

The Perceived Autonomy of Teachers in Elementary Education

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Abstract

The main aims of the paper are to examine the perceptions of elementary school teachers about teacher autonomy and to discover whether these perceptions differ in relation to variables such as the teachers' gender and age, teaching practice, branch, and city in which they work. The professional achievements and classroom behaviors of teachers are influenced by their perception of autonomy. The teachers face some constraints posed by school administration, colleagues, and supervisors during their instruction. They can deal with limitations on autonomy via risk-taking, inquiry, insistence, self-rule, and having responsibility to decide among selected goals, materials, methods, assessment, and scheduling.

Keywords: Teacher education, teacher autonomy, motivation, job satisfaction, decision making.

1. Introduction

Education is a multifaceted system which has connection with political, cultural and economic contexts. Thus, "who teaches what, when, and how, and under what conditions" are the most important questions that educators and education policy makers need to answer all over the world. In the past, teaching profession was perceived as transferring social values, and teaching basic skills to the next generation. As stated in the recent document of Common European principles, the competencies and qualifications of teachers have a key role in the development of the education system (EU Directorate-General for Education and Culture, 2006).

At the dawn of the 21st century, technologic, social, and economic developments and changes cause a global economic competition. There is an increasing demand for qualified education. Quality of education mainly depends on the content and implementation of curricula. The teachers have a basic position in any formal educational setting (Trae, 2008), and they are the interpreters and implementers of the curriculum; however, they have little voice in decision making process that related to curriculum development. Effective implementation of comprehensive curriculum occurs when education stakeholders have an ownership and understand the vision and implications of the program for teaching and learning (Feldman & Tung, 2002).

Teachers have a crucial role to form a society; therefore, they should have an understanding about learning process, have an accountability about organizing content, use materials and resources during instruction, participate in decision making process, and collaborate with colleagues, parents, and principals. The professional achievements and classroom behaviors of teachers are influenced by their perception of autonomy. Teacher autonomy as a basic human need is described as the freedom teachers have in making

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instructional decisions and controlling classroom behaviors (Deci & Ryan 1996; Hargreaves 2006). According to researchers, autonomous teachers have some characteristics such as self-directed professional development; they have the capability to make their own decisions about what to do rather than being influenced by someone else or told what to do; have ability for critical reflection and independent action. The motivation and achievement levels of teachers increase when they perceive autonomy in the school (Little 1995; Wong, Wiest, & Cusick, 2002).

Curricula are completely established by an outside, authoritative body—the Ministry of National Education in Turkey (OECD, 2005). Philosophy of education, instructional activities, textbooks, teaching materials, and assessment methods are prepared by the Ministry of National Education without asking opinions of teachers. Since the perceptions of teachers are one of the most crucial elements of the teaching and learning system (Korkmaz, 2007), there is an obvious need to scrutinize classroom behaviors and autonomy levels of teachers.

In the world, many research studies conducted with the aim of depicting the perceived autonomy of elementary school teachers. However, more research should be pertinent to and directed toward the perceptions of elementary school teachers, especially in public schools. Even though there is no explicit definition of autonomy; in the literature the terms of autonomy, independence, and control were used interchangeably. Since the definition of autonomy varies from culture to culture, the autonomy perception of a teacher possibly differs from one to another. In this study, autonomy over curriculum, professional development, classroom environment, and administrative decision making are considered components of professional autonomy. Independent action, persistence, self rule, risk taking, and responsibility to choose among selected goals, materials, methods, assessment, and scheduling are also taken into consideration as indicators of teachers' professional autonomy.

2. Aim of the study

Teacher autonomy commonly took no notice of researchers in the autonomy field. Thus, enhancing the quality of elementary education, and having sustainable effects require putting the teacher autonomy at the heart of the educational researches. The significance of this study places in the role of the elementary school teachers in the whole education system. The role of the classroom teacher in the whole life of the students is critical (MEB, 1993). The burnout of the qualified teachers and the lack of quality professional development have a negative impact on the elementary education. Researches indicate that teachers who are under control feel they have no autonomy and their performance is decreased and they frequently react with resistance, resentment, and loss of enthusiasm (Forrester 2000; Smith 2001). Thus, it is important to bring some research evidence regarding perceptions of elementary school teachers about teacher autonomy. So the main aim of this paper is to examine the perceptions of elementary school teachers about teacher autonomy and to discover whether these perceptions differ in relation to variables such as the teachers' gender, age, teaching practice, branch, and city in which they work. With this purpose, the following research questions were formulated:

1. What amount(s) of autonomy do elementary school teachers have?
2. Do the levels of autonomy teachers feel differ according to age, gender, city they work in, the graduation level and branch?

3. Methodology

Convenience sampling technique was applied in the paper since it is fast, inexpensive, easy, and the subjects are eagerly available. Additionally, getting permissions from the administrators of those schools were also easy for the researcher. The sample of this study consisted of the 2 Public Elementary Schools in Ankara and 2 in Mersin. Of 150 questionnaires

sent, 133 were returned and 118 were used in the research with an acceptable rate of 79%. 15 returned questionnaires were not included in this study since they came from the early childhood education teachers, special education teachers, and have not appointed teachers. While 56 percent of participants were female, 44 percent of them were male. The mean degree of teachers' age was 38. While the majority of teachers had an undergraduate degree (76%), only 14 percent of those had a master degree. In relation to branch of teachers, classroom teachers, Turkish teachers, and language teachers were the most common teachers in the survey with a percentage of 40, 9, and 8, respectively.

Data were collected from January to March of 2011. After a detail literature review on teacher autonomy, the questionnaire was developed by the researcher. The researcher assured respondents in relation to confidentiality and anonymity. The two pages questionnaire included questions related to demographic characteristics of teachers and teachers' autonomy. A five points Likert type questionnaire was applied in the items regarding teachers' autonomy (1=never, 5=always).

In order to develop this questionnaire, items from similar studies were collected in an item pool. Then, a total seven categories were derived through the literature review so as to represent "autonomy levels of elementary school teachers". In preparing the data collection instrument, these seven categories were taken into consideration: teacher burnout, job satisfaction; motivation, autonomy, decision making, curriculum loyalty, and self-governance. To establish content validity, first the questionnaire was checked through an analysis of relevant literature, and then several representatives from each of the four expert groups—five classroom teachers, one specialist in educational administration instructors, one specialist in measurement and evaluation instructors, and two specialists in curriculum and instruction instructors —reviewed the questionnaire. Based on the suggestions of these ten judges the questionnaire was refined and the language clarified where necessary.

4. Findings and Discussions

The findings of survey were analyzed through the SPSS 16.0 for Windows (Green & Salkind, 2008). On the other hand, statistical significance was employed in order to understand to what extent findings can be generalized. The significance level was chosen as $p < .05$ since this level is considered statistically reliable (Mitchell & Jolley, 2009). Overall reliability for the teacher autonomy questionnaire was calculated by using Cronbach Alpha of .79. This value is higher than .75 criterion which is regarded as an acceptable level of internal reliability as a rule of thumb (Tuckman, 1999). Thus, it can be said that the questionnaire is a reliable and valid measure of assessing the autonomy perceptions of teachers.

The five points Likert scale was subjected to factor analysis. In order to determine the number of factors to rotate three criteria were used: the priori hypothesis that was unidimensional, the scree test, and the interpretability of factor solution. The scree test indicated that the initial hypothesis on unidimensionality was incorrect. Consequently, four factors were rotated using an Oblique rotation procedure. The rotated solutions, as shown in Table 1, yielded four interpretable factors. The factor 1 —independence —accounted for 12.2% of the total variance, the factor 2—decision making— accounted for 9.1% of the total variance, the factor 3—curriculum fidelity— accounted for 21.2% of the total variance, and factor 4—self-rule and risk taking— accounted for 78.5% of the total variance.

Results indicated that most of the elementary school teachers are coerced to use the particular curriculum. Besides, they perceive lack of involvement in decision making processes; little opportunities for peer collaboration, discussion and debate of real school problems; lack of flexibility in strategies for defining instructional goals; and lack of responsibility and choice about such things as how, what, where to learn, when a learning experience will be considered to be completed, and how learning will be assessed.

The first research question of this study was aimed at exploring what amount(s) of autonomy do elementary school teachers have. To find an answer the first research question,

the data were analyzed descriptively. The mean scores ranged from 1.84 to 4.41 (out of 5). Additionally, factor analysis results reveal that the items of the questionnaire could be grouped into four categories: independent actions, persistence, administrative decision making, and self-rule and risk taking.

There were ten items in the part regarding independent actions category. Results revealed that the teachers do not feel autonomous when trying new ways to meet the needs of students (71.6%), making changes the teaching methods (76.3%) and techniques (74.6%) mentioned in guide of curriculum. Many of the teachers were suffer from to obey decisions of sub-branches meetings (69.2%). Although most of the teachers give importance to their professional development (91.2%), they stated that they do not have an opportunity to attend the courses and seminars related to their professional development (59.4%). Similarly, most of them do not have an occasion to review the curriculum before the academic year (73.5%) and negotiate educational issues with school administration (29.1%). Correspondingly, the teachers think that the school administration does not appreciate their achievements (42.4%), and supports them to try new method of teaching (46.7%).

The persistence category includes four items. The results showed that most of the teachers were dependent to the recommendations that stated in the guide of curriculum in relation to define the content of the lesson, required time to teach certain subjects, and the method they will utilize (60.2%). Majority of the teachers stated that they have to obey allocated time for subjects (70.4%); follow the recommended methods for measurement and evaluation (47.8%); and agree with the educational philosophy (73.7%) stated in guide of curriculum.

There were eight items regarding administrative decision making. The teachers affirmed that they have little opportunity to attend the committees and boards at district level (64.6%) and contribute to decisions of the school administration meetings (31.4%). In the same way, a small number of the teachers have an influence on decisions of the school management (19.5%), and participate in committees and board of school (12.8%). Nearly half of the teachers affirmed that they have to obey the decisions of their sub-branch colleagues in relation to decide the acquisitions and skills that will be taught in the course (44.8%). The teachers also suffer from being ignored in choosing of text books (72.3%), not following the objectives and acquisitions that chosen by themselves (64.4), and not having freedom of eliminating some subjects stated in the curriculum from their own teaching plan (50.4%).

Table 1: Four interpretable factors

Items	Factor Loads			
	1	2	3	4
<i>Independent action</i>				
I try new ways to meet the needs of students.	.716			
I give importance to my professional development.	.692			
I negotiate educational issues with school administration.	.689			
I review the curriculum before the academic year.	.689			
I attend the courses and seminars related to my professional development.	.659			
School administration always appreciates my achievements.	.657			
The school administration supports me when I try new teaching method.	.623			
I don't use teaching methods defined in the guide of curriculum.	.575			
I don't obey decisions of sub-branches meetings.	.442			
I don't use teaching techniques mentioned in guide of curriculum.	.422			
<i>Persistence</i>				
How, what, and when I teach depend on the guide of		.622		

curriculum.	
I decide the allocated time for the subjects that I will teach.	-.549
I find different ways for measurement and evaluations stated in the guide.	-.462
I accept the educational philosophy stated in the program.	.357
<i>Administrative decision making</i>	
I join the committees and boards at district level.	.635
My opinions generally are taken into account in the school administration meetings.	.571
I am authority to join the decisions of school management.	.528
I join the committees and board of school.	.480
I determine the acquisitions and skills that will be taught in the course with my colleagues.	.420
My opinion is asked to determine of text books.	.400
I focus on objectives and acquisitions that I choose.	.367
I am free to remove some subjects stated in the annual plan from teaching plan.	.359
<i>Self rule and risk taking</i>	
I feel limited to use classroom resources such as boards and walls.	.575
I am free to choose in-service training courses and seminars.	-.507
My colleagues do not support me when trying alternative teaching methods.	.483
I plan measurement and evaluation activities with my colleagues.	.476
I decide teaching materials that will be used in the classroom.	-.422
I determine instructional activities on my own.	-.418
I teach same subjects at the same time with my colleagues.	.408
Generally I am not appreciated by my colleagues.	.404
I am free to choose my teaching approach.	-.389
Inspectors do not tolerate subjects taught outside the annual plan.	.348
I do not give my opinion about the acquisitions and skills that will be taught that year.	.263

Finally, self rule and risk taking category has eleven items. The results demonstrated that the many teachers were feeling restricted to use classroom facilities (43%), try different teaching methods (70.4%), plan measurement and evaluation activities by themselves (65.8%), decide the acquisitions and skills that will be taught that year (70.7%), and decide which subject and when they teach (74.4%). Besides, they stated that their colleagues usually do not appreciate them (57.5%), and the inspectors do not allow them to teach subjects apart from the annual plan (69.8%). On the other hand, the teachers perceive autonomous selecting in-service training courses and seminars (64.7%), deciding instructional activities (76.9%) and teaching approach (68.1%), choosing teaching materials (85.2%).

Furthermore, a one-way ANOVA was conducted to evaluate the relationships between age and autonomy levels of teachers. The independent variable, age in included three levels: teachers between the ages 23-35, teachers between the ages 36-48, and teachers above 49. The results of ANOVA (see Table 2) indicated not significant relationships between age and the autonomy levels of teachers, $F(2, 113) = 1.93, p = .15$.

Table 2.

Age and Autonomy Levels

<i>Age of Teachers</i>	<i>M</i>	<i>SD</i>	<i>n</i>
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23-35	102.56	11.34	52
36-48	106.86	10.06	51
49+	106.23	16.23	13

Moreover, an independent-samples t test was conducted to evaluate differences between the autonomy levels of male and female teachers. The test was not significant, $t(115) = 2.12$, $p = .58$. There was no difference in autonomy levels between teachers regarding to gender. Table 3 indicates that the mean scores of female and male were very close to each other. The female teachers ($M = 102.99$, $SD = 10.1$) and male teachers ($M = 107.52$, $SD = 12.8$) perceive autonomy to the same degree.

Table 3.

Gender and Autonomy Levels

Gender of teachers	M	SD	n
Female	102.99	10.1	65
Male	107.52	12.8	52

$t = 2.12$, $p = .58$

An independent-samples t test was also conducted to evaluate the relationship between the city that teachers work in, and the autonomy levels perceived by the teachers. The test was not significant, $t(115) = .99$, $p = .51$. There was no difference in autonomy levels between teachers regarding to gender. Table 4 indicates that indicates that the mean scores for each city were very close to each other. Teachers in these two cities perceive autonomy to the same degree.

Table 4.

City and Autonomy Levels

Gender of teachers	M	SD	n
Ankara	103.76	10.5	51
Mersin	105.89	12.3	66

$t = .99$, $p = .51$

A one-way ANOVA was conducted to evaluate the relationships between the graduation level and autonomy levels of teachers. The independent variable was the graduation level of teachers included three cities: Undergraduate (2 years ed.), bachelor's degree and master. The dependent variable was the total score on the autonomy questionnaire. The ANOVA was not significant, $F(2, 111) = .133$, $p = .88$. There were no differences in autonomy levels the teachers perceive regarding the graduation level. Table 5 indicates that the mean scores for each graduation level were very close to each other. Teachers in these graduation level experience autonomy to the same degree. Because the ANOVA test was not significant, no Multiple Comparison test was run.

Table 5.

The Graduation Level and Autonomy

<i>Graduation levels of the Teachers</i>	M	SD	n
Undergraduate (2 years ed.)	106.89	9.97	9
Bachelor's Degree	104.82	11.79	89
Master	104.69	11.62	16

A one-way ANOVA was conducted to evaluate the relationships between the branch and autonomy levels of teachers. The ANOVA was not significant, $F(2, 111) = 77.1$, $p = .64$. There were no differences in autonomy levels the teachers perceive regarding the branch. The results of these tests, as well as the means and standard deviations for the branch, are

reported in Table 6. It was noticed that the mean scores for different branches were very close to each other.

Table 6.

The Branch and Autonomy

<i>Branch of the teachers</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Classroom teacher	104.62	10.753	47
Mathematics	103.50	18.586	8
Turkish	106.09	8.927	11
Social	108.20	13.989	5
Physical Education	117.33	16.289	3
Foreign Language (English)	100.22	5.911	9
Science	110.60	18.311	5
Visual Arts	103.50	11.091	4
Technology and Design	103.40	3.209	5
Religion	105.75	10.595	4

5. Conclusions

The conclusions on how do elementary teachers perceive autonomy and what amount(s) of autonomy do they feel they have, and whether the autonomy that the elementary school teachers perceive differ according to age, gender, city they work in, level of education was discussed. Specifically, the present study indicated that teacher autonomy was presented four categories: independent actions, persistence, administrative decision making, and self-rule and risk taking.

These findings of the present study seem to be consistent with the studies in the literature. The autonomy of teachers is well documented in the literature related to the job satisfaction of teachers, teacher stress, teacher motivation, pedagogy for autonomy, and teacher burnout (Wolff 2007; Everhard 2006; Little 2004; Moomaw 2005a; Jimenez Raya 2007; Viera 2007).

It was noticed that findings obtained in response to first research question showed that teachers perceive less autonomy in relation to trying new ways to meet the needs of students, negotiating educational issues with school administration, attending the courses and seminars related to their professional development, modifying teaching methods defined in the guide of curriculum, choosing teaching techniques they do not mentioned in guide of curriculum.

It was seen that the findings of the this study are similar to Moomaw's (2005b) findings stating that some teachers do not want the autonomy since the more autonomy they have, the more responsibility they have to take. This study showed that especially older or veteran teachers do not want more autonomy. The possible reason behind this might be cultural aspects of the society they live in. That is, in some cultures autonomy is not an important human need (Moomaw, 2005).

Similarly, teachers face some constraints caused by the pre-stated curriculum guide, school administration, colleagues, and inspectors during their instruction. That is, most of the teachers stated that they have to pursue the decisions of sub-branches meetings, and employ teaching techniques mentioned in guide of curriculum. Besides, the school administrations do not appreciate accomplishments of the teachers, and do not support the teachers to try innovative method of teaching.

It was seen that the teachers do not feel autonomous to make changes in curriculum content, allocated time, and the way of teaching. Explicitly, many teachers stated that they have to obey allocated time for subject, pursue the suggested methods for measurement and evaluation, and hold the educational philosophy stated in guide of curriculum. Motivation and job satisfaction of the teachers decrease when they do not allow making decisions about what to teach, how to teach, and when to teach. In addition to decision making, teachers

necessitate flexibility, responsibility, control, and self-determination in their own classroom.

The findings related to administrative decision making showed that most of the teachers do not join the committees and boards at district level, have a say to judgments of the school administration meetings, have influence on school management's decisions, and partake committees and board of school. Moreover, the teachers do not feel independent to make a decision concerning the acquisitions and skills that will be taught in the course, choose the text books, employ the objectives and acquisitions that chosen by themselves, and remove some subjects stated in the curriculum from their own teaching plan.

Finally, findings related to self rule and risk taking category demonstrated that most of the teachers feel less autonomous when using classroom facilities, attempting different teaching methods, preparing measurement and evaluation activities by themselves, choosing the acquisitions and skills that will be taught that year, and deciding which subject and when they teach. In addition to that, they perceive that their colleagues usually do not appreciate them and the inspectors do not allow them to teach subjects apart from the annual plan. In contrast, the teachers feel independent to decide on in-service training courses and seminars, choose instructional activities and teaching approach, select teaching materials. Teachers can make teaching more effective if they have more autonomy in the classroom. The school environments that encourage risk taking and inquiry help the teachers to develop sense of autonomy (Firestone, 1991).

6. Recommendations

In the current study, the perceptions of elementary school teachers about teacher autonomy were examined. In addition, whether the perceptions of the teachers differ in relation to variables such as the teachers' gender and age, teaching practice, branch, and city in which they work was discovered.

Since autonomy is a crucial requirement for a sense of success, the study of teacher autonomy can be helpful to increase effectiveness of teachers. The output of this study is a source for the teacher educators, school administrators and teachers to understand the importance of risk-taking, inquiry, insistence, experimentation, self-rule, and having responsibility to decide among selected goals, materials, methods, assessment, and scheduling to deal with limitations on autonomy.

This research reveals several potential future research avenues. For example, the relationships between the degree of autonomy perceived by teachers and job satisfaction should be examined. Besides, researchers may wish to consider examining the cultural aspects of autonomy needs of teachers. It is hoped that various factors related to perceptions of autonomy such as the work environment, academic aptitude, quality of pre-service teacher education, or years of experience will be identified and discussed by future research.

References

- Everhard, C. (2006). Autonomy and the language classroom: opening a can of worms. *Independence, Newsletter of the IATEFL Learner Autonomy Special Interest Group*, 37: 2.
- EU Directorate-General for Education and Culture. (2006). Communication from the commission to the council and the European parliament. Improving the Quality of Teacher Education. SEC(2007)933. Retrieved from http://ec.europa.eu/education/com392_en.pdf
- Feldman, J. & Tung, R. (2002). *The role of external facilitators in whole school reform: teachers' perceptions of how coaches influence school change*. Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 1-5, 2002).

- Firestone, W. A. (1991). Merit pay and job enlargement as reforms: Incentives, implementation, and teacher response. *Educational Evaluation and Policy Analysis* 13(3), 269-288.
- Forrester, G. (2000). Professional autonomy versus managerial control: The experience of teachers in an English primary school. *International Studies in Sociology of Education*, 10 (2), 133-151.
- Green, S. B., & Salkind, N. J. (2008). *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data* (5th Ed.). Boston: Pearson.
- Hargreaves, A. (2006). Four ages of professionalism and professional learning in lauder, H, Brown, P, Dillabough, J and Halsey, A.H. (Eds.) *Education, Globalization and Social Change*, Oxford, Oxford University Press.
- Jiménez Raya, M. (2007). Developing professional autonomy: A balance between license and responsibility. *Independence, Newsletter of the IATEFL Learner Autonomy Special Interest Group*, 40: 32-33
- Korkmaz, I. (2007). Teachers' opinions about the responsibilities of parents, schools, and teachers in enhancing student learning. *Education*, 127 (13), 389-398.
- Little, D. (1995). Learning as dialogue: the dependence of learner autonomy on teacher autonomy. *System*, 23 (2), 175-181.
- Little, D. (2004). *Learner autonomy, teacher autonomy and the European Language Portfolio*. A keynote speech presented at l'Université de Technologie de Compiègne UNTELLE 2004, Compiègne, France. March 18th, 2004. Retrieved from <http://www.utc.fr/~untele/2004ppt/handouts/little.pdf>
- MEB. (1993). *İlkokuma Yazma Öğretimi Kılavuzu*. [Guide of Teaching Reading and Writing]. Milli Eğitim Bakanlığı İlköğretim Genel Müdürlüğü. Ankara. MEB.
- Mitchell, M.L. & Jolley, J.M. (2009). *Research Design Explained*. Usa: Cengage Learning.
- Moomaw, W. (2005a). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, 29(1), 37-53
- Moomaw, W. (2005b). *Teacher-perceived autonomy: A construct validation of the teacher autonomy scale*. The University of West Florida. (Doctoral Dissertation).
- Smith, R.C., & Barfield, A.. (2001). Interconnections: Learner autonomy, teacher autonomy (in 2 parts). *Language Learning* 7 & 8 (1),5-6.
- OECD. (2005). *Basic education in Turkey: Background report*. Ministry of National Education.
- Trae, S. (2008). Comparing the intended and the perceived: administrator expectations and student perceptions of teacher roles in catholic service-learning. *High School Journal*, 91 (4), 59-76.
- Tuckman B. W. (1999). *Conducting educational research*. (5th Ed.). London: Harcourt Brace Jovanowich.
- Vieira, F. (2007). Teacher autonomy: Why should we care? *41st International Annual IATEFL Conference*, Aberdeen (Scotland), 18-22 April.
- Wolff, L. B. (2007). "Why not?". *Independence, Newsletter of the IATEFL Learner Autonomy Special Interest Group*. 40: 34-36
- Wong, E. H., Wiest, D. J., Cusick, L. B. (2002). Perceptions of autonomy support, parent attachment, competence and self-worth as predictors of motivational orientation and academic achievement: an examination of sixth- and ninth-grade regular education students Statistical Data Included. *Adolescence*. Retrieved from http://findarticles.com/p/articles/mi_m2248/is_146_37/ai_89942828/