

SCHOOL CLIMATE AND TEACHERS' PERCEPTIONS ON CLIMATE FACTORS: RESEARCH INTO NINE URBAN HIGH SCHOOLS

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ABSTRACT

This study examined the difference in the levels of the variables related to the school climate factors among the teachers teaching social science courses, the teachers teaching natural science courses, and the teachers teaching art, music and physical education. As a result of the analyzes, all the teachers reported open climate in relation to the factors of team commitment, organizational clarity and standards, intimacy and support , autonomy, member conflict, medium climate in relation to the factors of risk and in reward. Additionally, the teachers teaching art, music and physical education reported higher open school climate than others, man than women, single teachers than married ones, the teachers with more degree of education than the ones with a lower degree of education, older teachers than younger ones, and the teachers with less seniority than the ones with more seniority. Finally, some ideas were suggested about what should be done in helping teachers to work in a more desirable open school climate.

Key Words: School climate, organizational climate factors, high school teachers, and upper secondary high school education

INTRODUCTION

Schools are social institutions (Getzels & Guba, 1970). Within school organizations there are students, teachers, administrators, and many kinds of service personnel. Members of each of these groups occupy distinctive positions and are expected to behave in certain ways. The role expectations of these groups and norms ascribed to them are different from each other. Clearly, the relationships among many kinds of people in schools are varied and complex. Only if those relationships are understood and generally accepted can the school organization function effectively (Campell, Corbally & Nystrand, 1983).

Schools are also hierarchical organizations. The board of education is usually placed at the top of the hierarchy, followed by the superintendent, the principals and the teachers. In terms of the responsibility, students are responsible to teachers; principals are responsible to the superintendent, and the superintendent responsible to the board of education. Structurally, there is a series of superordinate-subordinate relationships within schools. Functionally, this hierarchy of relationships (principal to teacher, teacher to student, and so on) is the basis for allocating and integrating roles, personnel, and facilities to achieve school goals. Operationally, educational organizations are people intensive, thus the process in schools takes place person-to-person interaction (Sergiovanni & Starratt, 1988).

Every educational organization has a climate that distinguishes it from other schools and influences behavior and feelings of teachers and students for that school (Sergiovanni & Starratt, 1988). Climate has been defined in various ways by authors as the perceived subjective effects of the formal system, the informal style of managers, and other important environmental factors that impact on the attitudes, beliefs, values and motivation of people who work in a particular organization (Litwin & Stringer, 1968); personality of an organization (Halpin, 1967); the atmosphere of the workplace, including a complex mixture of norms, values, expectations, policies, and procedures that influence individual and group patterns of behavior (Spencer, Pelote & Seymour, 1998); generalized perceptions that people employ in thinking about and describing the organizations in which they work (Hall, Bowen, Lewicki & Hall 1987); employees' perceptions of the events, practices, and procedures as well as their perceptions of the behaviours that are rewarded, supported and expected within an organization (Schneider, Wheeler & Cox, 1992); the result of valuations or cognitive appraisals of environmental factors in terms of their acquired meanings to the individual (James & James, 1989), and not an assessment of what organizational members believe the organization should be like, but rather is an assessment of the shared perception of what the organization actually is like (Luthar, DiBattista & Gaulttschi, 1997).

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As for schools, climate is a necessary link between organizational structure and teacher attitude and behavior. It was found that formal characteristics of schools had an important influence on the way in which teachers perceived climate (George & Bishop, 1971). Clearly, climate represents a composite of the mediating variables that intervene between the structure of an organization and the style and other characteristics of leaders and teacher performance and satisfaction (Sergiovanni & Starratt, 1988).

Numerous studies have been done on organizational school climate. For instance, Halpin (1963) finds that it is behavior of elementary school principals, which in a large measure sets a climate tone for school (Halpin & Croft, 1963). In a more direct investigation leader behavior and organizational climate was found that by varying the leadership style from bureaucratic to human relations and human resources, three different climates- closed; warm, supportive and friendly; supportive goal-oriented-, each with distinct implications for member performance and satisfaction were created (Litwin & Stringer, 1968). The research of David McClelland and colleagues at the Harvard Business School (Litwin & Stringer, 1968) and Hay McBer and Company (Kelner, Rivers & O'Connell 1996), ongoing since the 1950s, indicate that successful leadership competencies and managerial styles produce motivating organizational climates, which arouse employee motivation to do work well, and which predict the desired organizational outcomes: exceptional customer satisfaction and financial performance. Thus, climate makes a difference. That is, it differentiates levels of performance among organizations. Hundreds of studies have demonstrated the link between organizational climate and bottom-line performance measures such as volume, efficiency, productivity, and customer perceptions of service quality. Typically, climate has accounted for 10 to 25 percent of the variance in performance measures. In many cases it has even been possible to predict significant improvements in performance based on climate improvements (Spencer, Pelote & Seymour 1998). In their study, Pirola-Merlo, Hartel, Mann & Hirst (2002) examined how negative events impact on team climate and how team climate relates to performance. Based on the results, team climate had a positive relation with team performance. Zohar (2000) demonstrated that variation in behaviour at the level of the individual supervisor - the group climate level of analysis - affected safety behaviours, and it was plausible that this would hold true for other aspects of climate. Weber (1995) found that the degree of difference in the climate regarding ethics between organizational units depended on how "insulated" the employees in that department were, with technical core employees having a more individual or local climate, while boundary-spanning employees had more of a cosmopolitan ethical climate. Neal, Griffin & Hart (2000) investigated links between general organizational climate and specific safety climate, and found that general organizational climate could influence perceptions of safety climate, and that these perceptions of safety climate influenced safety performance through their effects on knowledge and motivation.

Some instruments were developed to measure organizational climate. One of them is The Organizational Climate Description Questionnaire developed by Halpin & Croft (1963), which examines eight dimensions of organizational climate, four of which focus on teacher behavior- disengagement, hindrance, esprit and intimacy-, and four on the behavior of the principle- aloofness, production, thrust, and consideration. Teachers' responding to the instrument reveal a school climate on the open-to-closed continuum (Halpin & Croft, 1963). The other instrument developed by Schneider (1983) is The Organizational Climate Questionnaire, which measures six dimensions- organizational support, member quality, openness, supervisory style, member conflict and member autonomy (Hall, Bowen, Lewicki, & Hall 1987). One another instrument identifies and describes six organizational climate dimensions- flexibility, responsibility, standards, rewards, clarity and team commitment- developed in the Harvard Business School research that predicts organizational performance (Litwin & Stringer 1968). The most recent instrument developed by Hoy, Hofman, Sabo and Bliss (1996) was called OCDQ-RM (Organizational Climate Descriptive Questionnaire for Secondary Schools). This instrument is a 50 item climate instrument with 6 dimensions that describe the behavior of middle school teachers and principals. It measures three aspects of principal behavior – Supportive, Directive, and Restrictive- and three aspects of teacher behavior – Collegial, Committed, and Disengaged (Hoy, Hofman, Sabo, & Bliss, 1996).

In summary, organizational climate for the effectiveness of an organization is very important. Climate is indicative of how well the organization is realizing its full potential. High-performance organizations tend to make optimal use of everyone's capabilities. An accurate assessment of the climate can identify the unnecessary obstacles to employees contributing their best (LDR-Organizational Climate 2002). Thus, it is

of vital importance for managers to measure organizational climate factors, which affect employees positively and negatively in order to create a climate, in which job satisfaction and effectiveness is supplied in an organizational environment.

This study examined the difference in the levels of the teachers' perceptions related to the organizational climate factors among the teachers belonging to different sub groups: teaching categories- social courses, natural science courses, and art, music and physical education-, age, seniority, gender, marital status and educational levels in general high schools. The aims of the study were to determine;

1. The extent to which the teachers at high schools perceived organizational climate factors – organizational clarity and standards, team commitment, autonomy, intimacy and support, member conflict, rewards, and risk - on the open-to-closed continuum.
2. If the levels of teachers' perceptions on organizational climate factors acted differentially in teachers belonging to different sub groups: teaching categories, age, seniority, gender, marital status and educational levels.

METHOD

There were four schools in Afyon city center and five in Usak city centre serving general high school education with total population of 381 teachers (171 in Afyon and 210 in Usak) in the academic year of 2001-2002. Thus, those nine schools with 381 teachers comprised the population of the study. These cities selected because they have nearly the same amount of urban population. However, usable surveys were returned by 204 of total population of 381 teachers to whom they were distributed, which yielded a total response rate of 54 %- response rates per city ranged from 54% for Afyon (93 out of 171), 53% for Usak (111 out of 210).

Finally, the data collected from a sample of 204 (89 females and 115 males) teachers from 9 urban high schools in the centre of Afyon and Usak cities in the west of Turkey by means of the questionnaire developed by the researcher in the academic year of 2001-2002 were analyzed.

High school teachers were asked to complete a personal particulars form. This form inquired about teachers' teaching category, age, gender, seniority, marital status and education levels.

The instrument was developed after thorough review of the literature. First, a list of 68 items was generated related to organizational climate and after consultation with experts on measurement and educational administration, the list was reviewed and items that were agreed to be highly similar were eliminated and thus the items were further reduced to 27 items that had high face validity. I first tested the instrument on a pilot group consisting of 98 candidate teachers who were graduate students in their final academic year and who were enrolled part time in courses at high schools in the city of Usak in order to make the items understandable to the participants. From these, an instrument consisting of 27 Likert-type items developed.

Multiple factor-analytic techniques were utilized in order to investigate the factor structure of the data. The first task of the factor analyses was to identify common factors underlying the large and apparently diverse collection of school climate. The questionnaire was factor analyzed using the Principal Axis factor analysis method. The Kaiser- Meyer- Olkin statistic was .876; indicating sample size was appropriately large. Barlett's test of sphericity yielded a value of 8477 ($p < .00005$), suggesting correlations were substantial enough to justify factor analysis. The eigen values were 7.34, 1.69, 1.40, 1.38, 1.19, 1.14 and 1.04. After Principal Axis factor analysis with seven factors specified, the factors accounted for 56.7 of the variance (27.5%, 6.2%, 5.1%, 5.1, 4.4%, 4.2%, and 3.8%). Finally, seven factors related with organizational climate of schools were obtained.

The questionnaire was factor analyzed using the principal component method with Equamax rotation. After rotation the eigen values were 2.67, 2.54, 2.10, 2.05, 2.01, 2.00 and 1.90 and the factors accounted for 56.7 of the variance (9.9%, 9.4%, 7.8%, 7.6, 7.4%, 7.4% and 7.1%). As it is seen in Table 1, items loading on factor 1 described organizational clarity and standards consisting of five items asking about clarity in the authority in school, the level of bureaucracy, and whose responsibility the tasks and projects are and the level of performance standards. Items loading on factor 2 defined team commitment consisting of four

items asking about the level of commitment to school and working groups. Factor 3 defined autonomy consisting of three items asking about the level of taking responsibility in the accomplishment of tasks. Items loading on factor 4 defined support and intimacy consisting of five items asking about the level of warm and friendly relations and the level of trust and help from principals and colleagues in school. The factor 5 defined member conflict consisting of three items asking about the level of competition and expressing opinions freely. The factor 6 defined rewards consisting of three items asking about the level of promotion system, positive encouragement by principals and the equilibrium of reward and performance. Finally, items loading on factor 7 defined risk consisting of four items asking about the level of taking risks at the right time by principals and teachers.

The questionnaire was also submitted to validity and reliability tests. Alpha reliabilities for the items loading on seven factors were .82 for organizational clarity and standards, .85 for team commitment, .66 for autonomy, .82 for intimacy and support, .79 for member conflict, .88 for rewards, and .68 for risk.

The reliability of the instrument was also tested using the test-retest method and the reliability of the each factor was determined using Pearson Product-Moment Correlation. Consequently, a general high school not included in the sample was chosen. The teachers were asked to take the instrument on a test-retest basis with a fortnight interval. Fifty teachers from this school completed the both tests.

The form used in the test-retest for reliability was the same as the instrument used in the study. However, the teachers did not fill out the personal data sections. The reliability for each organizational climate factor was found out: 'organizational clarity and standards' as $p = .8623$, team 'commitment' as $p = .8327$, 'autonomy' as $p = .7349$, 'intimacy and support' as $p = .8627$, 'member conflict' as $p = .8031$, 'rewards' as $p = .8747$, and 'risk' as $p = .7619$.

Finally, the questionnaire included 27 statements about seven organizational climate dimensions: organizational clarity and standards, team commitment, autonomy, intimacy and support, member conflict, rewards and risk. Teachers answered each question on a five point scale: 1 I definitely disagree, 2 I disagree, 3 I neither agree nor disagree, 4 I agree, 5 I definitely agree. In scoring the questionnaire, as all the questions were positive, low score in each item indicated closed climate and a high score open climate. Average scores for each of the seven dimensions indicated the degree of teachers' perception levels in these climate dimensions. In scoring the level of the perception of the teachers in organizational climate dimensions, very closed was indicated by the average score of very closed by 1.00 to 1.80, closed by 1.81 to 2.60, medium by 2.61 to 3.40, open by 3.41 to 4.20 and finally very open by 4.21 to 5.00. The level of significance for all tests was 0.05 levels.

RESULTS

Results of this study are presented in the sections that follow, beginning with a description of the teachers, average scores of teachers' perception and climate score differences among teachers in different categories: teaching category, gender, marital status, education level, age and seniority. The statistical data collected from the teachers were analyzed by t-test for Equality of Means and Analysis of Variance followed by Tukey post hoc analysis.

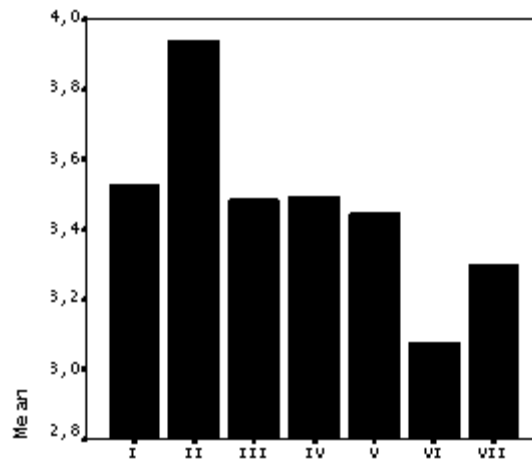
The teachers from the 9 urban high schools serving high school education-upper secondary education- were total 204 teachers, 43.6% of whom were women and 56.4% men. As it can be expected, the teachers teaching social courses were in majority: the teachers teaching social courses were 51.0% of the sample, teachers teaching natural science courses were less in number with the percentage of 38.7% and those teaching art, music and physical education courses were the least in number with 10.3%. Most of the teachers who constituted the sample were married. The single teachers consisted only of 19.6% of the sample whereas the married teachers consisted of 80.4%. Nine urban schools had a well-educated teacher force. As reported on their questionnaires, 17.6% of the teachers had less than bachelor's degree and 82.4% had a bachelor's degree 44.2% of whom were graduates of faculties of education and 38.2% of whom were graduates of faculties other than education faculties. The teachers in the sample were highly middle aged: 27.5% were under 30 years old; 15.7% between 31 and 35 years old; 17.6% between 36 and 40 years old and 23.5% between 41 and 45 years old; 12.3% 46 and 50 and only 3.4% over 51 years old. On the other hand, the teachers in the sample were highly experienced: 20.1% had fewer than 5 years of experience;

23.5% had between 6 and 10 years, 14.2 had between 11 and 15 years, 20.1 % had between 16 and 20 years and the remaining 22.1 % had more than 20 years of experience.

Average climate scores of all teachers

As it is shown in Figure I, all the teachers reported open climate in team commitment (3.93), organizational clarity and standards (3.52), intimacy and support (3.49), autonomy (3.48), member conflict (3.44); medium climate in risk (3.29) and in reward (3.07). They reported the highest open climate score in team commitment but the lowest in rewards.

Figure I. Average climate scores of all teachers



I- Organizational Clarity and Standards

II- Team Commitment

III-Autonomy

IV- Intimacy and Support

V- Member Conflict

VI-Rewards

VII-Risk

Climate score differences among teachers in different categories teaching categories

Climate scores among teachers according to teaching categories were analyzed through one way of analysis of variance (ANOVA) followed by Tukey post hoc analyses. ANOVAS showed that there was a significant difference in the climate scores in the organizational climate factors according to teaching categories of the teachers. Teachers teaching art, music and physical education courses reported higher open school climate than the teachers teaching social science courses in relation to the factor of member conflict (being 3.85 versus 3.41) and this was also higher than the teachers teaching natural science courses (being 3.85 versus 3.36). Likewise, teachers teaching art, music and physical education courses reported higher open school climate than the teachers teaching social science courses in relation to the factor of team commitment (being 4.34 versus 3.87) and higher than the teachers teaching natural science courses (being 4.34 versus 3.90). The results of Tukey post hoc analyses according to the teaching categories of the teachers in member conflict and team commitment are shown in Table 1.

Table 1. The results of post hoc tests according to teaching categories

Teaching Categories	N	Member	F	Team	F
		Conflict		Commitment	
Social Courses	104	3.4167		3.8782	
Science Courses	79	3.3671	3.209*	3.9072	3.656*
Arts, Music and Physical Education	21	3.8571		4.3492	

*p<.05

Gender

There was not a significant difference in the climate scores in the organizational climate factors according to the gender of the teachers. However, there was a trend for men to report higher open climate than women in relation to the factor of intimacy and support (being 3.54 for men versus 3.41 for women) and in relation to the factor of member conflict (being 3.51 for men versus 3.34 for women). The results of t-test for equality of means for women and men in terms of their school climate levels are shown in Table 2.

Table 2. t-test for equality of means for teachers according to gender

Climate Factors	Women			Men			t
	N	Mean	SD	N	Mean	SD	
Organizational Clarity& Standards	89	3.50	0.48	115	3.54	0.74	0.49
Team Commitment	89	3.92	0.53	115	3.94	0.88	0.21
Autonomy	89	3.42	0.57	115	3.52	0.77	0.99
Intimacy & Support	89	3.41	0.72	115	3.54	0.87	1.16
Member Conflict	89	3.34	0.66	115	3.51	0.90	1.52
Rewards	89	3.11	0.86	115	3.04	0.98	0.52
Risk	89	3.35	0.58	115	3.24	0.91	0.98

df: 202

Marital Status

There was not a significant difference in the climate scores in the organizational climate factors according to the marital status of the teachers. However, there was a trend for single teachers to report higher open climate than married ones in relation to the factor of organizational clarity and standards (being 3.56 for single teachers versus 3.51 for married ones). The results of t-test for equality of means for single and married teachers in terms of their school climate levels are shown in Table 3.

Table 3. t-test for equality of means for teachers according to marital status

Climate Factors	Single			Married			t
	N	Mean	SD	N	Mean	SD	
Organizational Clarity& Standards	40	3.56	0.50	164	3.51	0.67	0.45
Team Commitment	40	3.94	0.69	164	3.93	0.76	0.03
Autonomy	40	3.45	0.59	164	3.48	0.71	0.32
Intimacy & Support	40	3.45	0.65	164	3.50	0.84	0.32
Member Conflict	40	3.40	0.76	164	3.45	0.82	0.37
Rewards	40	3.10	0.89	164	3.06	0.94	0.26
Risk	40	3.32	0.57	164	3.29	0.83	0.24

df: 202

Education Level

Climate scores among teachers according to education level were analyzed through one way of analysis of variance (ANOVA) followed by Tukey post hoc analyses. ANOVAS showed that there was not a

significant difference in the climate scores in the organizational climate factors according to the education levels of the teachers.

Table 4. The results of post hoc tests according to teaching levels

Climate Factors	Teaching Levels (Means)			F
	2 Year College	Faculty of Education (B.A.&B.S.)	Other Faculties (B.A.&B.S.)	
	N=36	N=90	N=78	
Organizational Clarity & Standards	3.44	3.49	3.59	0.88
Team Commitment	3.89	3.91	3.98	0.23
Autonomy	3.42	3.48	3.60	0.77
Intimacy & Support	3.41	3.48	3.54	0.32
Member Conflict	3.36	3.41	3.51	0.57
Risk	3.19	3.31	3.32	0.37
Rewards	2.98	2.98	3.21	1.51
Risk	3.19	3.31	3.32	0.37

*p<.05

However, there was a trend, in general, for teachers with a lower degree of education- undergraduate or graduate of two year college- to report lower open school climate than the ones with more degree of education - graduates of a four year faculty of education and other faculties with a diploma of B.A. or B.S. The results of Tukey post hoc analyses according to education levels of the teachers in school climate factors are shown in Table 4.

Age

Climate scores among teachers according to age were analyzed through one way of analysis of variance (ANOVA) followed by Tukey post hoc analyses. ANOVAS showed that there was a significant difference in the climate scores in reward factor according to age of the teachers. Older teachers reported higher open climate than younger ones in relation to the factor of reward. The results of Tukey post hoc analyses according to the age of the teachers in reward are shown in Table 5.

Table 5. The results of post hoc tests according to age

Age	N	Reward (Means)	F
Under 30	56	2.84	2.301*
31-35	32	2.96	
36-40	36	2.98	
40-45	48	3.16	
45-50	25	3.24	
51 over	7	4.00	

*p<.05

Seniority

Climate scores among teachers according to seniority were analyzed through one way of analysis of variance (ANOVA) followed by Tukey post hoc analyses. ANOVAS showed that there was not a significant difference in the climate scores according to seniority of the teachers. However, surprisingly, there was a trend for the teachers with less seniority to report higher open climate than the ones with more seniority in relation to the factor of organizational clarity and standards, rewards, intimacy and support. The results of Tukey post hoc analyses according to the seniority of the teachers are shown in Table 6.

Table 6. The results of post hoc tests for teachers according to seniority

Climate Factors	Seniority (years) Means
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	Under 5	6-10	11-15	16-20	Over 21	
	N: 41	N: 48	N: 29	N: 41	N: 45	F
Organizational Clarity and Standards	3.59	3.67	3.36	3.51	3.41	1.50
Team Commitment	4.09	4.00	3.73	3.93	3.85	1.20
Autonomy	3.43	3.43	3.51	3.47	3.56	0.27
Intimacy and Support	3.66	3.42	3.34	3.66	3.33	1.67
Member Conflict	3.83	3.47	3.47	3.51	3.37	0.23
Rewards	3.30	2.92	2.77	3.24	3.05	2.11
Risk	3.34	3.28	3.26	3.44	3.15	0.77

*p<.05

DISCUSSION

I assessed school climate through seven organizational climate factors and 27 items related to these seven factors. Results showed that all the teachers reported the highest open climate score in team commitment but the lowest in rewards. The reason why all the teachers reported the lowest open climate in rewards may be because teachers' financial problems have not been solved, yet. They have low and inadequate salary (MEB- Milli Egitim Bakanligi (Ministry of Education)-, 1997). Thus, this affects the school climate perceived negatively by the teachers who are supposed to work with such a poor salary negatively and can also be a tremendous source of stress. The reason why all the teachers reported the highest open climate in team commitment may be parallel with the idea that school is an organization where friendly interpersonal relations should exist (Halpin, 1967).

Analysis of school climate scores in different sub groups -teaching categories, age, gender, marital status, seniority, and education level- showed that, in many cases, teachers belonging to different sub groups experienced differential school climate. For instance; teachers teaching art, music and physical education courses reported higher open school climate in member conflict and in team commitment than the teachers teaching social science courses and natural science courses. This may be because the general high schools' only aim is to prepare the children between 15 and 17 years old for the entrance exam to higher education (MEB, 2001b). While majority of students with 64.5% attend to general high schools in Turkey, only 35.5 of them attend vocational high schools (Dogan, Oruncak & Gunbayi, 2002). The questions asked in this entrance exam are derived from social and natural science courses taught in these schools. Thus, the teachers teaching social courses and natural sciences are more overloaded and under pressed by the demands of students and their parents than the teachers teaching art, music and physical education courses. This may affect the school climate perceived by teachers teaching art, music and physical education courses free from the demands of students and their parents positively.

In terms of gender, results showed that there was a trend for men to report higher open climate than women in intimacy and support and member conflict. This may be because most of the principals and supervisors in Turkey are men. Thus, women teachers may have difficulty in making themselves understood by the principals and supervisors due to the difference in gender, which may affect the school climate perceived by women who have little chance of becoming principals and supervisors negatively.

Whereas there was not a significant difference in the climate scores in the organizational climate factors according to the marital status of the teachers, there was a trend for single teachers to report higher open climate than married ones in organizational clarity. Married teachers are supposed to support a family and have children to look after in addition to their roles of being a teacher and this may cause married teachers to experience role conflict due to being a teacher, a parent and a spouse at the same time. Thus, this role conflict may affect the school climate perceived by married teachers negatively.

Results showed that there was a trend, in general, for teachers with a lower degree of education, who were undergraduate or graduate of two year college, to report lower open school climate than the ones with more degree of education, who were the graduates of a four year faculty of education and other faculties with a diploma of B.A. or B.S. The fact that the teachers with a diploma B.A. and B.S. are more and well educated parallel with the advancements in the new technology and in knowledge and that they know more in theory and practice may be a source of stress for the teachers with a lower degree of education who are supposed

to work in the same school with the teachers with the more degree of education and in turn this may effect the school climate perceived by the teachers with a lower degree of education negatively.

Results also showed that older teachers reported higher open climate than younger ones in reward factor. This finding is consistent with the findings that the older the members are, the more job satisfaction they have (Michael, 1974). On the other hand, because younger teachers have high expectations in reward in their early years and they are more idealist than older teachers, they are likely to experience higher levels of job stress. Thus, the level of stress as result of their failure in the realization of high expectations may affect the school climate perceived by younger teachers negatively.

Surprisingly, the results showed that there was a trend in general for the teachers with less seniority to report higher open climate than the ones with more seniority. This finding is not consistent with the finding that as long as the seniority increases, expectations of a staff become more realistic and so his or her expectations become less (Sergiovanni & Carver, 1973). However, this finding is consistent with the job opportunities environment in Turkey. Because of the recent bottle neck in Turkish economy and the increasing rate of unemployment, the students graduated from teacher training faculties have been either not appointed or only some of them have been appointed to the schools as a teacher due to the decrease in supply by the Ministry of Education (MEB, 2001a). Thus, those young teachers who have had a chance to be appointed as a teacher may see themselves luckier and appreciate the value of their job and this may cause them to perceive the school climate where they work more positively than the older ones.

The study reported in this article identifies only high school teachers' perceptions related to school climate factors and their perception levels differentiated according to subcategories such as teaching category, age, gender, marital status, seniority and education level in the cities of Afyon and Usak in Turkey. The studies on the school climate of other schools of pre-school education, primary and junior high school education, and higher education should be done comprehensively throughout Turkey. School climate and its effects on physical and emotional health and job satisfaction of teachers and student outcomes of their learning processes in schools should also be studied.

In helping teachers to work in a more desirable open school climate, (1) teachers' salary should be increased and consistent with their education level; (2) the students graduated from Faculty of Education should have a chance to be appointed to schools as a teacher with the developments in Turkish economy and the increase in supply by the Ministry of Education or private schools; (3) new vocational high schools with up to date programs should be opened and the students graduated from junior high schools should be attracted to these schools in order to diminish the demand to general high schools; (4) teachers should be supplied more facilities in career development and self actualization, and both men and women should have the same degree of chance to become supervisors and principals (5) the teachers with lower degree of education should also be supported in career development via in-service education.

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REFERENCES

- Campell, R. F., Corbally J. E., & Nystrand R. O. (1983). *Introduction to educational administration*. USA: Allyn and Bacon ,Inc.
- Dogan M., Oruncak B., & Gunbayi, I. (2002). Problems and solutions for high school physics in Turkey. *Physics Education* 37, November 2002 p.543-546.
- George J., & Bishop L. (1971). Relationship of Organizational Structure and Teacher Personality Characteristics to Organizational Climate. *Administrative Science Quarterly*. Vol. 16, 467-476.
- Getzels, J. W., & Guba E. G. (1970). *Social behaviour and the administrative process, selected readings on general supervision*, The Macmillan Company, London.
- Hall D. T., Bowen D. D., Lewicki R. J., & Hall F. S. (1982). *Experiences in management and organizational behavior*. USA: John Wiley & Sons.
- Halpin, A. W. (1967). *Theory and research in administration*. New York: Macmillan.
- Halpin, A. W., & Croft D. B. (1963). *Organizational climate of schools*. Chicago: University of Chicago, Midwest Administration Center.

- Hoy W. K., Hofman J., Sabo D., & Bliss J. (1996). The organizational climate of middle schools: the development and test of the OCDQ-RM. *Journal of Educational Administration*. Vol.34, No.1, 41-59.
- James, L.A., & James, L.R. (1989). Integrating work perceptions: explorations into the measurement of meaning. *Journal of Applied Psychology* 74, 739–751.
- Kelner S. R., & C, O'Connell K. (1996). *Managerial style as a behavioral predictor of organizational climate*. Boston: Hay McBer.
- LDR-Organizational Climate. (2002). *Organizational climate overview*. Retrieved from June 11, 2002, from www.ldrgroup.com/climateoverview.html.
- Litwin G., & Stringer R. (1968). *Motivation and organizational climate*. Boston: Harvard Business School Research Press.
- Luthar, H.K., DiBattista, R.A., & Gautschi, T., (1997). Perception of what the ethical climate is and what it should be: the role of gender, academic level. *Journal of Business Ethics* 16, p 205-217.
- M.E.B. (1997). *Turkish grand national assembly annual report*. Ankara: Mesleki ve Teknik Acikogretim Okulu Matbaasi.
- M.E.B. (2001a). *National education statistical data 2001*. October, Ankara: ACEM ve IV Aksam Sanat Okulu Matbaasi.
- M.E.B. (2001b). *National education early in 2002*. December, Ankara: IV Aksam Sanat Okulu Matbaasi.
- Michael, R. C., & Robert, F. E. (1974). Some personal and organizational determinants of job satisfaction of postal clerks. *Academy Of Management Journal*, June 338-373.
- Neal A., Griffin M. A., & Hart P. M. (2000). The impact of organizational climate on safety climate and individual behavior. *Safety Science* Volume 34, Issues 1-3, 99-109
- Pirola-Merlo A., Hartel, C., Mann L., & Hirst C. (2002). How leaders influence the impact of affective events on team climate and performance in R&D teams *The Leadership Quarterly* Volume 13, Issue 5, 561-581
- Sergiovanni T. S., & Robert J. Starratt. (1988). *Supervision: human perspectives*. New York: Mc Graw Hill.
- Sergiovanni J. S., & Carver F. D. (1973). *The new school executive: a theory of administration*. New York: Dood, Mead and Company Inc.
- Schneider, B. (1983). Work climates: an interactionist perspective. In: Feimer, N.W. & Geller, E.S., Editors, 1983. *Environmental psychology: directions and perspectives*, Praeger, New York, 106–128.
- Schneider, B., Wheeler, J.K., & Cox, J.F. (1992). A passion for service: using content analysis to explicate service climate themes. *Journal of Applied Psychology* 77, 705–716.
- Spencer L. M., Pelote V., & Seymour P. (1998). A causal model and research paradigm for physicians as leaders of change. *New Medicine*, 2:57-64 Current Science Inc. ISSN 1089-2524.
- Weber, J. (1995). Influences upon organizational ethical subclimates: a multi-departmental analysis of a single firm. *Organizational Science* 6, 509–523.
- Zohar, D. (2000). A group-level model of safety climate: testing the effect of group climate on microaccidents in manufacturing jobs. *Journal of Applied Psychology* 85, 587–596.