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*Osman EMIROGLU, Ahmet GUNEYLI, Nazim Serkan BURGUL*

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# Motivational Sources of Teachers in a Developing Country

Osman EMIROGLU<sup>1</sup>, Ahmet GUNEYLI<sup>2</sup>, Nazim Serkan BURGUL<sup>3</sup>

## Abstract

The problem sentence of this study is “What are the perceptions of teachers regarding their sources of motivation?” The descriptive research method was used in this study. Stratified sampling was applied to the overall research population of 3,063 teachers in North Cyprus, which resulted in a research sample of 341 teachers. A Motivational Sources Scale, prepared by the researchers, was used as the data collection tool in the research. The teachers who participated in this study stated that both intrinsic and extrinsic motivations are “highly” important for them. In particular, it was observed that they consider intrinsic motivation to be more important than extrinsic motivation. As a suggestion for future teacher training, it is important to determine intrinsic motivation sources and therefore how to motivate teachers more deliberately and systematically. Furthermore, the extrinsic motivation sources that are problematic can be determined, as they affect teachers negatively and should be specified and eradicated.

*Keywords:* North Cyprus, motivation-culture relationship, education, Herzberg’s Motivation Theory.

## Introduction

In this study, the goal is to determine the motivational sources of the teachers in North Cyprus (mentioned in the second paragraph), which is an island in the Mediterranean. Therefore, the aim of this study is to understand teachers in a developing country and to establish a culture-motivation relationship with one of the important social science disciplines that is education. When the literature was reviewed, it was found that there have been some studies (Hernandez & Iyengar, 2001; Hofstede, Hofstede & Minkov, 2010; Romero & Kleiner, 2000) that have

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<sup>1</sup> Near East University, School of Physical Education and Sports, Nicosia, NORTH CYPRUS. E-mail: osman.emiroglu@neu.edu.tr

<sup>2</sup> Near East University, Nicosia, NORTH CYPRUS. E-mail: ahmet.guneyli@neu.edu.tr

<sup>3</sup> Near East University, Nicosia, NORTH CYPRUS. E-mail: nazim.burgul@neu.edu.tr

shown that motivation is related to culture. As these studies were analyzed, it was seen that people from different cultures are motivated in different ways. Scarborough (1998) and Miller (2003) stated that communal needs could differ from one society to the other as a need that is not important in one society could be important for another. Therefore, it is apparent that people's life satisfaction (motivation) can change from one culture to the other. The opinion of Hofstede, Hofstede & Minkov (2010) on this matter is particularly important as it indicates that in the United States, people are motivated by their individual achievements, whereas in some other cultures, group performance is more important.

North Cyprus is a small island that has a closed economy with many political problems. There are significant social and economic differences between developed and developing countries. Many of the underlying causes of these differences are rooted in the long history of development of such nations and include social, cultural and economic variables, historical and political elements, international relations and geographical factors. According to the UN, a developing country is a country with a relatively low standard of living, undeveloped industrial base and moderate to low Human Development entails a modern infrastructure (both physical and institutional), and a move away from low value added sectors such as agriculture and natural resource extraction (Educational Pathways International, 2010). Compared to developed countries that usually have economic systems based on continuous, self-sustaining economic growth and high standards of living, North Cyprus is considered to be a small developing Mediterranean island.

### **Purpose of the Study**

The problem sentence of this study is "What are the perceptions of teachers regarding their motivational sources in North Cyprus (as a developing country)?" The following sub-problems are stated in order to respond to the problem sentence.

*Sub-problem 1: What are the motivation levels of the teachers according to intrinsic and extrinsic motivation?*

*Sub-problem 2: Do the points the teachers scored in the Motivational Source Scale*

- a) Change in accordance to demographic (sex and age) variables?
- b) Change in accordance to educational (education level, faculty etc.) variables?

## Theoretical Background

In literature, there are some theories that explain the main subject of this study, which is motivation. In this study, one of the motivation theories that were chosen for analysis was Herzberg's Two Factor Theory of Motivation (also called Hygiene-Motivation Theory) and therefore motivation has been analyzed by classifying into intrinsic and extrinsic motivation. Maslow's hierarchy of needs theory is widely used in schools as well as many other fields when describing motivation. The theory of Maslow reveals the physiological, safety, social, esteem and self-actualization factors that should be understood by administrators so that they can determine the needs of teachers that will allow the practice of many administratively positive methods (Whitaker, Whitaker & Lumpa, 2013). Frederick Herzberg put forward a different perspective on the source of human motivation. According to his theory, while traditional promoters (extrinsic factors) called hygiene such as salary, benefits and vacation opportunities are available on one hand, intrinsic factors such as awareness, success, responsibility, described as motivational factors, are available on the other hand (Dickens, 2012).

Herzberg's theory and books are still relevant today. In the globalizing and increasingly competitive business world, institutions continue to keep the issue of motivation on the agenda to counter the many difficulties that they face. Motivation has become an even more important issue for the institutions as they demand more from their employees. Administrators must motivate themselves in order to achieve high performance in addition to motivating their employees (Siemens, 2005). In the research by Kaufman that included primary and secondary school teachers, it was revealed that Herzberg's hygiene theory could be used in schools to identify the motivation sources of teachers (Kaufman, 1984).

Teaching is a versatile professional field that incorporates social, psychological and economic characteristics in different dimensions. The concept of motivation as a psychological dimension plays an important role for the teachers, students and administrators in the field of education, as in all other fields. Motivation is defined as an internal desire for the satisfaction of needs (Lussier & Achua, 2015). Understanding the concept of motivation and developing this characteristic enables an increase in the quality of education and the achievement of targets in a more efficient way that follows the vision of the organization.

The characteristic of a high-energy school can be explained by the level of morale and motivation of the employees at the school (Whitaker, Whitaker & Lumpa, 2013). Improving the quality standards in education is possible through an effective human resource (teachers are the human resource in the context of this research) model (Sallis, 2002). Patrick, Hisley and Kempler (2000) revealed that the teachers' passion for teaching encourages students to be more interested, energetic and curious while also improving their own internal motivation. In these

terms, it is highly important to research the effects of the motivation levels of teachers on the quality of education they provide.

Human-oriented organizations need humans to use their talents effectively in order to be beneficial. This is important in order to develop innovation and creativity. Educational institutions cannot work without teachers or other staff members (Sallis, 2002). Determining the motivation sources of the teachers that are very important for educational institutions may be beneficial for the efficiency and quality of the institutions in these terms. Motivation, as a key element of human resource management, is considered to be the backbone of effective management. Motivating individuals is at the center of management efforts to achieve productive outcomes. In order to work better, it is necessary to develop skills as well as developing the desire for better work (Crawford, Kydd & Riches 2002). With this purpose, identifying the motivation sources will be highly important for teachers in developing their performance, increasing the awareness of their administrators and providing feedback to the authorities who shape the education system.

## **Methodology**

The research model, population & sample, data collection tool, procedure and data analysis of the study are explored in this section.

### ***Research Model***

This study was based on a quantitative approach and the descriptive research method was used with the purpose of determining the views of teachers regarding the sources of motivation in their occupation.

### ***Population and Research Sample***

The research population consisted of all teachers working in North Cyprus during the 2014-2015 academic years. The Sampling method was preferred, as reaching all the research population would have been difficult in terms of time, cost and control. The Stratified Random Sampling method was used in order to choose a sample in a way that would represent the overall study universe.

The draft version of the scale was applied to 328 teachers in the research population to determine the validity-reliability of the scale. After forming the final form of the scale, 3,063 teachers in the population of the research were stratified according to the number of teachers in the Nicosia, Famagusta, Kyrenia, Guzelyurt and Iskele provinces in North Cyprus, which resulted in a total of 341 teachers with 95% confidence level and 5% sampling error. Specifically, 121 of the 1,091 teachers in Nicosia, 87 of the 780 teachers in Famagusta, 59 of the 526

teachers in Kyrenia, 42 of the 378 teachers in Guzelyurt and 32 of the 288 teachers in Iskele were included in the study.

### ***Data Collection Tool***

A two-part scale prepared by the researchers was used as the data collection tool in the research. A Personal Information Form was included in the first part of the scale with the purpose of identifying the demographic, educational and occupational information of the teachers included in the research. A “Motivational Sources Scale” prepared based on the literature review by the researchers and also by taking into account expert opinion was included in the second part of the question form.

*Personal Information Form:* In the personal information form, 14 questions were included that were asked in order to identify: the demographic information of the teachers, such as gender and age; the occupational features such as school they graduated from and their level of education’ educational information, such as whether they had received in-service training and their occupational seniority; the total years they had worked in the current school they were working in; whether they were temporary/tenured; whether they worked in private/government schools; the grades of the students in their schools/classes; the number of students in the schools where they worked; the number of teachers in their schools; how many hours of lessons they had on a weekly basis; and their fields of expertise.

*Motivation Sources Scale:* A total of 40 items were included in the final version of the Motivation Sources Scale prepared by the researchers after the validity-reliability-confidentiality-studies were performed. The Motivation Sources Scale was prepared in a 5-point Likert format and it included suggestions that were worded in a positive manner. The possible answers to each of the suggestions were graded as “completely disagree=1”, “disagree=2”, “neither agree nor disagree=3”, “agree=4” and “completely agree=5”. A high score obtained from the inventory item and sub-dimensions signified that the sub-dimension was the motivation source. Information on the scale of the validity and reliability study is as follows.

*Content and face validity:* Researchers prepared an open-ended question (“what are the motivation sources of teachers?”) and addressed it to the experts in the education faculty at their university. The answers given were analyzed using content analysis and items were determined. Furthermore, Turkish literature (articles and theses) on teachers and motivation were studied. A draft form of 68 items was formed as a result of content analysis and literature review. The draft version of the inventory was presented to a panel of experts from three specialists in the field of education management and from this, it was been concluded that the inventory would be appropriate to measure the motivation sources of teachers after making certain changes based on the opinions and suggestions of the experts.

*Construct related validity:* Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used in order to ensure the structure validity of the scale. The normal distribution of the data set was analyzed by Shapiro-Wilk test prior to the exploratory factor analysis of the inventory and it was determined that it fit to normal distribution. For EFA, the KMO coefficient of the inventory was found to be 0.92, the Chi Square value of Bartlett's Test of Sphericity was 7990.11 and they were found to be significant. Accordingly, the scale was found to be suitable to carry out the factor analysis. The variances of the factors in the exploratory factor analyses implemented by conducting principal component analysis and varimax rotation were analyzed and it was decided that the eigenvalue of the inventory was greater than 1 and had a 2 factor structure. Exploratory Factor Analysis was repeated by removing the items with factor loads less than 0.5 from the inventory. As a result of the Exploratory Factor Analysis, 27 items were removed from the scale. In line with these results, it was identified that the inventory was formed of 41 items and 2 sub-dimensions (intrinsic motivation and extrinsic motivation), describing the 56.86% of the total variance. As a result of CFA, the final version of the Motivation Sources Inventory with 40 items was formed by removing one more item from the inventory of 41 items. Having analyzed the fit indexes of the model as a result of confirmatory factor analysis, it was observed that  $\chi^2/df$  was 2.70, the RMSEA value was 0.05, the GFI value was 0.90, the NFI value was 0.8 and the CFI value was 0.91. Accordingly, it was concluded that the fit index of the scale was within acceptable limits and the model fit was good. It was identified that the inventory was formed of two dimensions of intrinsic motivation and extrinsic motivation. The first 13 items of the inventory formed the dimension of intrinsic motivation and the remaining 27 items between the 14th and 40th items formed the dimension of extrinsic motivation.

*Reliability:* The reliability of the inventory was tested by both Cronbach's alpha and split-half method internal consistency tests. In addition, item-total score analysis was carried out based on correlation. As a result of the analysis performed by the researcher, the reliability coefficient was found to be 0.86 as a result of both tests conducted by using Spearman Brown and Guttman Split-Half techniques. According to the Cronbach's alpha test conducted regarding the reliability of the general inventory and the sub-dimensions, the inventory-wide Cronbach's alpha reliability coefficient was 0.97, the Cronbach's alpha coefficient for the intrinsic motivation sub-dimension was 0.96 and the Cronbach's alpha coefficient for the extrinsic motivation sub-dimension was 0.96. The item-total correlation coefficients were found to be between 0.48 and 0.76, and they were all found to be statistically significant ( $p < 0.05$ ). In addition to split-half and Cronbach's alpha tests, the item-total correlations were sufficient; therefore, no items were removed from the Motivation Sources Scale and it was identified that the inventory was reliable.

### ***Procedure***

Before the process of data collection, permission was acquired from the North Cyprus Ministry of Education in order for the scale to be used in schools. Schools were visited with permission from the Ministry and the appropriate times to use the scale were determined in conjunction with the school administrators. The scale was applied during the 2014-2015 academic year spring term (March-June). The participants were informed about the purpose of the research and how to complete the scale before they started answering the data collection tools provided to them.

### ***Data Analysis***

SPSS 21 and AMOS 21 were used for the statistical analysis of the data obtained from the survey. The normality assumption for scale development was tested by Shapiro-Wilk test and were found to be normal. The reliability of the scale was identified by internal consistency test and construct related validity was maintained by Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Following the formation of the final scale, frequency analysis and descriptive statistics were used in identifying the demographics and seniority about the teachers included within the scope of the research during the second application. The Shapiro-Wilk test was used in order to test the consistency of the data set collected from the final form with normal distribution and the data set was found to be inconsistent with normal distribution. Non-parametric hypothesis tests were used for the comparison of independent variables (gender, age group, occupational seniority, etc.) with the dependent variables. The Mann-Whitney U test was used for the comparison of scale scores in cases where the independent variable was formed of two categories and the Kruskal-Wallis test was used in cases where it was formed of more than two categories. When the Kruskal-Wallis test results were found to be different between the groups, the Mann-Whitney U test was used in order to determine the group that caused the difference.

## Findings

The findings of the study were presented based on the following sub-problems.

### *The motivation levels of the teachers according to internal and external motivation*

Accordingly, the views of the teachers are summarized below regarding the intrinsic and extrinsic motivation.

*Table 1.* Distribution of answers of teachers to the statements in the subscale of intrinsic motivation

	Strongly Disagree		Disagree		Neither Agree Nor Disagree		Agree		Strongly Agree		$\bar{x}$	s
	n	%	n	%	n	%	n	%	n	%		
According to me, motivation is;												
1. Being motivated by success	14	4.11	23	6.74	10	2.93	154	45.16	140	41.06	4.12	1.03
2. Finding time to do research.	9	2.64	25	7.33	30	8.80	174	51.03	103	30.21	3.99	0.96
3. Feeling satisfied with the job I do.	14	4.11	12	3.52	12	3.52	111	32.55	192	56.30	4.33	1.00
4. The love of teaching.	10	2.93	20	5.87	16	4.69	126	36.95	169	49.56	4.24	0.99
5. The love of children.	9	2.64	21	6.16	22	6.45	130	38.12	159	46.63	4.20	0.99
6. The respect I feel towards teaching.	9	2.64	14	4.11	24	7.04	136	39.88	158	46.33	4.23	0.94
7. Finding the opportunity for progress and self-development.	8	2.35	15	4.40	20	5.87	148	43.40	150	43.99	4.22	0.92
8. Taking authority and responsibilities.	9	2.64	20	5.87	32	9.38	168	49.27	112	32.84	4.04	0.95
9. Feeling a sense of pride.	8	2.35	21	6.16	33	9.68	130	38.12	149	43.70	4.15	0.99
10. Having the right to make decisions.	9	2.64	17	4.99	39	11.44	160	46.92	116	34.02	4.05	0.94
11. Finding the opportunity for creating my own purposes.	9	2.64	20	5.87	35	10.26	163	47.80	114	33.43	4.04	0.95
12. Having teaching as my ideal profession.	8	2.35	25	7.33	41	12.02	136	39.88	131	38.42	4.05	1.00
13. Finding the opportunity to work with children or adolescents.	7	2.05	19	5.57	36	10.56	164	48.09	115	33.72	4.06	0.92

The distribution of the teachers' answers to the expressions in the Motivational Sources Scale intrinsic sub-dimension are given in *Table 1*. Five items (3, 4, 5, 6 & 7) were found to be in the "strongly agree" range ( $\bar{x}$ =4.20-5.00) according to the arithmetical average evaluation. The most "agreed" item for the teachers was "The love of teaching". The rest of the eight items (1, 2, 8, 9, 10, 11, 12 & 13)

were in the “agree” range (=3.40-5.00). When we analyze intrinsic motivation sources, the teachers agreed least with the “having opportunities to research” item.

Table 2. The distribution of the answers of teachers to expressions under extrinsic motivational sub dimensions

	Strongly disagree		Disagree		Neither Agree Nor Disagree		Agree		Strongly agree		M	s
	n	%	n	%	n	%	n	%	n	%		
According to me, motivation is;												
14. Sufficient equipment and facilities at my school	1	3.5	2	7.92	5	15.8	13	40.7	10	31.9	3.9	1.0
15. The vision of the school.	1	3.5	2	5.87	5	16.7	12	36.9	12	36.9	3.9	1.0
16. The promotion system according to quality	1	3.8	2	8.21	5	15.2	12	36.9	12	35.7	3.9	1.0
17. The quality of the curriculum	1	2.9	2	8.50	4	13.2	14	43.7	10	31.6	3.9	1.0
18. Not having discrimination in my school.	7	2.0	2	5.87	2	8.21	13	38.1	15	45.7	4.2	0.9
19. Not having bullying in my school.	1	3.2	1	5.57	3	9.68	12	37.8	14	43.7	4.1	1.0
20. The mentality of the school administration.	1	3.8	1	4.69	4	12.0	13	40.4	13	39.0	4.0	1.0
21. Students' attitude.	7	2.0	2	7.04	4	12.6	16	47.5	10	30.7	3.9	0.9
22. Participation of students in lessons.	6	1.7	2	6.45	3	10.5	14	42.2	13	39.0	4.1	0.9
23. Evaluation of my success.	1	2.9	2	8.21	3	9.97	15	43.9	11	34.9	4.0	1.0
24. Management skills of the school principal.	1	3.5	2	5.87	4	12.9	13	39.5	13	38.1	4.0	1.0
25. Managers that fulfill the needs of teachers.	6	1.7	2	6.45	4	11.7	13	40.7	13	39.3	4.0	0.9
26. The amount of salary.	1	4.9	4	12.3	4	12.0	13	38.1	11	32.5	3.8	1.1
27. Parents' attitude.	1	2.9	3	10.2	5	16.1	14	42.5	96	28.1	3.8	1.0
28. Administration measurement and evaluation	1	3.2	4	11.7	5	15.8	14	42.5	91	26.6	3.7	1.0
29. Transportation to school.	1	4.1	5	14.9	7	21.4	13	40.1	66	19.3	3.5	1.0
30. The working environment ergonomics.	6	1.7	2	7.62	5	16.4	15	44.5	10	29.6	3.9	0.9
31. The Ministry of National Education policies.	1	4.6	4	12.6	5	15.2	13	38.7	98	28.7	3.7	1.1
32. Being a member of a union and union approach.	2	6.4	5	14.6	9	27.5	11	33.1	62	18.1	3.4	1.1
33. Supervisors approach.	1	4.9	4	12.6	8	24.0	12	36.9	73	21.4	3.5	1.1
34. In-service courses, seminars and congresses.	9	2.6	3	11.1	6	18.4	15	45.7	75	21.9	3.7	1.0
35. Participation in national and international	1	3.2	3	9.68	4	14.3	15	45.4	93	27.2	3.8	1.0
36. Performance evaluations.	1	3.8	2	8.21	6	18.7	14	41.0	96	28.1	3.8	1.0
37. Departmental meetings.	7	2.0	3	11.1	8	25.5	14	41.6	67	19.6	3.6	0.9
38. Parent meetings.	1	3.8	5	15.2	8	24.6	13	39.5	57	16.7	3.5	1.0
39. Holiday opportunities.	1	3.5	3	10.8	7	21.1	13	40.1	83	24.3	3.7	1.0
40. Perception of my school.	5	1.4	3	9.68	3	11.4	16	48.0	10	29.3	3.9	0.9

The distribution of the teachers' answers to the expressions under the Motivational Sources Scale extrinsic sub-dimensions are given in Table 2. Only one item (#18, “Not having discrimination in school”) was in the “strongly agree” (=4.20-5.00) range by arithmetical average. The rest of the 26 items were in the “agree” range (=3.40-4.19). The lowest score of the teachers in the research was (=3.42±1.14) (#32, “Being a member of a union and the approach of the union”).

Table 3. Descriptive statistics for from the teachers' scores in the motivational sources scale

Sub-Dimensions	n	Total Score		Item score		Min	Max
		$\bar{x}$	s	$\bar{x}$	s		
Intrinsic Motivation	341	53.72	10.17	4.13	0.78	14	65
Extrinsic Motivation	341	104.15	19.71	3.86	0.73	27	135
General Scale	341	157.87	27.90	3.99	0.70	54	200

The descriptive statistics of the teachers in the research population were correlated with the scores from the motivational sources scale and the sub dimensions of the scale. The item for intrinsic motivating sub dimensions in the study is (=4.13-0.78) and as a positive opinion they gave “agree” answer to items in this sub dimension. The average of the item scores for the teachers gave in the extrinsic motivation sub-dimensions was (=3.86-0.73) and as a positive opinion they gave “agree” answer to items in this sub dimension. When we analyzed the descriptive statistics for the teachers' overall total scores in the motivational sources scales, the item score average was (=3.99-0.70). According to this, the teachers commonly gave the “agree” answer in the scale and had positive opinions.

**Comparison of the teacher's motivational sources scale scores according to demographic variables**

Under this heading, a comparison of the scores from the overall scale, as well as the intrinsic and extrinsic motivational scores of the teachers was carried out according to gender and age variables. A brief summary using only the significant difference scores is displayed in Table 4 and insignificant scores were not used.

Table 4. Comparison of the scores of the teachers from motivational sources scale according to gender

Sub-Dimensions	Gender	n	$\bar{x}$	s	Order Ave.	Order Total.	U	p
Intrinsic motivation	Female	223	54.46	10.02	180.70	40297.00	10993.00	0.01*
	Male	118	52.31	10.35	152.66	18014.00		
General scale	Female	223	159.85	27.82	181.04	40371.50	10918.50	0.01*
	Male	118	154.12	27.77	152.03	17939.50		

\* $p < 0,05$

In Table 4, according to the Mann-Whitney U test results, a significant difference ( $p < 0,05$ ) was found in the intrinsic motivation sources and the general scale scores due to gender variables, but not in the extrinsic motivational sources ( $p > 0,05$ ). According to this, intrinsic motivation sources are more important for female teachers than male teachers. Similar to this, the average scores of female teachers from the general scale are greater than for the male teachers.

Table 5. Comparison of the scores of teachers from the motivational sources scale according to age

Sub-dimensions	Age groups	n	$\bar{x}$	s	Min	Max	Mean	$\chi^2$	p
Extrinsic motivation	30 years and younger	79	107.67	20.23	32	135	191.25	13.07	0.00*
	31-40 years	128	105.91	18.81	44	135	182.93		
	41-50 years	103	100.30	21.22	43	135	150.39		
	51+ years	31	100.68	14.09	67	125	138.60		
General Scale	30 years and younger	79	162.86	28.47	54	200	192.13	12.78	0.01*
	31-40 years	128	159.36	27.87	63	200	181.66		
	41-50 years	103	153.28	29.52	64	200	151.92		
	51+ years	31	154.19	17.32	120	190	136.52		

\* $p < 0,05$

According to the Kruskal-Wallis test results in Table 5, there is a significant difference in extrinsic motivational sources and general scale in terms of age variables ( $p < 0,05$ ), but no significant difference in intrinsic motivation ( $p > 0,05$ ). The analysis of significant differences in extrinsic motivational sources according to age groups shows that teachers that were 30 years old and younger as well as the 31-40 age group had greater scores than the teachers in the 41-50 age and 51-years and older age groups. In the general scale, the 30 years old and younger and the 31-40 years age group statistically had greater scores than the 41-50 years and 51+ age groups.

**Comparison of teacher’s motivational sources scale scores according to educational variables**

Under this heading, a comparison of the scores from the overall scale, as well as the intrinsic and extrinsic motivational scores of teachers was made according to their education level, graduation department and whether they had received in-service education on motivation variables.

No significance difference was found ( $p > 0.05$ ) (Kruskal Wallis results) according to the educational level of teacher’s scores from the general motivational source scale and sub-dimensions of the scale in this study. In addition, the comparison of the scores from the motivational sources scale of the teachers’ graduate department showed no significant difference ( $p > 0.05$ ) (Kruskal Wallis results) in either overall scale or the sub-dimensions of the scale. According to this, the motivational sources of teachers who graduated from educational disciplines, science, math and engineering fields, literature-social-language fields and other faculties are all similar.

Finally, no significant difference ( $p > 0.05$ ) was found in the total scores of the teachers in this study who had received in-service education about motivation from overall motivational scale and the sub-dimensions according to the Mann

Whitney U scores. The motivational sources of the teachers who had in-service education about motivation were similar to the teachers who had not.

Table 6. Comparison of the scores from teachers' motivational sources scale scores according to their levels of school

Sub-dimensions	Level	n	$\bar{x}$	s	Min	Max	Mean.	$\chi^2$	p
Intrinsic Motivation	Primary	125	55.38	10.09	14	65	192.32	10.69	0.00*
	Secondary	92	53.28	10.42	15	65	167.95		
	High school	124	52.36	9.91	14	65	151.78		

\* $p < 0.05$

The average score results for the Primary school teachers the intrinsic motivational sources sub-dimensions were higher than for teachers from other school levels, as displayed in Table 6. In other words, intrinsic motivation sources are more important for primary school teachers than other school level teachers. The comparison of the motivational sources scale scores of teachers according to the region of their schools shows that there is no significant difference ( $p > 0.05$ ) in the overall scale and the sub-dimensions of the total scale scores. There is no differentiation between the average scores for the motivational sources of teachers from Nicosia, Famagusta, Kyrenia, Guzelyurt and Iskele.

The comparison of the scores from the motivational sources scores of teachers in this study according to the number of the students in their schools showed a statistically significant difference ( $p < 0.05$ ) in the intrinsic motivational sub-dimension scores in the Kruskal-Wallis test results. No significant difference was found between extrinsic motivation and the overall scores ( $p > 0.05$ ).

Table 7. Comparison of the scores from the teacher's motivational sources scale scores according to the number of students in their schools

Sub-dimensions	Number of students	n	$\bar{x}$	s	Min	Max	Order mean.	$\chi^2$	p
Intrinsic Motivation	200 or less	49	55.98	11.53	14	65	209.40	11.50	0.02*
	201-400	79	52.76	9.24	14	65	149.50		
	401-600	61	53.56	10.29	19	65	171.62		
	601-800	68	53.24	9.74	22	65	165.37		
	801 or more	84	53.80	10.46	15	65	172.93		

\* $p < 0.05$

Teachers who worked in schools that have 200 students or less had higher intrinsic motivational sub-dimensions average scores than the other teachers, according to the results in Table 7. The comparison of motivational source scores of teachers in this study show no significant difference ( $p > 0,05$ ) between the overall scale scores and sub dimensions total scores according to Kruskal-Wallis

test results. Finally, analysis of the Kruskal-Wallis test results regarding the comparison of the teachers' motivational sources scale scores according to their weekly working hours showed no significant difference ( $p > 0.05$ ) between the overall scale and the sub-dimension average scores.

## Discussion

At the beginning of this discussion section, some findings from literature are given in terms of the importance of motivation of teachers regarding education. For instance, Bishay (1996) mentioned that the increase in motivation is equally important for students as it is for teachers. Jesus and Lens (2005) revealed that the motivation of teachers is highly effective in terms of the motivation of students and it is also critical for the head teachers of the schools. In addition, De Jesus & Conboy (2001) pointed out the fact that the motivated teacher can directly affect the future of a country. It has been confirmed that motivated teachers have an important function regarding the implementation of educational reforms, implementing the alterations and obtaining subsequent success and satisfaction. Studies that were held in the southern part of Cyprus (World Bank, 2014; Konstantinides-Vladimirov, 2013) revealed that motivation of the teachers is an important subject and it is one of the fundamental aspects of education policies. The teachers who participated in study pointed out that both intrinsic motivation and extrinsic motivation, which are the terms used in the research survey, are "highly" important for them.

In the second part of this study, the 'demographic', 'educational' and 'occupational' variables were investigated to determine whether or not they influence the motivational resources of the teachers. According to the findings of the research, personal variables such as gender, and age, and occupational variables, including educational stuff and the number of students in the school are significantly different. The points obtained from the female teacher motivation scale (intrinsic motivation and in the general scale), were found to be higher than for the male colleagues. When considering the age variable, the points obtained from the motivation resource scale from teachers whose age was below 30 or between 31- 40 were higher than the teachers whose age was between 41 -50 or above 51. In addition, the intrinsic motivation sources for primary school teachers were more important compared to middle and high school teachers. Lastly, the intrinsic motivation sources were greater for teachers whose schools host less than 200 students compared to teachers whose schools host more than 201 students. The motivation sources of teachers did not differ in terms of educational levels.

Another important finding of this study is that intrinsic motivation sources are more important for primary school teachers when compared to middle and high school teachers. Similarly to this result, it was found in the study of Bostanci

(2007) that the intrinsic motivation sources such as love towards the profession and students is higher in preschool teachers and classroom teachers. In other words, it was found that they are motivated greatly compared to high school teachers in terms of psycho-social factors. The reasons for that can be explained as follows: primary school teachers continuing educating with the same students for years and make more psychosocial connections with both the parents and students. On the other hand, in the study of Bostanci (2007), it was observed that for high school teachers, external motivations are more important such as the school administration, being appreciated, physical circumstances, communication with colleagues, etc.

In this study, it has been found that the variable of the number of students affects the internal motivation sources of the teachers. As the number of students decreased, the points obtained by the teachers from the intrinsic motivation scale increase. It is thought that student academic success could increase when there are a decreased number of students in schools/classes. Therefore, as student successes' increase, teachers may experience progress and satisfaction more often; in other words, it can increase their intrinsic motivation. (Kowalski, 2011)

In this research, no variable associated with education significantly impacted teacher motivation, and this is intriguing. However, in order to use their motivation sources correctly, teachers should gain a higher awareness level of education in universities and by education obtained through in-service training. This can assist overcoming the problems negatively affecting the motivations of teachers. However, in research conducted by Çelik (2015), it was revealed that the motivations of the teachers are affecting in a positive direction as the education levels of the teachers increases.

## Conclusion

As stated in the discussion section, the importance of intrinsic motivation is especially emphasized in the literature on school teaching. When considering the teachers involved in this research, it was observed that they provided positive opinions on questions related to intrinsic motivation and, considering that they chose intrinsic motivation sources over extrinsic motivation sources, it can be said that they have the capabilities and characteristics that are necessary for school teaching. To summarize, this finding is very important and significant for the North Cyprus education system. Ultimately, in-service classes with the purpose of enhancing the career development of the teachers in North Cyprus can bring benefits. Teacher training, within intrinsic motivation sources which sources are prior and how to motivate teachers can be executed more deliberately and systematically. Apart from these, the extrinsic motivation sources that are problematic, in other words, that affect teachers negatively can be specified and eradicated.

It is observed in many research studies that, in terms of the motivation status of male teachers, they are more negatively impacted compared to female teachers. Therefore, by determining male teacher's motivation sources this will make them perform their profession more efficiently and more effort can be made. Similarly, for teachers who are older and feeling exhausted, some precautions can be taken or special applications can be conducted. With reference to the findings stating how the size of classes and schools affect teacher motivation, in crowded classrooms/schools different kinds of precautions can be taken and ways in which teachers should act should be encouraged.

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