# Empirical Research on Education and Student Failure: Teachers' Psychological and Sociological Interpretations

# Giavrimis Panagiotis Papanis Efstratios

Department of Sociology, University of Aegean Ch. Trikoupi & Faonos str., 81100 Mytilene, Greece

**Eugenia A. Panitsidou, MSc, PhD (Corresponding Author)** Department of Educational and Social Policy, University of Macedonia GR-54655, 27 Kathigiti Rossidi Str Thessaloniki Greece E-mail: epantsidou@uom.gr, Phone : (0030) 2310 420304

# **Papastamatis Adamantios**

Department of Educational and Social Policy, University of Macedonia 156 Egnatia str, 54006, Thessaloniki, Greece

# Abstract

The present study aims to record teachers' views on the factors influencing students' success or failure respectively, in Greece. Moreover, it seeks to identify structural deficiencies in the Greek education system, related to school failure phenomena, in order to provide for grounded political suggestions Throughout contemporary literature, various psychological and social variables have been identified as causes of student failure, such as motivation, self-esteem, family context, education system, teacher or student personality. Our quantitative research was conducted on a sample consisting of 300 teachers of primary and secondary education in Greece. Data analysis indicated that the phenomenon of student failure or success is multifaceted, depending on various social as well as economic parameters.

Key-words: Student success/failure, motivation, self-esteem, family context, socio-economic and cultural background

# 1. Introduction: the issue of equity in education

Education as a social representation has always incorporated, directly or indirectly, developments, attitudes and interrelations of both market tendencies and dominant ideology. Social change, class differentiation, polysemy of the role of the teacher as well as of the student, have been expressed in many ways throughout education systems, attributed different dimensions depending on economic and societal priorities. The importance of equity in educational chances initially emerged in the sixties, when underrepresentation of low socio-economic classes and overrepresentation of high socioeconomic classes was rather significant. However, in the light of scientific and technological advancement, internationalisation of economies and subsequent socio-economic structural transformations, equity in education has been viewed as a major component of sustainable economic growth and social cohesion reinforcement in the 21<sup>st</sup> century, both globally as well as within the European context.

According to an OECD study (Field, Kuczera & Pont, 2007), building on a comparative perspective on how different countries have approached equity in education, which was set in a bi-dimensional framework comprising fairness and inclusion, it was pointed out that not all students have equal trajectories within the educational system, nor equal chances to benefit from education. Thus, three key areas were identified to deliver equity and equal chances: the structure of education systems, classroom practices and resourcing. The issue of equity in education has attracted growing interest within the European Union (EU), as well. As early stated in the Treaty of Rome (1957) and confirmed by the Treaty of Amsterdam (1997), education is the key variable in economic and social progress of the peoples in Europe. Wider consensus, however, among member states, concerning the economic and social value of education, was reached at the Lisbon European Council (2000), setting the framework of a coherent strategy to turn EU into the "most competitive economy in the world, based on knowledge". In the light of the evolving Lisbon agenda, the Commission of the European Communities (2006) highlighted efficiency and equity as critical factors to develop EU's long-term potential for competitiveness as well as for social cohesion.

It is therefore considered a critical socio-political issue to ensure provision of equal chances within the educational system, taking into account that:

- There is a human rights imperative for people to be able to develop their capacities and participate fully in society.
- The long-term social and financial costs of educational failure are high. Those without the skills to participate socially and economically generate higher costs for health, income support, child welfare and security.
- Increased migration poses new challenges for social cohesion in some countries while other countries face long-standing issues of integrating minorities. Fair and inclusive education for migrants and minorities is a key to these challenges.
- Equity in education enhances social cohesion and trust.

(Field, Kuczera & Pont, 2007)

In this vein, it was judged important to identify factors influencing student failure or success within the Greek education system, as a reference point to reach grounded conclusions and enable formulation of effective policy measures.

### 2. Factors influencing student failure or success

Student failure is defined as a situation in which the student cannot exploit his/her cognitive and emotional resources, resulting in a performance inferior to his/her capabilities (Gerou, 1991; Kaila, Xanthakou & Andreadakis, 1996). Researchers have sought to identify possible causes of student failure, studying psychological and social variables such as motivation, self-concept, socioeconomic background, education system, teacher and student personality, etc. (Lloyd, 1978; Markovitis & Tzouriadou, 1991; Mortimore et al., 1988; Tremblay et al., 1992). Depending on the theoretical background, failure has been attributed to the industrial or post-industrial education model, dominant ideology, deficiency in cultural capital, social class, sensory deprivation, lack of play during infancy, poor communication, deficient class dynamics, teachers' attitudes, curricula or student self-esteem and confidence (Bourdieu & Passeron, 1996; Fragoudaki, 1985; Marsh, Parker & Smith, 1983; Matsagouras, 2000; Mylonas, 1998, 1999; Scheerens, 1992; Tremblay et al., 1992).

Motivation constitutes a critical factor responsible for students' personal involvement in the educational process (Atkinson, 2000). It largely defines the goals the student sets which, in relation to skills and time available for studying, determine effectiveness in the school environment. According to Bourdieu and Passeron (1996) student motivation is inextricably linked to the value system of the family and society at large, but also directly related to the ability to process information and thus, to his/her overall performance. Low achievers tend to attribute their failure to curricula and fortune, and try to locate sources of self-esteem within groups and interests besides the school context. On the contrary, students with high school performance emphasise on self-regulation and self-discipline skills, consistent and supportive family context and commitment to goal achievement (Knopp, 1982; Whitley & Frieze, 1985; Wigfield, 1988). Most often teachers associate student failure with lack of motivation and indifference to or rejection of the family context. Self-concept refers to the internalisation of student's social image (Leontari, 1996), developed by social comparison of his/her achievement potential and affected by the acceptance of the "significant others". Marsh, Parker and Smith (1983) propose a hierarchical model, according to which, self-concept is composed of a generic factor and several individual factors specialised in areas of social life.

One of these sub-factors refers to school self-concept, which affects student success or failure at school. It evolves since early childhood, while it is formed by teacher-parent expectations, peer interaction and structure of the education system (Paraskevopoulos, 1985). Positive self-concept increases effectiveness in school requirements, becomes the driving force of personal and social development, leads to deeper and more complete information processing, enables use of more metacognitive learning strategies and structures the internal system of values in a coherent way. Thus, self-concept is considered a more valid prognostic factor of student failure compared to sex or age (Leontari, 1996). Family context and social class has its own constitute indisputably, the most important correlation factor to student failure (Bourdieu & Passeron, 1996; Georgiou, 2000, Johnson, 1994; Katsikas, 1995; Teddlie & Reynolds, 2000). Each social class has its own limits, restrictions, expectations and stereotypes, while it attempts to predetermine attitudes, values and social advancement potential for its members (Bourdieu & Passeron, 1994). Class restrictions are often mitigated by social networks, cultural influences, experiences, context and compensatory education. Fortunately, it appears that student performance depends less on the economic level of parents and more on the value they attach to learning, as well as on their level of education (Bourdieu & Passeron, 1996; Brassett-Grundy, 2002; Coleman, 1988; Schuller et *al.*, 2004).

A learning culture within the family in conjunction with stable emotional climate deeply affect school performance. Assistance with school subjects provided by parents, hours spent with the child, effective communication and values transmitted are directly associated with success and failure (Bourdieu & Passeron,1996; Georgiou, 2000; Gonzalez-Pienda et al., 2002; Kim, 2002). Democratic, however well-defined and coherent, family context is the best factor to predict school adjustment, whereas authoritarian or indifferent family environment could lead to an immature learning personality, social insecurity and low self-esteem (Georgiou, 2000; Georgiou & Christou, 2000; Rodriguez, 2002).

The teacher-student relationship and expectations arising from this relationship are likely to affect school performance, as well (Georgiou et al., 2002). The education system, for many decades, had been training teachers to appreciate variables such as students' intelligence, diligence and discipline. Progressively, this has led teachers to the point to assume that an efficient student is somebody who does not present behavioral problems in class (Genovese, 2002). The teacher-student relationship is largely determined by the attitudes of teachers in defining student deficiency, their qualifications, their professionalism, their methodology, as well as the degree of burnout or anxiety they experience (Argyropoulos, 1999; Bernal & Torres, 1990; Friedman, 2000; Hendrickson, 1979; Matsagouras, 2000; Xochellis, 199; Tsiplitaris, 2000; Vamvouka, 1982). The complex and multileveled psychological processes taking place in the classroom are widely influenced by factors like reinforcement, feedback, stereotype imitation, transference or counter-transference. In short, teachers' personality, their flexibility and ability to incorporate cultural norms and values, to be open to social change as well as to new learning patterns, determine their attitudes towards student diversity, motivation or communication impediments (Creemers, 2002; Dilworth & Imig, 1995; Slavin, Karweit & Wasik, 1992).

#### 3. Purpose of the study

As analysed above, student failure is a multi-factorial phenomenon, for which there is an imperative to be investigated as it is directly linked to economic development and social stability. In this context, the present research seeks to identify parameters student failure is determined by, in order to reach to interpretative conclusions and provide for suggestions on a political level.

#### 4. Methodology

To this end, a quantitative research was conducted, attempting to record views of teachers in Greece on the profile of low and high performers and the reasons leading to student failure, with respect to four parameters: family context, teacher effectiveness, teaching methods, state policies. Moreover, the rationale and underpinning interrelations were sought to be identified.

### 4.1 Sampling

The sample of the research consisted of 300 teachers of primary and secondary education, out of which 141 (47%) were male and 159 (53%) were female. The age of the respondents in the sample ranged from 18 to 65 years, with the highest frequency appearing in the age range 34-41 (33.3%), followed by the age range 42-49 (27.7%) (table 1). As far as years of service were concerned, 26% reported having 1 to 11 years of service, 38.7% having 12 to 23 years of service and 35.3% having 24 years or more (table 2).

AGE LEVEL	Absolute frequency	Relative frequency
18-25	15	5
26-33	38	12.7
34-41	100	33.3
42-49	83	27.7
50-57	47	15.7
58-65	11	3.7
>65	6	2
Total	300	100

#### Table 1: Absolute and relative frequencies with reference to age

#### Table 2: Absolute and relative frequencies with reference to years of service

YEARS SERVICE	OF Abso frequ	olute Relative uency frequency	
1-11	78	26	
12-23	116	38.7	
24 and over	106	35.3	
Total	300	100	

### 4.2 Research tools

To conduct the survey, a questionnaire built for the specific research was used, the construction of which was grounded on relevant literature, as well as findings of similar research studies in Greece. To ensure the validity of the questionnaire, it was attempted that both conceptual content of individual questions, as well as of thematic clusters, were based on contemporary pedagogical and psychological theories. The main body consisted of five thematic clusters including closed questions, while making use of a four-point Likert scale, in which 1 stood for disagree and 4 for agree. The first cluster referred to the profile of students with low school performance. The second cluster consisted of questions associated with the profile of students with high school performance. The third cluster included questions with reference to reasons of dropping out, features of the Greek education system and state policies on education. At the beginning of the questionnaire, demographic data were comprised in relation to gender, social class, school of attendance and parents' educational background.

### 4.3 Statistical Analysis

In order to enable better processing of the research data, the method of factor analysis was conducted in 14 questions of the questionnaire. The method of principal component analysis with rectangular axes rotation was used. To determine the number of factors with a load of over 0.40, the eigenvalue criterion and correlation matrix were applied. Variable allocation showed satisfactory dispersion of answers, while the sample size (N = 300) was considered sufficient for factor analysis.

#### 5. Findings

From factor analysis a four factor solution was adopted. The four factors accounted for 47.461% of total variance. In detail, the following generic factors were identified: a) Structural deficiencies of the education system, b) Students' professional prospects, c) Social inequalities and d) Family context.

The first factor, structural deficiencies of the education system, interpreted 15.53% of the total variance. It included five (5) questions concerning deficiencies of the Greek education system as well as of teacher training and qualifications which accounted for student failure. Mean was 2.34, standard deviation 0.59 and median 2.2.

The second factor, students' professional prospects, interpreted 13.13% of the total variance. Four (4) questions were comprised on the correlation of achievement at school and future professional prospects. Mean was found 2.67, standard deviation 0.41 and median 2.75.

The third factor, social inequalities, interpreted 9.89% of total variance. It included two (2) questions concerning the role of education in general, as well as of curricula on bridging social inequalities. Mean was 2.70, standard deviation 0.73 and median 3.

The fourth factor, family context, interpreted 8.91% of total variance. Three (3) questions were comprised on the correlation of student failure and parental attitudes towards education, as well as socioeconomic background of the family. Mean was found 2.45, standard deviation 0.54 and median 2.33.

INDICATORS	Agent quarters	Education system	Professional prospects	Social inequalities	Family context
Mean		2.34	2.67	2.70	2.45
Median		2.20	2.75	3	2.33
Standard deviation		0.59	0.41	0.73	0.54
	25	2	2.25	2	2
Quartiles	50	2.2	2.75	3	2.3333
	75	2.8	3	3.5	2.9167

The mean matrix indicated that teachers, according to their subjective views and assessments, are more inclined to agree, a) that high achievers at school have more promising career prospects than low achievers and that school performance is directly related to future position in the labour market, b) that the education system has failed to bridge social inequalities, something which, in their opinion, is mostly related to curricula and their non-participation in curricula design. Moreover, teachers tend to disagree with the view that features of the education system, such as professionalism, teacher training and attitudes, as well as family context and student personality are responsible for low school performance. To better clarify the views of teachers on student failure, factors' means were studied in relation to differences among them. In order to compare means, a multivariate analysis of variance was used, with statistically significant repetitive measurements: Hotelling's Trace, F (3. 297) = 40.58, p < 0.001,  $\eta^2 = 0.30$ .

Similarly, comparison for primary relation was found statistically significant: F (1. 229) = 62.23, p <0.001,  $\eta^2$  = 0.21. Means of the 4 factors are shown in figure 1 in ascending order. The aforementioned data evidence that teachers' views vary considerably. In detail, they tend to assert that the education system does not reverse social inequalities, while there exists strong correlation of school performance and future professional prospects. It was not extensively supported though that the structure of the education system accounts for student failure. In their opinion, family context and student personality far overwhelm deficiencies of the education system.



Figure 1: Hierarchical classification of questioner factor means

In order to better compare the views of teachers and identify whether they represent specific profiles, they were grouped according to the questionnaire factors. Thus, using cluster analysis, two groups derived. Studying key means deriving from cluster analysis, it was identified that the two clusters formed, bear the following characteristics (table 4): a) the first cluster (group 1) disagreed with the view that high achievers at school have better career prospects than low achievers and that the education system cannot bridge social inequalities. Moreover, b) the first cluster rather disagreed with the view that parameters of the education system, family context and student personality account for poor school performance, whereas c) the second cluster (group 2) agreed that high achievers at school have better career prospects than low achievers at school have better career prospects than low achievers at school performance, whereas c) the second cluster (group 2) agreed that high achievers at school have better career prospects than low achievers and that the education system cannot bridge social inequalities. In addition, they mostly agreed that the structure of the education system, family context and student personality are responsible for low school performance. The classification of students in groups is shown in table 5.

FACTORS	CLUSTERS		
	Group 1	Group 2	
Education system	2.2	2.6	
Professional prospects	1.5	3.75	
Social inequalities	1.5	4	
Family context	2	3	

 Table 4. Central averages of questionnaire factor clusters

#### Table 5. Classification of educational groups

GROUPS	NUMBER OF CASES		
Group 1	160		
Group 2	140		
Total	300		

#### 6. Discussion

The aim of the present study was to record the views of teachers in relation to possible causes that lead students to failure at school and to identify whether the structure of the education system is interrelated to it. Teachers and the staff employed in the field, in general, lead a critical role in the sociopolitical integration of students into the education system and the labour market later on. Our research findings indicated that high achievers at school have better career prospects compared to low achievers and that school performance is directly related to their future position in the labour market. Looking into the professional prospects of individuals in relation to existing opportunities in the labour market along with their educational background, we reach an understanding of broader and longer-term processes of social production and reproduction, of exclusion and transference.

In this context, several research studies have associated school performance with socioeconomic status, while theorists of sociology of education have attributed to the education system and its procedures future career biographies of individuals. As identified from our research findings, teachers assert that the education system cannot bridge social inequalities, a fact mainly related, in their opinion, to the state intervention in curricula design. Researchers have repeatedly pointed out that education reproduces and perpetuates social inequality through selection of the content of the curricula, favouring thus, privileged social strata (Bourdieu & Passeron, 1996; Mylonas, 1998; Fragoudaki, 1985). Curricula are shaped according to the dominant ideological-political considerations of each place-time period, while students are convinced of the fairness of the education system and the fact that success is based on hard work and their effectiveness as learners. Theoretically, all individuals are provided with the same opportunities to prove their worth, to gain significant educational credentials and move into positions of influence and power, but in practice this is not feasible, since schools reward tractability, passivity, obedience and acceptance of values advocated by the education system, while they criminalise creativity, initiative and diversity.

The aforementioned process legitimises existing social hierarchy. Participation of stakeholder groups in curricula design could possibly be a way to mitigate the impact of socio-political interests and turn the education system towards recognition and support of the diversity of students, since the issue of school performance and student failure does not only concern individuals but the wider context in which they live and operate (physical and social environment). Bourdieu and Passeron (1994) argue that success is related to the attitude of the education system towards knowledge, skills and cultural capital of students, which is the result of the way education is organised. The "nature" of the education system thus, is what reproduces social inequality through school performance (Kelpanidis, 2002). Teachers in our research, however, while, in general, supporting the responsibility of the education system, rather disagree with the view that specific parameters of the education system, such as quality of staff employed, teacher training and their attitudes towards students influence student failure. At this point, it is important to emphasise that a) teachers support the public nature of education, developing though, a growing concern for the quality of services provided by the Greek education system due to finance shortages and b) teachers, throughout the education process, shape their judgments on students' abilities from stereotypical perceptions of the characteristics of the 'good' or 'bad' student. Teachers' classifications tend to be neither neutral nor based on objective criteria, but rather depend on common perceptions of the learning behaviour of students.

Finally, regarding teachers' views on the responsibility of the family context and student personality for low school performance, in studies abroad as well as in Greece there has been a dominant perception that home environment largely determines school performance by affecting students' motivation, values, and attitudes towards education and learning (Bourdieu & Passeron, 1996; Mylonas, 1998; Fragoudaki, 1985). Social status and educational background of parents serve as important factors, influencing the performance of children at school (Bourdieu & Passeron, 1996; Georgiou 2000). It has also been identified that low-income families are not involved in their children's education, a fact which critically affects children's personality and skills (Brassett-Grundy, 2002; Epstein, 1992; Hickman, Greenwood & Miller, 1995; Schuller et al., 2004). Cultural capital of the family, interpersonal relationships of its members and parental involvement account for a large proportion of school and professional outcomes in children's biographies. Findings in the present study are in line with previous research, pointing out that teachers allocate greater importance to family context and student personality, compared to the structure of the education system, in determining student failure or success.

## 7. Conclusions & Suggestions

What considered noteworthy in the present research findings, is the fact that there are two significantly differing teacher groups. Teachers in the first group are more optimistic about future professional prospects of low achievers at school, while they attribute little responsibility to social structures. On the contrary, teachers in the second group appear more denunciatory, agreeing that school performance affects employment prospects of students having failed at school, while they allocate responsibilities between the education system, which is judged unable to bridge social inequalities and, secondarily, the family context and student personality.

Thus, implementation of effective teacher training programmes on tackling student difficulties and parent counseling is deemed important. In addition, teacher involvement in setting and implementing curricula is considered a core parameter in supporting the critical role of the institution of school. The aforementioned procedures may increase overall effectiveness of the education system, provided that social structure of the contemporary context, as well as social integration and cohesion of all students are taken into account.

#### **REFERENCES**

- Argyropoulos, K. (1999). Occupational stress of teachers. Contemporary Education, 106, 38-54 (in Greek).
- Atkinson, E. (2000). An investigation into the relationship between teacher motivation and pupil motivation. Educational Psychology, 20, 45-57.
- Bernal, J.R. & Torres, M.E. (1990). Successful classroom strategies for students at risk begin with effective in-service training. Paper presented at the ACRES / NRSSC Symposium, Tucson, AZ.
- Bourdieu, P. & Passeron, J.C. (1994). Reproduction in Education, Society and Culture, 2nd edn. Great Britain: Sage.
- Bourdieu, P. & Passeron, J.C. (1996). The inheritants. Students and their culture. Athens: Kardamitsa (in Greek).
- Brassett-Grundy, A. (2002). Parental Perspectives of Family Learning. Wider Benefits of Learning Research Report No 2. London: Institute of Education.
- Coleman, J. (1988). Social Capital in the Creation of Human Capital. American Journal of Sociology, 94, Supplement, 95-120.
- Commission of the European Communities (2006). Communication from the European Commission to the Council and to the European Parliament. Efficiency and equity in European education and training systems. COM 481 final.
- Creemers, B. P. M. (2002). From school effectiveness and school improvement to Effective School Improvement: background, theoretical analysis, and outline of the empirical study. Educational Research and Evaluation, 8, 4, 343-362.
- Dilworth, M.E. & Imig, D.G. (1995). Professional teacher development and the reform agenda. ERIC Document EPO-SP94-1.
- Epstein, J. J. (1984). Effects on teacher practices of parent involvement for change in student achievement in reading and maths. Paper presented at the Annual Meeting of the American Research Association, New Orleans.
- European Council (2000). The Lisbon European Council: Presidency Conclusions. 23<sup>rd</sup> -24<sup>th</sup> March 2000.
- Field, S., Kuczera, M. & Pont, B. (2007). No more failures: Ten steps to equity in education. Paris: OECD Publishing.
- Fragoudaki, A. (1985). Sociology of Education Theories on Social Inequality at School. Athens: Papazisis (in Greek).
- Friedman, I. A. (2000). Burnout in Teachers: Shattered Dreams of Impeccable Professional Performance. Journal of Clinical Psychology, 56,5, 595–606.
- Genovese, J.E.C. (2002). Cognitive skills valued by educators: Historical content analysis of testing in Ohio. The Journal of Educational Research, 96, 2, 22-36.
- Georgiou, S. N. (2000). School-family relationship and child development. Athens: Hellinika Grammata (in Greek).
- Georgiou, S. & Christou, C. (2000). Family parameters of achievement: A structural equation model. *European Journal of Psychology of Education*, 15, 2, 297-311.
- Georgiou, S., Christou, C., Stavrinides, P. & Panaoura, G. (2002). Teacher attributions of student failure and teacher behavior towards the failing student. Psychology in the Schools, 39, 5, 583-595.
- Gerou, T. D. (1991). Student failure Illiteracy Learning Difficulties: Dyslexia, Athens: Vivliogonia (in Greek).
- Gonzalez-Pienda, J. A., Nunez, J. C., Gonzalez-Pumariega, S., Alvarez, L., Roces, C. & Garcia, M. (2002). A structural equation model of parental involvement, motivational and attitudinal characteristics, and academic achievement. Journal of Experimental Education, 70, 257-287.
- Hendrickson, B. (1979). Teacher burnout: How to recognize it, what to do about it. *Learning*, 7, 37-39.
- Hickman, C. W., Greenwood, G. & Miller, M. D. (1995). High school parent involvement: Relationships with achievement, grade level, SES, and gender. Journal of Research and Development in Education, 28, 5, 125-134.
- Johnson, G.M. (1994). An ecological framework for conceptualizing educational risk. Urban Education, 29, 1, 34-39.
- Kaila, M., Xanthakis, G. & Andreadakis, N. (1996). The logic of student failure: A "balanced relationship" between the family and school. In M. Kaila (ed.) Student failure: From the school "Family" to the "School" of the family. Athens: Hellinika Grammata (in Greek).

- Katsikas, C. (1995). Family and school performance: the coincidence of a relationship. *New Education*, 74, 121-128 (in Greek).
- Kelpanidis, M. (2002). Sociology of Education: Theories and Reality. Athens: Hellinika Grammata (in Greek).
- Kim, E. (2002). The relationship between parental involvement and children's educational achievement in the Korean immigrant family. *Journal of Comparative Family Studies*, 33, 4, 529.
- Knopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology*, 18, 2, 199-214.
- Leontari, A. (1996). Self-concept. Athens: Hellinika Grammata (in Greek).
- Leontari, A. & Gialamas, B. (1996). Exam stress, self-concept and school performance. *Psychology* 3, 2, 20-39 (in Greek).
- Lloyd, D.N. (1978). Prediction of student failure from third-grade data. *Educational Psychological Measurement*, 38, 1193-2000.
- Markovitis, M. & Tzouriadou, M. (1991). *Learning disabilities. Theory and practice*. Thessaloniki: Prometheus (in Greek).
- Marsh, H.W., Parker J.W., & Smith I.D. (1983). Preadolescent self-concept: Its relation to self-concept as inferred by teachers and to academic ability. *Journal of Educational Psychology*, 53, 50-78.
- Matsagouras, H. (2000). The classroom. Athens: Grigoris (in Greek).
- Milonas, T. (1998). Sociology of Greek Education. Athens: Gutenberg (in Greek).
- Milonas, T. (1999). Reproduction of social classes through school mechanisms: secondary education in the village and town. Athens: Gutenberg (in Greek).
- Mortimore, P., Sammons, P., Stoll, L., Lewis, D., & Ecob, R. (1988). School Matters: The Junior Years. Wells: Open Books.
- Official Journal of the European Communities (1997). Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related acts. Brussels: C 340.
- Official Journal of the European Communities (2002). Consolidated Version of the Treaty Establishing the European Community: The Treaty of Rome 1957. Brussels: C 325/35.
- Paraskevopoulos, I. (1985). Developmental Psychology. Athens: Author (in Greek).
- Pyrgiotakis, I. (1989). Socialization and social inequalities. Athens: Grigoris (in Greek).
- Rodriguez, J. L. (2002). Family context and achievement among three generations of Mexican American high school students. *Applied Developmental Science*, 6, 88-94.
- Scheerens, J. (1992). Effective Schooling: Research, Theory and Practice. London: Cassell.
- Schuller, T., Preston, J., Hammond, C., Brassett-Grundy, A. & Bynner, J. (2004). *The Benefits of Learning: The impact of education on health, family life and social capital.* London: Routledge Falmer.
- Slavin, R.E., Karweit, N.L., & Wasik, B.A. (1992). Preventing early student failure: What works?. *Educational Leadership*, 50, 10-18.
- Teddlie, C. & Reynolds, D., (2000). *The International Handbook of School Effectiveness Research*. London: Falmer.
- Tremblay, R. E., Masse, B., Perron, D., LeBlanc, M., Schwartz-man, A. E. & Ledingham, J. E. (1992). Early disruptive behavior, poor school achievement, delinquent behavior, and delinquent personality: Longitudinal analyses. *Journal of Consulting and Clinical Psychology*, 60, 64-72.
- Tsiplitaris, A. (2000). Psychology of the classroom. Athens: Perivolaki (in Greek).
- Vamvoukas, M. (1982) Motives of the teaching profession. Heraklion: Author (in Greek).
- Whitley Jr. B.E. & Frieze, I. H. (1985). Children's causal attributions for success and failure in achievement settings: A meta analysis. *Journal of Educational Psychology*, 77, 608-616.
- Wigfield, A. (1988). Children's attributions for success and failure: effects of age, and attention focus. *Journal* of Educational Psychology, 77, 608-616.
- Xochellis, P. (1999). Introduction to Pedagogy. Thessaloniki: Kyriakides (in Greek).