

*Teacher effectiveness and
personal characteristics*

1. Introduction and aim

EDUCATIONAL EFFECTIVENESS MIGHT LEAD TO BETTER RESULTS IN improving student achievement in relation to factors such as reducing class size or increasing the percentage of GDP spent on education (Croninger et al. 2007; Rivkin, Hanushek, & Kain, 2005). The success of students in school is particularly imperative in any developed society that places education at the center of socio-economic development. While student performance is not the only effect of the training process, it represents an important part of the training operation (Caprara et al. 2006).

The teachers' role in today's society has changed. They need to wear different vizards during the school day and to respond to new roles that in other times they would be covered by parents or society (DeBruyne, 2001). As stated by White (2000) "*...the teaching profession can be lucrative, but it can also be filled with stress, frustration and to reduce the time that someone has available for himself*" (p. 61). Teachers have a significant impact on student achievement. While students' performance for many researchers determine how good or bad teachers perform (Patrick, 2007). Bemby et al (1998) realized that "*... it is clear that teachers have a broad impact on student achievement. That impact is a strong prosthetic component and it is able to reduce the educational effect that other variables have*" (p. 19).

The starting point of this research effort was the speculation on teachers' effectiveness in Greek primary education. Given the importance and significance of the teachers' role in school success, there is a speculation

on the deficit research data on the teachers' effectiveness in Greek educational system. Although many studies have demonstrated the importance of effectiveness in schools (Aslam, & Kingdon, 2011; Goldhaber and Hansen, 2009; Karatzia-Stauioti, 1999) there are few and limited research results which point out the influence of demographic characteristics on teachers' effectiveness (Patrick, 2007; Buddin, & Zamarro, 2009; Rivkin, Hanushek, & Kain, 2005). Despite the large number of local, regional and national surveys that have been conducted on teachers' effectiveness, the question about the factors that influence it continues to be (Croninger et al. 2007). A piece of the last query can be covered by specific demographic and personal characteristics of teachers (Croninger et al. 2007).

The demographic characteristics that have been mostly studied is teachers' gender, the working sector (public or private), teachers' salary, teachers' experience, the schools' location (urban, suburban and rural), the qualification level (bachelor, master, doctorate), teachers' age and marital status (Hanushek, & Rivkin, 2006; Rivkin, Hanushek, & Kain, 2005; Nye, Konstantopoulos, & Hedges, 2004). It seems that different demographic and personal characteristics lead teachers to deal differently with their daily labor problems and perform their duties with differentiated strategies (Cho, 2012; Goldhaber, & Hansen: 2009; Clotfelter, Ladd, & Vigdor, 2006; Cox, & Jimenez, 1991).

Taking in consideration the above, the aim of this research is to study whether teachers' effectiveness is affected by teachers' salary and demographics-personal characteristics of primary teachers of the last three classes in primary schools.

2. Theory review

The effectiveness in organizations can be defined as “... *the extent to which the company or organization achieves its organizational purposes*” (Price, 1997: 370; Cameron, 1978: 604). According to Anderson (2004) effective teacher is “... *the one that achieves his educational goals that he sets for himself or others such as the Ministry of Education, school or at the Pedagogical Institute pose to him*” (p. 22).

According to Howie and Plomp (2005), teacher is “... *the most important factor in educational system and often society expects from him to correct or overcome difficulties in the curriculum or the educational*

resources” (p. 53). This perception, from scientific point of view, shows how important are teachers’ capabilities as teaching and learning rely on them. When a teacher is characterized as “*good*” does not mean that he is also effective in terms of learning outcomes. The identification “*good*” can be connected with pleasure and fun but not with the “*good*” and “*successful*” teaching (Preis, 2010). The initial determination is inherent to the process and the latter with the result (Fenstermacher, & Richardson, 2005; Black, & Howard, 2000). However, the evaluation or measurement of teacher effectiveness is a difficult process as it depends on the performance of students, and as in all the measurements is difficult to distinguish the different levels of abilities and skills (Passos, 2009).

Measuring effectiveness is a complex and difficult process and for this reason there has been developed many different ways to measure it (Berk, 2009). Among the ways to measure teacher effectiveness student achievement appears to have the most direct and reliable results (Mathers, Olivia, & Laine, 2008). As Goodlad (2004) mentions student achievement “... *is used as a determinant for measuring teacher effectiveness, depending on how good or bad are the students grades in the assessment criteria*” (p. 8). However, measuring effectiveness is a process that requires time and important parameters accept student achievement (Passos, 2009). While creating a reliable measurement tool can give reliable and objective results (Kassotakis, 2010).

There are many factors associated with the school teacher and affect his effectiveness and hence students achievement (Goldhaber, & Hansen, 2009). The question on to the different teacher characteristics affecting his effectiveness has been investigated in the last 50 years (Darling-Hammond, 2000). The variables have been mainly studied are related to teacher gender, working sector (public or private), his salary, experience, working location (urban, suburban and rural), qualification level (bachelor, master, doctorate), age and marital status (Hanushek, & Rivkin, 2006; Rivkin, Hanushek, & Kain, 2005; Nye, Konstantopoulos, & Hedges, 2004).

One of the factors that have been studied to a great extent and is related to teacher effectiveness is teachers’ gender (Goldhaber, & Hansen: 2009; Clotfelter, Ladd, & Vigdor, 2006). In the research that gender is included, it is tested whether sex affects their effectiveness (Okoro, Ekuoren, & Udoh, 2012; Kingdon, & Teal, 2008). The research results are not clear; many studies have shown that there is an influence of gender on student achievement (Aaronson, Barrow, & Sander, 2007; Page, &

Rosenthal, 1990) while others show no effect (Antecol, Eren & Ozbeklik, 2012; Tahir, 2011).

Many studies have been conducted to investigate whether teachers in private or public schools are more effective (Tahir, 2011; Xatzixristou, & Vasiliades, 2011). Most of these have shown that private schools are more effective than public (in terms of student achievement) (Hanif, 2004; Alderman, Orazem & Paterro, 2001; Cox, & Jimenez, 1991). Teachers' experience affects their effectiveness (Harris, & Sass, 2011; Jimenez-Castellanos, 2010; Currall, et al., 2005) but this relation is not always linear (Clotfelter, Ladd, & Vigdor, 2006; Rivkin, Hanushek, & Kain, 2005; Michaelowa, 2002) and several times nonsignificant (Aaronson, Barrow, & Sander, 2007; Nye, Konstantopoulos & Hedges, 2004).

As for the area in which the school unit is located, research data are limited. Researchers using as independent variable the area of the school unit, try to explore if students have better or lower achievement in urbanized areas or less urbanized areas. The research results show that the area where the school unit is located affects teachers' effectiveness (Lin, 2010; Hanif, 2004). However the results do not coincide as shown in some cases teachers are more effective in urban areas (Lin, 2010) while in other cases appear to be effective in rural areas (Hanif, 2004) because of the increased stress have teachers in urban locations. Work-related stress often caused by the demands of parents, the time management and workload . It seems that in urban areas the teachers affected by a number of factors that cause stress leading to reduced work performance (Hanif, 2004; Schaubroeck, & Ganster, 1991).

Teacher qualifications has become an important variable to measure effectiveness (Cho, 2012; Clotfelter, Ladd, & Vigdor, 2006) that directly affects student achievement (Kingdon, & Teal, 2008; Aaronson, Barrow, & Sander, 2007). Although some studies have shown a statistically significant correlation between qualification level and effectiveness (Kingdon, & Teal, 2008; Aaronson, Barrow, & Sander, 2007) perhaps the most striking feature of many researches is that increased level of education (master or doctorate) does not affect the effectiveness and hence student achievement (Hanushek, & Rivkin, 2006). This item instantly raises a series of questions regarding the relationship between the qualifications and the lessons taught in schools by the qualified teachers (Croninger, et al. 2007; Darling-Hammond, 2000). For that reason many researchers are interested in the link between the master or doctoral degree with teaching

or the subject taught in school (Croninger, et al. 2007; Darling-Hammond, 2000).

The most common way of measuring the impact of salary on teacher effectiveness is the study of factors affecting teachers' salary and through them to check salary's effect. Such factors are the level of education and the experience. Yet again the results do not help in forming a common view as to the effect of salary on teacher effectiveness (Hanushek, & Rivkin, 2006). The majority of the results show no significant correlation (Aslam, & Kingdon, 2011; Darling-Hammond, 2000). However, when there is a correlation is mostly positive. Therefore, the salary usually positively affects effectiveness (Jimenez-Castellanos, 2010; Lin, 2010; Cur-rall et al 2005; Hanif, 2004).

Age and marital status is not a common factor correlated with the effectiveness and thereby to student achievement. There is little research data to determine the correlation of age with effectiveness (Croninger, et al. 2007). Croninger et al (2007) in his research showed that age does not affect effectiveness. In contrast, Kingdon and Teal (2008) in a survey showed that the correlation between effectiveness and age is not linear but curve. Essentially, at an early age teachers are more effective than older teachers.

As for marital status, Hanif (2004) showed that married teachers have lower job effectiveness compared to unmarried counterparts. This item comes in agreement with the results of Antoniou, Polychroni and Walters (2000) where the marital status affects job effectiveness; that may be due to the increased stress they have in their daily lives (reflecting on family responsibilities) and the low degree of self- efficacy they feel. It seems that married teachers because of stress, reduce the level of self- efficacy, therefore are less effective in work (Hanif, 2004; Antoniou, Polychroni, & Walters, 2000)

3. The research

3.1. Sample

In this research the participants were teachers and students from public and private schools throughout Greece, in rural, suburban and urban areas. The total number of teachers working in the public and private sectors in Greece during the school year 2012-2013 in accordance with the

Greek Statistical Service is 64,166 of which 60,405 work in the public sector and 3.761 in the private sector. Teachers working in the fourth, fifth and sixth grades both in private and in public sector in all prefectures of Greece are 31.589 of which 29.735 work in the public sector and 1.854 in the private sector. In total 110 schoolteachers and 1.183 students participated in the research. The student age is between 10 and 12 years old. The descriptive characteristics of teachers and students who participated in the survey are presented in detail in Tables 1 and 2.

Table 1. Teacher descriptive characteristics (N=110)

Characteristics	N	%	Characteristics	N	%
Gender			Sector		
Female	85	77,3	Public	101	91,8
Male	25	22,7	Private	9	8,2
Marital status			Qualification level		
Unmarried	54	49,1	Bachelor	84	76,4
Married	56	50,9	Master or Doctorate	26	23,6
Location			Salary		
Rural	12	10,9	Low	24	21,8
Suburban	34	30,9	Medium	37	33,6
Urban	64	58,2	High	49	44,5
Age	M	S.D.	Years in service	M	S.D.
	38,58	8,725		12,70	8,021

Table 2. Student descriptive characteristics (N= 1.183)

Characteristics	N	%	Characteristics	N	%
Gender			Sector		
Female	646	54,6	Public	1065	90,0
Male	537	45,4	Private	118	10,0
Lesson					
Language	650	54,9			
Mathematics	533	45,1			
Grade			Location		
Forth (age 10)	458	38,7	Rural	132	11,2
Fifth (age 11)	386	32,6	Suburban	268	22,7
Sixth (age 12)	339	28,7	Urban	783	66,2

3.2. Research tool

The questionnaire was separated in three parts. The first part is consisted of nine open and closed ended questions which includes teachers' personal and demographic characteristics. Specifically the collected information where about the gender, the working sector, years of experience, the location of the school unit, the marital status, age, qualification level and the salary. These personal and demographic characteristics are shown by previous research to be related to teacher effectiveness (Antecol, Eren, & Ozbeklik, 2012; Jimenez-Castellanos, 2010; Lin, 2010; Kingdon, & Teal, 2008; Aaronson, Barrow, & Sander, 2007; Clotfelter, Ladd, & Vigdor, 2006; Hanif, 2004; Darling-Hammond, 2000; Cox, & Jimenez, 1991).

To measure teacher effectiveness there was a use of the student achievement (Berk, 2005; US Department of Education, 2009; Mathers, Olivia, & Laine: 2008) in the subjects of language and mathematics (Antecol, Eren, & Ozbeklik, 2012; Cho, 2012; Okoro, Ekuren, & Udoh, 2012; Aslam, & Kingdon, 2011; Jimenez-Castellanos, 2010; Lin, 2010; Buddin, & Zamarro, 2009; Kingdon, & Teal, 2008; Croninger, et al., 2007; Patrick, 2007; Clotfelter, Ladd, & Vigdor, 2006; Currall, et al., 2005; Dee, 2005; Rivkin, Hanushek, & Kain, 2005; Nye, Konstantopoulos, & Hedges, 2004; Alderman, Orazem, & Paterro, 2001; Darling-Hammond, 2000; Page, & Rosenthal, 1990).

In an effort to compare student achievement in different subjects (language and mathematics) and in different classes (fourth, fifth and sixth), the initial values of students achievement turned into values -z. The range of values -z extends from -3 up to +3, where the average is 0 and enables to compare results on different courses and classes (Kassotakis, 2010; Rellos, 2003; Georgousis, 1999; Dimitropoulos, 2003).

To determine whether there is a correlation between teacher effectiveness and the demographic characteristics, there was a use of the multiple linear regression with nine independent variables, the general formula of which is $Y_i = b_0 + b_1 * x_i + b_2 * z_i + b_3 * m_i + b_4 * n_i + b_5 * l_i + b_6 * k_i + b_7 * o_i + b_8 * p_i + b_9 * q_i$. Correlations and similarities in the tables indicate that there is a significant association when the significance level is less than 5% ($p < 0.05$) and statistically highly significant correlation when the significance level is less than 1% ($p < 0.01$).

4. Results

Based on the aim of the present study, in the attempt to investigate the correlation between effectiveness and teachers' demographic characteristics, there was a use of the multiple linear regression. The general type of which is:

$$Y_i = b_0 + b_1 * F + b_2 * OK + b_3 * H + b_4 * PE + b_5 * M + b_6 * XY + b_7 * T + b_8 * ES + b_9 * A$$

- Where Y (dependent variable) is student achievement (quantitative variable) and takes prices from -2,79 to + 2,20. The mean score is 0 and the standard deviation is 1.
- Where b_0 is constant
- Where F (independent variable), is the teachers' gender (nominal variable) and takes prices 0 (female) and 1 (male).
- Where OK (independent variable), is the teachers' marital status (nominal variable) and takes prices 0 (unmarried) and 1 (married).
- Where H (independent variable), is the teachers' age (quantitative variable) and takes prices from 22 to 55. The mean score is 38,58 years and the standard deviation is 8,725.
- Where PE (independent variable), is the schools' location (ordinal variable) and takes prices 0 (rural), 1 (suburban) and 2 (urban).
- Where M (independent variable), is the teachers' salary (ordinal variable) and takes prices 0 (low), 1 (median) and 2 (high).
- Where XY (independent variable), is the teachers' years of experience (quantitative variable) and takes prices from 1 to 33. The mean score is 12,70 years and the standard deviation is 8,021.
- Where T (independent variable), is the teachers' working sector (nominal variable) and takes prices 0 (public) and 1 (private).
- Where ES (independent variable), is the teachers' qualification level (nominal variable) and takes prices 0 (bachelor) and 1 (master or doctorate).
- Where A (independent variable), is the match or mismatch between teachers' and students' gender (nominal variable) and takes prices 0 (same) and 1 (different).

The starting multiple regression model is:

$$Y = -1,787 - 0,030 * F - 0,084 * OK + 0,029 * H + 0,117 * PE - 0,052 * M + 0,027 * XY - 0,014 * T + 0,965 * ES - 0,096 * A$$

Table 3. Pattern of starting model of multiple linear regression

	Coefficients	Beta	t (stat)	p.value
(Constant)	-1,787		-7,336	,000
Gender	-,030	-,013	-,468	,640
Marital Status	-,084	-,042	-1,437	,151
Age	,029	,246	3,916	,000
Location	,117	,077	2,913	,004
Salary	-,052	-,040	-,984	,325
Years of Experience	,027	,210	3,105	,002
Sector	-,014	-,004	-,127	,899
Qualif. Level	,965	,420	14,590	,000
Antistixia	-,096	-,048	-1,884	,060
R ² adj = 0,262 F = 45,413 F(prob) = 0,000				
Dependent variable: Teacher Effectiveness				

The starting model can explain 26,2 % of the variability of teacher effectiveness. There is a hypothesis test of the existence of the multiple linear correlation between the dependent variable (effectiveness) and the independent variables (gender, the gender match or mismatch, sector, experience, location, marital status, age, qualifications and salary).

H₀: There is not a linear correlation

H₁: There is a linear correlation

We accept the H₁ because the value F(prob) = 0,000 < 0,05

For the constant, there is a hypothesis test:

H₀: b₀ = 0

H₁: b₀ ≠ 0

We reject the zero hypothesis [t(stat) = -7,336 p.value = 0,000 < 0,05]. Constant must exist in the regression pattern.

For the factor gender there is a test:

H₀: b₁ = 0

H₂: b₁ ≠ 0

We accept the zero hypothesis [t(stat) = -0,468 p.value = 0,640 > 0,05]. So the factor gender must not exist in the regression pattern. Simply gender does not affect teachers' effectiveness.

For the factor marital status there is a test:

H₀: b₂ = 0

H₃: b₂ ≠ 0

We accept the zero hypothesis [t(stat) = -1,437 p.value = 0,151 > 0,05]. So the factor marital status must not exist in the regression pattern. Simply marital status does not affect teachers' effectiveness.

For the factor age there is a test:

$$H_0: b_3 = 0$$

$$H_4: b_3 \neq 0$$

We reject the zero hypothesis [$t(\text{stat}) = 3,916$ p.value = $0,000 < 0,05$]. So the factor age must exist in the regression pattern. Age positively affects teachers' effectiveness. Older teachers are more effective than younger teachers.

For the factor location there is a test:

$$H_0: b_4 = 0$$

$$H_5: b_4 \neq 0$$

We reject the zero hypothesis [$t(\text{stat}) = 2,913$ p.value = $0,004 < 0,05$]. So the factor location must exist in the regression pattern. Location positively affects teachers' effectiveness. Teachers are more effective when they work in schools which are located in areas with more population.

For the factor salary there is a test:

$$H_0: b_5 = 0$$

$$H_6: b_5 \neq 0$$

We accept the zero hypothesis [$t(\text{stat}) = -0,984$ p.value = $0,325 > 0,05$]. So the factor salary must not exist in the regression pattern. Simply salary does not affect teachers' effectiveness.

For the factor experience there is a test:

$$H_0: b_6 = 0$$

$$H_7: b_6 \neq 0$$

We reject the zero hypothesis [$t(\text{stat}) = 3,105$ p.value = $0,002 < 0,05$]. So the factor experience must exist in the regression pattern. Experience positively affects teachers' effectiveness. Teachers with more experience are more effective than teachers with less experience.

For the factor sector there is a test:

$$H_0: b_7 = 0$$

$$H_8: b_7 \neq 0$$

We accept the zero hypothesis [$t(\text{stat}) = -0,127$ p.value = $0,899 > 0,05$]. So the factor sector must not exist in the regression pattern. Simply working sector does not affect teachers' effectiveness.

For the factor qualification there is a test:

$$H_0: b_8 = 0$$

$$H_9: b_8 \neq 0$$

We reject the zero hypothesis [$t(\text{stat}) = 14,590$ p.value = $0,000 < 0,05$]. So the factor qualification must exist in the regression pattern. Qualification positively affects teachers' effectiveness. Teachers with a

master or doctorate degree are more effective than teachers with their bachelor degree.

For the factor gender match or mismatch there is a test:

$$H_0: b_8 = 0$$

$$H_9: b_8 \neq 0$$

We accept the zero hypothesis [$t(\text{stat}) = -1,884$ $p.\text{value} = 0,060 > 0,05$]. So the factor gender match or mismatch must not exist in the regression pattern. Simply the gender match or mismatch does not affect teachers' effectiveness.

After the hypothesis tests there is the final multiple regression model (without the factors that do not affect teacher effectiveness).

The final multiple regression model is as it follows:

$$Y = -1,887 + 0,027 * H + 0,117 * PE + 0,024 * XY + 0,971 * ES$$

Table 4. Pattern of final model of multiple linear regression

	Coefficients	Beta	t (stat)	p.value
(Constant)	-1,887		-8,604	,000
Age	,027	,233	3,865	,000
Location	,117	,077	2,972	,003
Wears of experience	,024	,187	3,114	,002
Qualification level	,971	,420	16,162	,000
R ² adj = 0,260 F = 103,555 F(prob) = 0,000				
Dependent variable: Teacher Effectiveness				

The final multiple regression model can explain 26% of the effectiveness variability. There is a hypothesis test about the existence of a multiple linear correlation between the dependent variable (teacher effectiveness) and the independent variables (experience, age, qualification and location).

H₀: There is not a linear correlation

H₁: There is a linear correlation

We accept the H₁ because the value $F(\text{prob}) = 0,000 < 0,05$

There is a positive influence of all the factors on teacher effectiveness. However, the factor that most affects effectiveness is the qualification level, followed by school's location and in the end the age and years of experience. Still needs to be noted that the proportion of variability that can interpret the coefficients are relatively low. This component is probably due to the fact that teacher effectiveness is influenced by many fac-

tors not included in the model. As reported in the literature these factors are likely to be work-related stress (Tahir, 2011; Curtaz, 2009; Hanif, 2004; Dickman, & Emener, 1992) and job satisfaction education (Moore, 2012; Blanchflower, & Oswald, 1998).

5. Discussion

The results of this research effort have shown that age affects teacher effectiveness. Increasing teachers' age makes teachers more effective. This element is in line with other research results (Kingdon and Teal, 2008). One possible explanation may be that older teachers are more satisfied with their work and that makes them more effective (Karavas, 2010; Ταρasiάδου, & Πλατσίδου, 2009; Stockard, & Lehman, 2004; Zembylas, & Papanastasiou, 2004; Bishay, 1996; Κάντας, 1992). Moreover, teachers' years of experience affect their effectiveness. Teachers with more years in service are more effective than their counterparts with fewer years in service. Many studies have shown that teachers' experience affects their effectiveness and consequently student achievement (Harris, & Sass, 2011; Jimenez-Castellanos, 2010; Currall, et al., 2005). That is because experienced teachers have more time to develop their skills than younger ones and they may also become more involved in the curriculum and use better materials to boost learning classroom (Jimenez-Castellanos, 2010).

The schools' location affects teachers' effectiveness. In urban areas, teachers are more effective in relation to the rural or suburban areas. This result is in agreement with other research results (Lin, 2010). One possible explanation may be the increased stress level that teachers in urban areas has; because of many factors (Hanif, 2004; Schaubroeck, & Ganster, 1991). Perhaps stress in this case has a positive impact and through that the effectiveness is increased. For several years, the assumption had been that stress negatively affects employee effectiveness (Hanif, 2004; Kahn, & Byosiére, 1992). However, the focus of the research in the different directions of stress has shown that stress can work positively to employee effectiveness (LePine, Podsakoff, & LePine, 2005).

Finally, teachers' qualification affects effectiveness. Teachers with higher educational level (master or doctorate) are more effective than their colleagues who have only their bachelor degree. This element is in line with other research results (Kingdon, & Teal, 2008; Aaronson, Bar-

row, & Sander, 2007). This component is probably due to the increased knowledge and skills gained by teachers through master and doctoral studies; which help them to better cope with their working demands (Croninger, et al. 2007; Darling-Hammond, 2000).

6. Conclusion

Teacher effectiveness seems to have preoccupied many researchers (Ilgen, & Pulakos, 1999; Campbell, 1990). Its importance for students and for society in general is given (Heck, 2009; Hanushek, 1992). However, there seems to be disagreement not only about which factors affect effectiveness (Passos, 2009; Cheng, Tam, & Tsui, 2002) but also how to measure effectiveness (Berk, 2009). Measuring effectiveness is a complex and difficult process and for this reason researchers have developed many different ways to measure it (Berk, 2009). Among these ways student achievement appears to have the most direct and reliable results (Mathers, Olivia, & Laine, 2008).

The purpose of this study is to search whether teacher effectiveness is affected by teachers' salary and demographic characteristics of teachers working in the fourth, fifth and sixth grades of the primary schools in Greece.

The main results of the research are that age, years of experience, the location where the school unit is and the qualification level influence its effectiveness. More specifically, teachers with greater age and more years of service who work in urban areas and have an increased qualification level (master or doctorate) are more effective. Instead, teachers' gender, the match or mismatch between teachers' and students' gender, the family status, the salary and the sector don't influence teachers' effectiveness.

The present study contributes to the promotion of science and education because of the importance that teacher effectiveness has to students, the school unit and the educational system (Heck, 2009; Hanushek, 1992). The quality of the educational process and its products is undoubtedly influenced by teacher effectiveness, the demand for effectiveness in education is necessary to improve the education provided (Akhlaq et al., 2010).

Research results have shown that teachers have an impact both in good and in poor student achievement and that this effect applies over time (Mpasetas, & Poulou, 2001; Karageorgos, 1996). Tucker and

Stronge (2005) state that “... *the importance of educational quality does not matter just on how well children learn in the classroom, but also for its impact on teacher effectiveness, which affects students for many years*” (p. 5). Based on the above findings and the older research results, it is necessary for the educational leadership in Greece to focus on the improvement of teacher effectiveness “... *the mission of educational leadership, if there it wants to affect student learning and performance, is to improve teacher effectiveness*” (Leithwood et al. 2006: 10). How well a child learns in school affects the rest of its life. Individuals with high levels of education have higher wage gains, they experience shorter unemployment, have better health and a higher living level and they are more cheerful during their lifetime. In contrast, low education level results in increased health costs, higher levels of unemployment and lower per capita income (Wall, 2010)

The demarcation of the investigation should be made to the multiplicity of the teacher effectiveness (Medley, 1982). Through the models developed by many researchers (Passos, 2009; Ogrenir, 2008, Anderson, 2004) it becomes strongly apparent that effectiveness is influenced by many variables and at many levels (Passos, 2009; Anderson, 2004; Cheng, Tam, & Tsui, 2002; Cheng, & Chui, 1996; Medley, 1982; Avalos, & Haddad, 1981). Such factors may be the personality of teachers, educational abilities and skills, the type of school management, the teaching subject, the classroom, the examination system, the workload and teachers’ socio-economic profile (Passos, 2009; Anderson, 2004; Cheng, Tam, & Tsui, 2002; Cheng, & Chui, 1996; Medley, 1982; Avalos, & Haddad, 1981).

Considering the above, new research questions that may arise related to:

- The effectiveness of teachers in secondary and tertiary education (Berk, 2009; Mathers, Olivia, & Laine, 2008; Flowers, & Hancock, 2003).
- The differences in teacher effectiveness by using a different measurement type; apart from that of student performance (Hanushek, 1992, Hanushek, 2007).
- The effect on teacher effectiveness of factors such as job satisfaction (Moore, 2012; Blanchflower, & Oswald, 1998) and job stress (Tahir, 2011; Curtaz, 2009; Hanif, 2004; Dickman, & Emener, 1992).

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Abstract

Teachers are the most important cell of the educational system therefore their effectiveness is able to influence students' progress and achievement. The effectiveness as a dependent variable is associated with a large number of variables. The purpose of this research is to study whether teachers' demographics and personal characteristics affect their effectiveness. The results showed that age, experience, the location where the school is and teachers' qualifications influence teachers' effectiveness. In contrast, teachers' gender, the teachers and students' gender match or mismatch, family status, teachers' salary and working sector do not influence teachers' effectiveness.

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