FriedmanTest

	S and O	SC	Ev	TP	Rs	Rg	Rt
Mean Rank	2.55	2.53	3.41	4.06	4.49	4.94	6.02
Pair Wise Differences							
S and O	-						
SC	0.02	-					
Ev	0.86	0.88	-				
TP	1.51*	1.53*	0.65	-			
Rs	1.94*	1.96*	1.08	0.43	-		
Rg	2.39*	2.41*	1.53*	0.88	0.45	-	
Rt	3.47*	3.49*	2.61*	1.96*	1.53*	1.08*	-

χ^2 = 310.18 ($p<.05$). * Minimum difference required for significance in pair-wise comparison = 0.89.

Table 2 indicates that *Salary and Opportunities, Student Characteristics and Evaluation* are the three most prominent sources of stress for teachers. All three are more stressful than *Resources, Regulations*, or *Relations*. Also, *Relations* turns out to be the least stressful area.

In addition to rating each source of stress, the respondents provided various clarifications regarding the different sources of problems. *Concerning Salary and Opportunities*, they indicated that there was an unprofessional bias in the implementation of the career structure on account of *connections*; that the career structure was used to *feed* some on the pretext of *quota* and harass others; that it benefited only a few (i.e., less than 30%); and that teachers were unduly required to

show a variety of accomplishments to advance just one step in the career structure.

Pertaining to *Student Characteristics*, the respondents pinpointed the following as specific areas of concern: serious deficiency in the English language rendering teacher communication taxing and fruitless; noisiness; disaffection; student arrogance due to their status as evaluators of teacher performance and due to relaxed promotion policy; disregard for homework; absenteeism and cheating during examinations.

Likewise, the respondents listed particular issues of dissatisfaction with respect to *Evaluation*. These included: the multiplicity of evaluators and the criteria, the lack of focus on classroom activities or teaching activity, the unwarranted revision of evaluation results by zonal administrations, the bias of students (in the evaluation) against teachers who require them to work hard, or who seriously check on their activities, and the inclusion of parents (who do not know the teachers) as evaluators.

The respondents also offered some elaboration about the difficulties they faced due to *Time Pressure*. Specifically, they mentioned: the mismatch between the syllabus for a semester and the time (periods) allotted for the syllabus, the need to revise lessons from previous grades (to compensate for students' deficiency); and the time spent at staff meetings that were frequently arranged during class hours.

Relatively few observations were made pertaining to problems related to *Resources*, *Regulations* and *Relations*. The observations on *Resources* were related to: poorly stocked libraries, absence of offices for teachers, and inadequate audio-visual aids. Those on *Regulations* consisted of assignment to both morning and afternoon shifts, and large class size. The major points raised by the respondents about (social) *Relations* were related to some degree of

acrimony among teachers due to the competition for promotion, and the low regard the community had for teachers.

Group Differences in Level of Stress

The results of the Mann - Whitney U test on the rank data for males and females are summarized in Table 3.

Table 3: Summary Data of Mann Whitney U Test for Males and Females

	Mean Score		Sum of		
	F (1)	M (2)	Ranks (R_1)**	U***	Z
Salary and Opportunities	1.43*	1.60	1274	1540	1.41
Student Characteristics	1.49	1.60	1335	1479	1.06
Evaluation	1.14	1.47	1082.5	1731.5	2.49 ($p<0.5$)
Time Pressure	1.32	1.29	1458.5	1355.5	0.36
Resources	1.16	1.22	1417.5	1396.5	0.59
Regulations	1.12	1.19	1394	1420	0.73
Relations	0.76	0.97	1095.5	1718.5	2.42 ($p<.05$)

* The standard deviations ranged from 0.30 -0.44 for males, and from 0.35 - 0.60 for females.

** For brevity, only the sum of ranks for the smaller group is given here. The sum of ranks for the other group may be obtained by using the formula: $R_2 = (n + 1) n /2 - R_1$

*** U = The number of times a female score precedes a male score

$$= n_1 n_2 + n \frac{(n_1 + 1)}{2} - R1, \text{ where } n_1 \text{ (females)} = 21; n_2 = 123.$$

As shown in Table 3, male teachers experienced more stress than females with regard to *Evaluation* and *Relations*, but not with regard to other sources of stress. A similar analysis using rank data for degree holders and non-degree holders was made with the results indicated in Table 4.

Table 4: Summary Data of Mann Whitney U Test for Degree Holders and Non-holders*

	Mean Scores				
	No Degree (1)	Degree (2)	Sum of Ranks (R_1)	U	Z
Salary and Opportunities	1.49**	1.61	3134	2691	1.79***
Student Characteristics	1.63	1.55	3753.4	2071.7	0.87
Evaluation	1.38	1.43	4327	2398	0.53
Time Pressure	1.35	1.26	3718.5	2106.5	0.72
Resources	1.28	1.17	3889.5	1935.5	1.46
Regulations	1.13	1.18	3341	2484	0.90
Relations	0.92	0.94	3489.5	2335.5	0.26

*n: No degree = 50; Degree = 91; ** The standard deviations ranged from 0.32 - 0.47 for degree holders and from 0.26 - 0.50 for non-degree holders; *** $p < .05$.

Evidently, the degree holders and the non-degree holders felt the various types of stresses to a similar extent, except that the degree holders showed greater concern about *Salary and Opportunities* than their counterparts.

A number of differences were detected in the level of stress of experienced teachers (i.e., those with teaching experience of over 10 years) and less experienced teachers, as shown in Table 5.

Table 5: Summary Data of Mann Whitney U Test for Experienced and Less Experienced Teachers*

	Mean Scores				
	Less Exp. (1)	Exp. (2)	Sum of Ranks (R_1)	U	Z
Salary and Opportunities	1.71**	1.56	1637.5	908.5	1.60
Student Characteristics	1.48	1.60	1952	1494	1.88***
Evaluation	1.22	1.45	967	1579	2.38***
Time Pressure	1.04	1.33	990	1556	2.25***
Resources	1.05	1.24	1092.5	1453.5	1.64***
Regulations	1.25	1.16	1552.5	993.5	1.10
Relations	0.95	0.93	1408.5	1137.5	0.24

* n: Less Experienced = 19; Experienced = 124.
** Standard deviations: .23 - .49 for the less experienced; .32 - .48 for the experienced.
*** $p < .05$.

According to Table 5, experienced teachers (as defined earlier), demonstrated greater amount of stress in relation to *Student Characteristics*, *Evaluation*, *Time Pressure* and *Resources*. However, the two groups indicated similar degree of dissatisfaction with *Salary and Opportunities*.

Table 6 presents comparative data in relation to pedagogically trained and untrained teachers.

Table 6: Summary Data of Mann Whitney U Test for Pedagogically Trained and Untrained Teachers*

	Mean Scores		Sum of Ranks		
	Untrained (1)	Trained (2)	(R_1)	U	Z
Salary and Opportunities	1.65**	1.60	1292.5	1020.5	0.32
Student Characteristics	1.57	1.58	1277.5	1935.5	0.23
Evaluation	1.36	1.44	1011	1302	1.47
Time Pressure	1.08	1.32	933.5	1379.5	1.97***
Resources	1.13	1.22	1158	1155	0.54
Regulations	1.21	1.15	1330.5	982.5	0.56
Relations	0.79	0.96	844.5	1468.5	2.53

*n: Untrained = 18; Trained = 119
** Standard deviations : 0.29 - 0.55 for the Non-trained ; 0.31 - 0.49 for the trained.
*** $p < .05$

Table 6 suggests that, compared with teachers who had no pedagogical training, those who had such training found *Time Pressure* and *Relations* more frustrating.

The information on teachers from centrally and peripherally located schools was analyzed by comparing the data from Menelik and Shimelis Habte schools with the corresponding data from Higher 12 and Ayer Tena schools. The results are as follows.

Table 7: Summary Data of Mann Whitney U Test for Teachers in Central and Peripheral Schools*

	Mean Scores		Sum of Ranks		
	Untrained (1)	Trained (2)	(R_1)	U	Z
Salary and Opportunities	1.57**	1.59	5294	2731	0.57
Student Characteristics	1.64	1.52	6092	1933	2.62 ***
Evaluation	1.47	1.37	5723	2302	1.14
Time Pressure	1.38	1.20	6029	1996	2.37***
Resources	1.18	1.24	5284	2741	0.61
Regulations	1.16	1.16	5340.5	2684.5	0.39
Relations	0.96	0.91	5756	2269	1.27

* n : Menelik and Shimelis Habte - H and S = 75. Higher 12 and Ayer Tena -HTand AT = 69;
** Standard deviations: 0.31-0.46 for Menelik and Shimelis Habte; 0.31 - 0.49 for Higher 12 and Ayer Tena.; *** $p < .05$.

As shown in Table 7, apparently teachers from centrally located schools were more troubled with *Student Characteristics* and *Time Pressure* than teachers from peripherally located schools. A similar comparison of the data for Menelik School (Main central) and Ayer Tena (Main peripheral) produced a slightly different result in that the teachers from Menelik School exhibited significantly greater stress than those from Ayer Tena School with regard to *Student Characteristics* and *Evaluation* (but not with regard to *Time Pressure*).

Discussion

The discussion centers on the relative seriousness or predominance of the various sources of teacher stress, group differences in levels of stress, and focal ideas for reducing the stress.

Predominance of Sources of Stress

Evidently the most prominent concerns of government senior high school teachers in Addis Ababa are related to *Salary and Opportunities*, *Student Characteristics* and *Performance Evaluation*. Apparently next in the hierarchy of problem areas are *Time Pressure*

and *Resources*. From the different sources of stress included in the study, *Regulations* (as defined in the Methods section) and *Social Relations* presented the least serious difficulties, with *Relations* ranking even lower than *Regulations*. The results concerning specific items in each of the seven scales, though definitely inadequate for generalization as single-item scores, provide some idea about the degree of concern the respondents attach to the particular items. For instance, among the items included in the *Salary and Opportunities* scale, the one that created the most dissatisfaction was the way the career advancement guidelines for teachers were implemented.

Low or inadequate salary of teachers has remained to be a major problem despite the introduction of the new career structure in 1994. For one thing, there are a variety of governmental and non-governmental organizations that pay a higher starting salary for non-teachers. This creates resentment especially among teachers of high academic achievement or background. Even more serious is the fact that the evaluation criteria and procedure, which form the basis for salary increment for teachers, have, at least in the eyes of the teachers themselves, many inadequacies.

The revised criteria for teacher promotion (MOE, 1999), though presented in fourteen major categories, can further be broken down into a lot of specific requirements which are difficult to fulfil as well as to assess. For instance, one global category is *Adequacy in teaching; contribution to the strengthening of pedagogical center, and sizeable utilization of pedagogical center* [writer's translation][8]. What all this means is that teachers have to attend to a large number of high expectations, and that can hinder them from doing well in any one area. Actually, according to some respondents, compared to the salary increment due to promotion, the amount of exertion that is required to get the promotion is so much that it is not worth the effort. To wit, a መምህር (Teacher) aspiring for promotion to ከፍተኛ መምህር (Senior Teacher) should have three years of teaching experience as

መምህር (Teacher), a total of eight years of teaching experience, and should obtain a minimum average score of 80% on evaluation (MOE, 1999). Even if these criteria are fulfilled, according to the respondents, the promotion may be subject to the quota fixed for the concerned school, (See also below). If finally successful, the candidate gets a maximum salary raise of 17.6 %.

The issue of promotion is rendered particularly disenchanting by what the respondents referred to as *quota system* - a stipulation (real or presumed) which sets a limit to the proportion of teachers in a given school that can get a promotion. Apparently the said stipulation is not documented but it has featured so widely in the reactions of the respondents that it cannot be dismissed outright as a fabrication.

The idea of quota, if actually practised, could be inspired by the intent to fit salary raise due to promotion to available recurrent budget. However, in a context where the promotion criteria are considered excessive and where there are considerable barriers to do effective work, imposing additional restriction on promotion (via quota or similar measures) is likely to encourage resentment and total reclusion.

According to the respondents, conditions in the schools also make it difficult to fulfil the criteria, and these include *heavy* teaching load (sometimes amounting to 30 periods a week), large class size and limited facilities. However, such constraints should be considered together with other limiting factors, such as insufficient motivation and the scarcity of in-service training that could enable teachers develop greater competence and self-confidence in teaching, research and counseling - qualities that are directly relevant to promotion.[9]

One other factor related to the high concern with salary is the rise in the cost of living. During the period 1991/92 - 1996/97, for example, there was an average inflation rate of 6.7% per year in commodity

prices (Befekadu and Birhanu, 2000). That contrasts with, for example, the 5.6% average rate of increase *every two years* in the salary of a መምህር (Teacher), which is granted only upon satisfactory performance. Some teachers try to supplement their income by teaching evening classes, or giving tutorials for fee-paying students on weekends. Unfortunately, that detracts them from their regular duties.

As supplementary to salary and career structure, fringe benefits and opportunities for further training/ education should normally receive considerable attention. To the disappointment of teachers, such consolatory provisions are rare in the present context. Actually, in Addis Ababa, housing and transportation services are becoming more and more costly (Befekadu and Birhanu 2000), and government support in such critical area, however modest or in whatever form it may be, would help to ease teacher stress. Regarding training opportunities for teachers, the focus has been on pre-service education, allowing only for sporadic training workshops. As a result, teachers feel that they have academically reached a dead end. The issue is worth special attention because fringe benefits and opportunities for further education and training signify better recognition of teachers' contributions to society, and can be self-enhancing and motivating, particularly when teacher turn-over is high (McGinn and Borden, 1995; Bogler, 1999).

Concerning the evaluators of teacher effectiveness, student participation can potentially help to increase the reliability and validity of the evaluation, but this is achieved only if the students appreciate the purpose, significance and responsibility associated with the task and avoid personal bias, vindictiveness or negligence in the process . Student bias in such evaluations has actually been underscored in other studies (e.g. Wicks, cited in Gibson, 1973). The requirements for proper evaluation mentioned above apply, even more emphatically in some cases, to parents who evaluate teacher

effectiveness because, as Tolor (1973) indicated, such evaluators are likely to base their evaluation on hearsay. Judging from the reactions of the respondents, bias and hearsay dominate teacher evaluation by students and parents, respectively. One unfortunate consequence of such aberrations is that they may impel some teachers to buy their way up the career structure by giving good grades to their students.

There is perhaps a more basic issue in the evaluation process since, at least in principle, the candidate should not only get complete information about the results of the evaluation, but should also be able to challenge them in case of faulty judgement. This kind of transparency and accountability is essential if the results of the evaluation are going to be used for professional self- improvement by the concerned teacher. Apparently forums for appeal exist at different levels (e.g. Zonal Career Advancement Committee) but according to the respondents, appeals do not get fair hearing at those levels due to various biases (which proved to be too difficult to check in this study). Even if the appeal committees attempt to give a fair treatment of complaints, they need to have very specific and dependable information about the achievements and activities of the appellant. If schools do not carefully collate such information ahead of time, both school and appeal committees are not likely to achieve transparency or credibility.

The findings concerning student characteristics as sources of stress markedly correspond to the results obtained in other studies (Borg and Riding 1991; Boyle *et al*., 1995; Getachew, 1999). What has come out very strongly from the present study is teachers' discontent regarding the academic preparation of students in the lower grades, and the administrative tendency to exercise leniency in student promotion. These and other similar problems (e.g., the problem of low student motivation for learning) probably emanate from incompatibility between instructional / educational demands on the one hand and available resources as well as educational planning

and management on the other. Solutions in this regard do not lie in expediency (as in *automatic promotion*) but on fundamental change in strategy which may include re-assessing priorities (particularly in relation to student practical experience), devising workable and sustainable alternatives of delivery, using resources efficiently, etc.

Perhaps the most serious complaint regarding *Time Pressure* concerns the discrepancy between a given syllabus (content) and the time allotment for the syllabus. The issue becomes doubly important given the inadequate academic background, specially the (English) language deficiency of students. In this respect, particular mention is made about the shortage of time to complete the syllabi for science subjects. Apparently teachers also spend some time in class translating their lectures in English into Amharic. Together with other constraints (eg. difficulty of correcting homework for a large class), these problems render the teacher almost ineffectual, and hence the stress. The recently introduced requirement in Addis Ababa high schools that each teacher be committed to serve in both morning and afternoon shifts has further created, at least among some teachers, the impression that the administration is decidedly set to tighten all possible controls over the lives of teachers, and it too probably has a negative psychological impact on the teachers.

Unexpectedly, *Resources* does not seem to be a serious source of concern in the type of schools included in the study in spite of the inadequate instructional facilities in the schools. The finding implies that when the personal and basic interests of teachers (such as salary) are markedly frustrated, their concern for essential professional ingredients become marginalized. What is more, according to the criteria for promotion, teachers are expected to develop teaching aids - an expectation that is hardly workable in the face of teacher grievance about time pressure and shortage of in-service training. So from this perspective as well, teachers may feel

that the question of resources is largely impractical, and that it should better be ignored.

The finding about *Regulations* should be interpreted carefully because the term is used in a limited sense referring to guidelines for such as the appointment of a unit leader, and regulations about student absenteeism. The relatively low preoccupation of teachers with such regulations contrasts with the findings about teacher discontent with salary, career structure, and evaluation and the associated guidelines. Considered together, the results indicate the usefulness of examining different categories of regulations in such investigations.

Comparatively, relations among staff members and between the staff and parents appear to be the least troublesome concerns for teachers. On the basis of other evidence (Farber and Ascher, 1991), one would have expected to see acrimony and conflict among teachers because of the stiff (and insufficiently transparent) competition for promotion. However, except a respondent's observation that Teachers *are 'feeding' on each other due to the evaluation*, no evidence was obtained to suggest poor relations among teachers. Perhaps the teachers found it indiscreet, self-revealing , risky or divisive to openly admit or declare acrimony of the type.

Group Differences in Level of Stress

As indicated in the results, female teachers apparently experience less dissatisfaction than male teachers with regard to *Evaluation and Relations*. Concerning *Evaluation*, the results may partly be due to greater cultural expectation for men to do well or to excel professionally and to assume the main responsibility for the betterment of domestic income. It could also be that female teachers are less predisposed, on account of estimated risk, to confront

misbehaving students, or, alternatively to be more accommodating to students and as a result have less anxiety about student *Evaluation*. On the administrative side also female teachers may feel less agitated about *Evaluation* because of an overall systemic climate to give special encouragement to their professional growth and to safeguard their interest - which is partly expressed in the inclusion of women representatives in the career advancement committees at school, *woreda* and zone levels.

The finding pertaining to the difference between male and female teachers in level of stress on *Relations* is in line with results obtained by Farber (1991) and Richardson (1997). One likely explanation for the finding is the greater tendency among males to be assertive and outspoken with unit leaders, department heads and other administrative staff - a tendency which, given the unsatisfactory working conditions, can easily lead to tension and conflict.

The relatively lower concern of non-degree holding teachers about *Salary and Opportunities* as compared to degree holding teachers is perhaps related to a difference in their expectation for benefits on the basis of qualification. According to the new guidelines, it is only the degree holders that are qualified to teach in high schools. So the non-degree holders may feel that it is unbecoming to complain about salary when in fact they are underqualified for the job.

Compared with the less experienced, experienced teachers seem to be encumbered with greater stress in relation to *Student Characteristics*, *Evaluation*, *Time Pressure and Resources*. When it comes to students, the feeling is that their behavior (e.g. diligence and attentiveness) has generally degenerated through the years for various reasons (e.g. the stiff competition for admission to higher institutions of learning). In this regard, it is the more experienced teachers that particularly sense the change, and feel chagrined. In reference to *Evaluation*, although initially the new career structure

promised considerable advantages for experienced teachers, practically the rigorousness and the complexities associated with the promotion criteria have not adequately allowed that to happen, and the experienced teachers appear disillusioned.

The difference between the two groups in level of stress regarding *Time Pressure* may at least be partly due to a tendency for schools to assign experienced teachers to higher and more challenging grades. It also appears that, on the whole, it is the more experienced teachers that get more involved in teaching or tutorial activities beyond their regular duties, as in the case of evening classes. Regarding *Resources*, again it is probably the more experienced teachers who appreciate more the importance of their availability, and who also notice more painfully the increasingly diminishing proportion of facilities and supplies in relation to the growth of student population.

The results just discussed are inconsistent with the findings of a study in a northern region of the country (Getachew, 1999), but it is line with other literature (Kyriacou and Sutcliffe, 1979; Manthei, *et.al*, 1996). However, there are important differences between Getachew's study and the present one. Getachew's study included less *experienced* teachers from rural areas who may have faced problems of adjustment. Moreover, his comparison was based on total stress score, not on data concerning individual components of the construct (such as *Student Characteristics*). In addition, Getachew's study included primary as well as high school teachers of about equal proportion, and it is unclear how the results would have turned out to be if the analysis was based on only high school teachers.

Turning to another type of group differences, the pedagogically trained teachers showed greater concern than their counterparts with regard to *Time Pressure* and *Relations*. Presumably, the former took more time to plan lessons and to examine student work. The pedagogically trained may have also faced greater problems in their

social relations because their views on teaching/learning processes and on school management could occasionally diverge importantly from the views of the non-trained, and their behavior may have been regarded as too pedantic, or condescending.

The most outstanding difference in level of stress between teachers in centrally and peripherally located schools pertains to *Student Characteristics*, and it is apparently the centrally located schools that experience the problem more acutely. The difference is probably related to the greater class size in the centrally located schools - which makes it difficult not only to give individual attention during instruction but also to maintain discipline. For instance, in the first semester (2000/2001) the average class size in the ninth grade at Menelik School was 83 but the corresponding figure for Higher 12 School was 62 (Beyene, 2001; Fissehaye, 2001). In addition, students attending centrally located schools faced a variety of distractions in their environs, and that probably exacerbated absenteeism and late coming and other misconducts. For example, in the present study, 52% of the respondents from Menelik School rated student late coming as *most serious* concern while only 30% of the respondents from Higher 12 School did so.[10]

Towards the Reduction of Stress

Taken together, the various sources of teacher stress present a formidable challenge, and the solutions are hard to come by. Still a few ideas pertaining to stress reduction can be forwarded for consideration.

Regarding *Salary and Opportunities*, it is probably useful and more practical to think in terms of fringe benefits and other forms of reward instead of just salaries. Such benefits may involve some form of support in housing or transportation as well as greater provisions for further training or education. Regarding the latter, there should be

more frequent short - term professional training coupled with modest material or monetary incentive. Active participation in such training should earn the teachers some credit which counts importantly towards promotion or salary increment. Provision of better amenities in schools, availability of small fund for within-school teacher development programs like seminars, facilitation of requests for transfer, and information on chances for professional development can further be used to improve teacher morale. Even more basic is the need for an appropriate or more effective mechanism for resolving tensions surrounding salary and opportunities through consultation, public debate, and consensus.

The stress arising from student deficiencies and disciplinary problems directly relate to the design and implementation of programs at the primary school level in terms of curriculum, and possibly teacher competency and job satisfaction. So there is a need to strengthen primary education by reviewing current policies and practices.

According to the respondents, measures that can improve the procedure for teacher evaluation include: involving only a selected group of good students, ruling out parental involvement, barring non-professionals in general from tampering with the results, and discarding the quota that sets a limit to the rate of promotion. Some officials question the validity of the latter two suggestions; others are not inclined to discuss them[11]. So there is a definite need to clear up the issues. Additional helpful considerations concerning *Evaluation* include: further refinement of the promotion criteria to make them more operational (during assessment) and less exorbitant, strengthening record keeping on teacher activities, continuous training of school administrators and *rigorous assessment of their performance*, which may involve evaluation by teachers, and a periodic review of the evaluation criteria and processes. In entertaining these and other similar suggestions, special care should be taken to avoid inequitable recognition among equals; and the cornerstone in all considerations should be professionalism.

In reference to *Time Pressure*, again there is a need to examine how well the syllabus fits the allotted time. In addition, teachers should be provided with adequate orientation and refresher courses related to the curriculum changes and to pedagogical methods. Teachers can also benefit from workshops on coping methods which may deal with time budgeting, organizing, and similar techniques but, as Farber (1991) perceptively indicated, such measures are better considered as a 'tune-up' rather than a remedy.

Concerning *Regulations* (as defined in the study), the problem is related both to stipulation and implementation. For instance, apparently no regulation exists regarding maximum class size. Conversely, though occasionally subject to leniency, there is a 10% upper limit for student absenteeism. In the former case, given the upsurge in student population and the limitation in facilities and teachers, it has become impossible to set a limit. In the case of absenteeism, there is sometimes pressure for waiver by students and parents on account of reasons ' beyond one's control', which may simply be a rationalization for low interest in schooling. Strict adherence to regulations about absenteeism can also inflate the number of repeaters whom the school can hardly accommodate, or increase the number of dropouts - which is already a serious problem (MOE, 2000). So the problem of school regulations and by-laws is closely tied to more basic issues - organizational, curricular, etc., and it is the resolution of such fundamental matters that can lend meaning and practicality to them.

Conclusion

It is often argued that the single most important preoccupation of teachers relates to salary. However, the present study has shown that their concern about student characteristics can be equally strong. In other words, working conditions beyond salary can be as critical as

the payment, and by attending to those conditions, it may be possible to reduce teacher stress significantly.

According to the study, degree-holding, experienced, and pedagogically trained teachers bear greater stress than their counterparts. This is a particularly crucial point because it is precisely those kinds of professionals that have better chances for employment elsewhere but that are most needed by the educational system.

The study also underscores the importance of conducting continuous and serious reviews of the new guidelines for teacher career advancement, and making appropriate adjustments without undue reluctance.[12] The various feedback and complaints about the procedures in the evaluation of teacher effectiveness that have been used in the schools for the past few years are a case in point.

The study found out that generally teachers in centrally located high schools face greater stress that arise from student characteristics and time pressure, and it appears that these problems are related to overcrowded classrooms. There is therefore a need to review student enrolment and class-size in high schools periodically with a view to achieve and maintain appropriate standards.

Furthermore, as the results indicated, some of the sources of stress for high school teachers are related to the educational provisions in primary schools. So the problems of these teachers are not a sectarian issue referring only to high schools, and their solutions require a wider perspective of the educational system.

The study of teacher stress is a relatively new area of engagement in the country, and there is evidently a wide room for additional investigations. Indeed, each of the sources of stress considered in the present study (e.g. *Performance Evaluation*) can be studied in greater depth. In this regard, it will be useful to further improve the

measuring instruments used in the present study to achieve greater precision.

Notes

1. For instance, there is considerable shortage of laboratory space in Menelik II High School (Beyene, 2001), and lack of laboratory technician at Higher 12 High School (Getachew, 2001).
2. In selecting the schools, the researcher and his colleague classified the 25 schools into central and non-central independently. Two discrepancies arose from the classifications (i.e., the researcher placed Medhane Alem High School under *central* while the collaborator classified it under *non-central*, and Higher 12 was regarded as non-central by the collaborator but as central by the researcher. After discussing the discrepancies, Medhane Alem was put under central and Higher 12 under non-central. The final classification included 14 central and 11 non-central schools.
3. For instance, in Semester 1, 2000/2001, total student enrolment (grades 9-12) in Menelik II High School and Shimelis Habte High School was 11, 057, as compared to 9,552 in Higher 12 and Ayer Tena schools. Also at the time indicated, the percentages of degree-holding teachers in Menelik, Shimeles Habte, Ayer Tena and Higher 12 high schools were 57.1, 67.7, 56.6 and 23, respectively.
4. More specifically, the teachers in each selected school were classified by sex, qualification, and subject area. Then, the respondents were selected randomly to represent each of the three categories. The sampling plan was that half of the teachers from each category from each school be included in the study, and that was effected with some exceptions. For instance, in the 1999/2000 academic year, there were 10 biology teachers in Menelik II High School (8 males and 2 females, 6 having B.Sc. and 2 diploma only). So 5 teachers (4 males and 1 female, 3 of whom had B Sc. and the rest diploma) were selected for the study. In some cases (e.g. when the number of eligible teachers was odd number) the selection was made by giving emphasis to fair representation. For instance, regarding history teachers, there was only one diploma holder in Menelik II High School, and she was a female. She was included in the sample.

5. Example of items are: *Salary and Opportunities*: My salary as compared to that of a professional of similar qualification having a non-teaching job; *Student Characteristics***:** Adequacy of the academic background of students; *Evaluation:* Parents' evaluation of teacher performance; *Time Pressure*: Time available to complete semester syllabus; *Resources*: Availability of textbooks; *Regulations*: Allocation of teaching load; *Relations*: Collaboration among department staff.
6. See Debebe, *et al.* (2000) in the references.
7. In some of the analyses, the total number of respondents does not add up to 144 because a few of the teachers have not responded to the relevant items. E.g. in the analysis involving teaching experience and level of stress, some of the teachers did not specify years of teaching experience.
8. Initially there were twelve such categories (MOE, 1996).
9. For instance, in a study involving teachers in 13 High Schools of Addis Ababa, Seyoum (1998) found out that 63.3% of the teachers had no opportunity to participate in workshops /seminars in 1996/97, and 27.2% did not take a research course.
10. This explanation got support, for example, from an interview with the Deputy Director of Higher 12 High School (Fissehaye, 2001).
11. See Beyene (2001) and Getachew (2001) in the references.
12. Revised guidelines for the implementation of the new career structure for teachers were available in 1999, but it is not yet clear whether these revisions have been disseminated to all concerned, put into practice, or whether they sufficiently accommodate past grievances.

References

Aklilu Habte (1967). *Brain Drain in the Elementary School: Why Teachers leave the Profession*. **The Ethiopian Journal of Education**, 1 (1), 27 -39.

Ayalew Shibeshi (1991). መምህራን የሚያጋጥሙዋቸው ችግሮችና ቅሬታ □ሚ□□ሩባቸው ሁኔታዎች [Problems Teachers Face and Conditions that Create Discontent in them] Addis Ababa: Research Report Sponsored by Ethiopian Teachers Association.

Befekadu Degefe and Berhanu Nega (eds.) (2000). *Annual Report on the Ethiopian Economy*, Vol.I, 1999/2000. The Ethiopian Economic Association. Addis Ababa: United Printers.

Beyene Erbeto, Deputy director, Menelik II Senior High School , Interview, January 11, 2001.

Bogler, R. (1999). *Reassessing the Behavior of Principals as a Multiple - factor in Teachers Job Satisfaction*. Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada.

Borg, M.G., and Riding, R.J. (1991). *Towards a Model for the Determinants of Occupational Stress among School Teachers*. **European Journal of Psychology of Education**, VI (4), 335 - 373.

Boyle, G., Borg, M.G., Falzon, J.M. , Boglioni, A.J. (1995). *A Structural Model of the Dimensions of Teacher Stress*. **British Journal of Educational Psychology**, 65, 49 - 67.

Chen, M., and Miller, G (1997). *Teacher Stress : A Review of the International Literature*. (ERIC Document Reproduction Service No. ED 410 187).

Cortis, G.A. (1973). *The Assessment of a Group of Teachers in Relation to Earlier Career Experience*. **Educational Review** , 25, 112 - 23.

Craig, R.C., Mehrens, W.H., and Clarizio, H.F. (1975). **Contemporary Educational Psychology - Concepts, Issues, Applications**. New York : John Wiley and Sons.

Darge Wole (2000a). *Patterns of Student Absenteeism in Addis Ababa Government Senior High Schools and Considerations for Containment.* **The Ethiopian Journal of Education**, XX (1), 59-89.

_____ (2000b) *What do High School Students Want of Their Teachers?* In David Bridges (ed.) **Secondary Teacher Education in Ethiopia**. Addis Ababa: Addis Ababa University Printing Press.

Debebe Tegegn, Hailu Yilma, Mengistu Mulat and Samuel Abduse, Teachers, Interview, Addis Ketema Senior High School, April 20, 2000.

Dunham, J. (1981). *Disruptive Pupils and Teacher Stress* **Educational Research**, 23 (3), 205 - 213.

Farber, B.A. (1991). **Crisis in Education - Stress and Burn out in the American Teacher**. San Franscisco : Jossey - Bass Pub.

Farber, B., and Ascher, C. (1991). *Urban School Restructuring and Teacher Burn out*. (ERIC Document Reproduction Service No. EC 340 812).

Fissehaye Negussie, Deputy Director, Higher 12 Senior High School, Interview, January 11, 2001.

Getachew Haile (1999). *Stress in School Teachers*. **The Ethiopian Journal of Education,** XIX (2), 15 - 46.

Getachew Woreta, Director, Higher 12 Senior High School, Interview, January 11, 2001.

Gibson, J.T. (1976). **Psychology in the Classroom**. New Jersey: Prentice - Hall, Inc.

Johnstone, M. (1993). *Teachers' Workload and Associated Stress*. (Research Report No. 53). Edinburgh: The Scottish Council for Research in Education.

Kyriacou, C., and Sutcliffe, J. (1978). *Teacher Stress: Prevalence, Sources and Symptoms*. **British Journal of Educational Psychology**, 48, 159- 167.

Kyriacou, C., and Sutcliffe, J. (1979). *Teacher Stress and Satisfaction.* **Educational Research**, 21(2), 89-96.

McGinn, N.F., and Borden, A.M. (1995). **Framing Questions , Constructing Answers - Linking Research with Education Policy for Developing Countries**. Massachusetts: Harvard University Press.

Manna Olango and Tesfaye Semela (2000). *Determinants of Teachers' Decision to Leave or Stay in the Teaching Profession*. **The Ethiopian Journal of Education**, XX (1), 1-23.

Manthei, R. ,Gilmore, A., Bryan, T., and Adair, V. (1996). *Teacher Stress in Intermediate Schools*. **Educational Research**, 38(1), 3-17.

Marascuilo, L.A., and Serlin, R.C. (1988). **Statistical Methods for the Social and Behavioral Sciences**. New York: Freeman and Co.

Menaghan, E.G. (1983). *Individual Coping Efforts: Moderators of the Relationship Between Life Stress and Mental Health Outcomes*. In H.B. Kaplan (Ed.), **Psychosocial Stress - Trends in Theory and Research** (pp. 157 - 191). New York: Academic Press.

Ministry of Education (MOE) (1986). **በኢትዮጵያ ትምህርት ጥናታዊ ግምገማ የትምህርት አስተዳደር መዋቅር እቅድ ጥናት ማጠቃለያ ሪፖርት** [Evaluative Research of the General Education System in Ethiopia - Summary Report on Study of Plan for the Structure of Educational Administration] Addis Ababa.

_____. (1994). **የመምህራን እድገት አፈጻጸም መመሪያ ቁርር** 1 [Guideline for the Implementation of Career Structure for Teachers - No.1].

_____.(1996). **የመምህራን እድገት አፈጻጸም መመሪያ ቁርር** 2 [Guideline for the Implementation of Career Structure System for Teachers - No.2].

_____.(1999). **የመምህራን እድገት አፈጻጸም መመሪያ(ተሻሽሎ የተዘጋጀ)** [Guideline for the Implementation of Career Structure for Teacher - Revised Version] , Addis Ababa.

_____. (2000). *Education Statistics - Annual Abstract* 1999/2000. Addis Ababa: Berhanena Selam Printing Enterprise.

Pettigrew, L.S., and Wolf, G.E. (1982). *Validating Measures of Teacher Stress*. **American Educational Research Journal**, 19, 373-396.

Richardson, A.G. (1997). *Stress in Teaching: A Study of Elementary School Teachers in the Caribbean.* Paper presented at the Annual Meeting of the American Research Association, Chicago, IL.(ERIC Document Reproduction Service No. ED 407 383).

Seyoum Teferra (1998). *The Current Status of Research Activities among Addis Ababa Senior High School Teachers*. **The Ethiopian Journal of Educational Research** , 18 (1), 1-18.

Siegel, S, (1956). **Nonparametric Statistics for the Behavioral Sciences** New York: McGraw Hill.

Tang, T., and Yeung, A.S. (1999). *Hong Kong Teachers' Sources of Stress, Burn out, and Job Satisfaction*. Paper presented at the International Conference on Teacher Education, Hong Kong (ERIC document Reproduction Service No. ED 429 954.)

Tolor, A. (1973). *Evaluation of Perceived Teacher Effectiveness*. **Journal of Educational Psychology**, 64, 98 - 104.

Woolfolk, A. E., and Mc Cune - Nicolich , L. (1984). **Educational Psychology for Teachers**. New Jersey: Prentice Hall, Inc.