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Greek secondary school teachers assess the extent to which the Greek school embraces the principles of intercultural

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GREEK SECONDARY SCHOOL TEACHERS ASSESS THE EXTENT TO WHICH THE GREEK SCHOOL EMBRACES THE PRINCIPLES OF INTERCULTURAL EDUCATION

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Abstract

The purpose of the present work is to determine the degree to which Greek secondary school teachers view the Greek school as embodied in the principles of intercultural education such as acquaintance with cultures, mutual respect, empathy, parity among others such as the right and conditions of study, the fight against leakage, the curriculum, pedagogical practices, the school climate and its connection to the local community and offer opportunities cognitive, social and psycho-emotional development of students.

130 Greek secondary teachers participated in the study. Implicative Statistical Analysis was employed for data analysis.

Among the most important findings is the finding that when respondents believe that the Greek school embraces the principles of intercultural education in relation to teaching methodology, it implies a belief that it embraces it in relation to pedagogical practices and the school's connection to local society. In addition, the belief that the Greek school embraces the principles of intercultural education in relation to the school's connection with the local community implies the belief that the Greek school offers the opportunity for cognitive, social and psycho-emotional development at all levels of study.

Keywords: Greek, school, principles, intercultural, education

Introduction

According to UNESCO Guidelines (2006) there are three major pylons or Principles regarding Intercultural Education. Agreeing to Principle I Intercultural education respects the cultural identity of the learner through the provision of culturally appropriate and responsive quality education for all. The second one Principle II Intercultural Education provides every Lerner with the cultural knowledge, attitudes and skills necessary to achieve active and full participation in society. Lastly Principle

III Intercultural Education provides all learners with knowledge, attitudes and skills that enable them to contribute to respect, understanding and solidarity among individuals, ethnic, social, cultural and religious groups and nations. According to Desli (201) UNESCO Guidelines (2006) depicted culture as a largely neutral and apolitical constructs. According to Bedeković (2017) the basic Principles of Intercultural Education rely on equality of all people as well as equal approval of the culturally diverse related not only to individuals but also groups. Intercultural Education and theory nowadays should be based on equality, justice, recognition of diversity and social cohesion (Karamitrou, 2019a; Karamitrou, 2019b; Kofou, & Anastasiadou, 2013; Florou, et al., 2015; Mokias, 2019). Gundara and Portera (2008) connected the awareness of cultural differences, modifications, dissimilarities and consistencies with the social values and richness. Intercultural Education is seeking for justice for all students providing equal opportunities in social and future professional life (Anastasiadou et al., 2014; Florou, et al., 2015; Nikolaou, 2000).

In addition Gundara and Portera (2008) claimed that Intercultural Education rely on equality, social justice and inclusions that is the basic idea of a democratic society. Herlo (2015) supported that Intercultural Education should fight against discrimination and intolerance, fanaticism and bigotry. Furthermore Bedeković (2017) claimed that Intercultural Education rely on prevention of ethnocentrism as well as discrimination, xenophobia, racism and put the foundations from liberation from any racist models (Florou, et al., 2015; Markou, 1997).

Moreover Zergiotis (2006) connected Intercultural Education Principles in relation to racism and xenophobia combating. For Intercultural Education it is fundamental the reduction of stereotypes and prejudices (Bedeković, 2017). Herlo (2015) stayed that Intercultural Education should fight for prevention of prejudices and stereotypes. Bedeković (2017) claimed that Intercultural Education relies on the decrease of stereotypes and prejudices. Intercultural Education has to put the basis for stereotypes and prejudices' elimination toward foreign students (Frangoudaki & Dragona, 2000).

In a line Gundara and Portera (2008) claimed that the fundamental principles of Intercultural Education are related to stereotypes and prejudices decrease. Gundara and Portera (2008) maintained that Intercultural Education Principles aim to ethnocentrism and nationalism elimination.

In addition Sablić (2014) pointed out the importance of a respect toward cultural diversity as well as respect related to ethnic and linguist diversity aiming to a nonviolent

community and individuals need to be willing and ready to lone in a multicultural society (Georgogannis, 1999), a society characterized by a variety of cultural and ethnic backgrounds (Batelaan, 1983).

Herlo (2015) supported that Intercultural Education should fight for respect related to cultural diversity and cultural identity (Masouras, 2019). Sablić (2014) put emphasis on the Principles of Intercultural Education related to human dignity and diversity respect.

Gundara and Portera (2008) maintained that Intercultural Education Principles view to Xenophobia and discrimination as well as tolerance, unity and coexistence of different cultures. In addition the appreciation of diversity leads to prejudice and discrimination (McGee Banks, 2004). Bedeković (2017) claimed that Intercultural Education Principles must be in a line with the global, culturally pluralistic communities.

Intercultural Education Principles asked for an open and multicultural identity (Bedeković, 2017) that individuals will achieve greater openness and share mutual appreciation (Fenners a Hapgood, 1997) due to the fact that school is the place that students' cultures are met and mixed (Damanakis, 1997; Gotovos, 2002).

Purpose of the study

The scope of the current paper is to define the degree to which Greek secondary school teachers assess the Greek school as embodied in the Principles of Intercultural Education such as acquaintance with cultures, mutual respect, empathy, parity among others such as the right and conditions of study, the fight against leakage, the curriculum, pedagogical practices, the school climate and its connection to the local community and offer opportunities cognitive, social and students' psycho-emotional development.

Participants

Regarding 130 respondents' gender, 105 are women, (80.8%) and 25 men (19.2%). Of the 130 respondents, 95 (73.1%) are education executives and 35 (26.9%) are not. In terms of years of service, 16 have from one to five years of service, 20 (15.4%) from 6 to 10 years of service, 19 (14.6%) from 11 to 15 years of service, 28 (21.5%) from 16 to 20 years, 30 (23.1%) from 21 to 25 years and finally, 17 (13.1%) from 26 to 30 years. For 53 (40.8%) respondents their school or schools in their area of responsibility belong

to an urban center area, for 25 (19.2%) in a suburb area, for 28 (2.5%) in a semi-urban area, for 16 (12.3%) in rural and 8 (6.2%) in inaccessible.

Research methodology

This section is dedicated to the presentation of a main type of clustering methods: Statistical Implicative Analysis (SIA). Statistical Implicative Analysis (SIA in the Didactic of Mathematics (Gras, 1979). Since Régis Gras' doctoral dissertation, a great deal of research has been published exploring the different paths of theory development (Gras et al., 1997; Gras, & Couturier, 2013; Gras et al., 2004; Gras, et al., 2008; Gras, Regnier, & Guillet, 2009; Gras, Régnier, Marinica, & Guillet, 2013; Anastasiadou et al., 2007; Anastasiadou & Panitsides, E. 2014; Panitsides, Anastasiadou, 2015; Nikolaou et al., 2017a; Petridou et al., 2017b). Thus, the method rests on implication intensity which measures the degree of astonishment inherent in a rule. For example, the set of items B, then it is legitimate and intuitive to expect that the counter part is and the set of non-B items is strongly associated with the set of non A-items (Anastasiadou et al., 2007; Anastasiadou et al., 2008; Anastasiadou et al., 2010a; Anastasiadou, 2018a; Anastasiadou, 2019a; Anastasiadou, 2019b; Anastasiadou & Gagatsis, 2017; Anastasiadou & Giossi, 2018; Anastasiadou,& Papadaki, 2019; Anastasiadou & Pappa, 2019; Christodoulou, et al., 2017; Ntotsi, & Anastasiadou, 2019; Fotiadis & Anastasiadou, 2019, Souravlas @Anastasiadou, 2020, Souravlas et al., 2020).

The implicative representation of the associations is presented in Figure 1 by a weighted graph without cycle where each edge responds to a rule, and in Figure 2 by an ascending hierarchy oriented by meta-rules (Anastasiadou, 2018; Anastasiadou, 2019a).
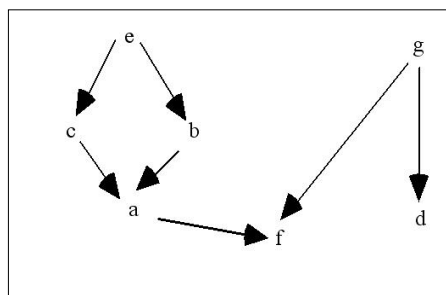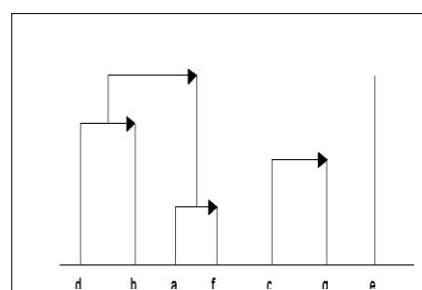

Figure 1

Figure 2

Similarity: a symmetrical analysis, according to the algorithm proposed by I.C. Lerman (Lerman, 1978), is a link that brings practically all items together in a large class, whatever their a priori taxonomic classification may be (Gras & Bodin, 2017). The Similarity indices are used in data analysis to study objects described by binary variables (Anastasiadou, 2019). According to Blanchard (2009), they allow one to assess the likeness between two objects and two variables.

SIA is used for data analysis. Specifically Similarity tree (widely known as dendrogram) (Lerman, 1981) and Implicative graph ranked by CHIC Software (Couturier, 2008).

Results

From the following table, Table 1: Statistics Item (Table 1), we observe that the respondents highly appreciate that the Greek school embraces the principles of intercultural education (cultural acquaintance, mutual respect, empathy, parity) in relation to parameters such as ensuring the right to study for all children of compulsory school education (E19.2) (M = 4.23, sd = 0.894) as well as the provision of study conditions for all children of compulsory school education (E19.3) (M = 3.62, sd = 0.968).

Also, the respondents estimate that to a moderate degree the Greek school embraces the principles of intercultural education (acquaintance of cultures, mutual respect, empathy, parity) in relation to parameters such as the general goal and the specific goal of our educational system (E19.1) (M = 3.15, sd = 0.772), the fight against student dropout and the provision of compensatory measures (E19.4) (M = 3.27, sd = 0.713), the content of the curricula (E19.5) (M = 3.12, sd = 0.579), the textbooks and the educational material (E19.6) (M = 3.08, sd = 0.618), teachers' intercultural readiness (E19.7) (M = 2.85, sd = 0.535), teaching methodology (E19.8) (M = 2.85, sd = 0.664), pedagogical practices (E19.9) (M = 2.92, sd = 0.733), the school climate (E19.10) (M = 3.42, sd = 0.796), the organization of school life (E19.11) (M = 3.19, sd = 0.738), the connection of the school with the local community (E19.12) (M = 2.85, sd = 0.821),offering opportunities for cognitive, social and psycho-emotional development at all levels of students (E19.13) (M = 3.31, sd = 0.669).

Table 1: Statistics Item

ItemE19: Greek school embraces the principles of intercultural education (acquaintance of cultures, mutual respect, empathy, parity) in relation to parameters such as:	Mean	Std. Deviation	N
E19.1: The general goal and the specific goal of our educational system	3.15	.772	130
E19.2: The right to study for all children of compulsory school education	4.23	.894	130
E19.3: The provision of study conditions for all children of compulsory school education	3.62	.968	130
E19.4: The fight against student dropout and the provision of compensatory measures	3.27	.713	130
E19.5: The curricula' content	3.12	.579	130
E19.6: The textbooks and the educational material	3.08	.618	130
E19.7: Teachers' intercultural readiness	2.85	.535	130
E19.8: Teaching methodology	2,85	.664	130
E19.9: Pedagogical practices	2.92	.733	130
E19.10: School' climate	3.42	.796	130
E19.11: School life' organization	3.19	.738	130
E19.12: The connection of the school with the local community	2.85	.821	130
E19.13: opportunities' offering for cognitive, social and psycho-emotional development at all levels of students	3.31	.669	130

The similarity diagram: In the similarity diagram are presented groupings of statements based on teachers' behavior during completing the questionnaire. The similarities with bright black are significant at a significance level of 99%. In the similarity diagram (Figure 3) three distinct similarity groups are presented (Group A, Group B, Group C). The first group (Group A) of similarity refers to similarities between in the variables/ items (((E19.1 E19.3) E19.2) (E19.4 E19.7)) (similarity: 0,103133).

In particular the similarity (E19.1 E19.3) (similarity: 0,702976), which is important, demonstrates the similar tactics of respondents who estimate whether the Greek school embraces the intercultural education' principles (acquaintance cultures, mutual respect, empathy, parity) in relation to parameters such as the general goal setting and the specific goal setting of our educational systemic and ensuring the conditions of attendance for all children regarding compulsory school education. This group (E19.1 E19.3) (similarity: 0,702976), is joined by a third variable/ item E19.2, and according to which respondents rate on to a large extent that the Greek school embraces the principles of intercultural education (acquaintance cultures, mutual respect, empathy,

parity) in relation to parameters such as securing the right to education for all children of compulsory school education.

In group A, the relatively strong similarity is also found (E19.4 E19.7) (similarity: 0.607164) the similar tactics of the respondents who appreciate the combating student dropout and offering compensatory measures and teachers' intercultural readiness.

The strongest similarity in the second group, Group B, is between the variables (E19.5 E19.6) (similarity: 0.638352) according to which the Greek school embraces the principles of intercultural education (getting to know cultures, mutual respect, empathy, parity) in relation to content parameters of curricula and textbooks and educational materials. The second similarity in the second group, Group B, is among the variables (E19.10 E19.11) (similarity: 0.646187) according to which the Greek school embraces the principles of intercultural education (getting to know cultures, mutual respect, empathy, parity) in relation to parameters its climate school and organization of school life.

The second similarity group (Group B) ((E19.5 E19.6) (E19.10 E19.11)) (similarity: 0.146049) shows very little similarity. This means that the parameters curriculum content and textbooks and the teacher material is differentiated by parameters school climate and its organization related to school life.

The third and last similarity group, Group C, in similarity relations between in the variables/items ((E19.8 E19.9) (E19.12 E19.13)) (similarity: 0.256038). The most powerful similarity in the third group, Group C, is among the variables (E19.8 E19.9) (similarity: 0.713603) and is important. The similarity (E19.8 E19.9) (similarity: 0.713603), which indicates the views of the respondents according to which the Greek school embraces the principles of intercultural education (acquaintance of cultures, mutual respect, empathy, parity) in relation to parameters teaching methodology and pedagogical practices.

This group does not is only the strongest in Group C but stronger than any other relationship similarity within the similarity diagram. The similarity (E19.12 E19.13) (similarity: 0.669008) indicates the views of respondents according to which the Greek school embraces the principles of intercultural education (acquaintance cultures, mutual respect, empathy, parity) in relation to parameters connecting the school with the local community and offering cognitive opportunities, social and psycho-emotional development at all levels they attend.

The similarity of the third group, Group C, ((E19.8 E19.9) (E19.12 E19.13)) (similarity: 0.256038) is marginally significant and indicates the connection, albeit marginally, of the four parameters named teaching methodology, pedagogical practices, connection of the school with the local community and offer opportunities for cognitive, social and psycho-emotional development at all levels they attend which the Greek school embraces intercultural education' principles (acquaintance cultures, mutual respect, empathy, parity).

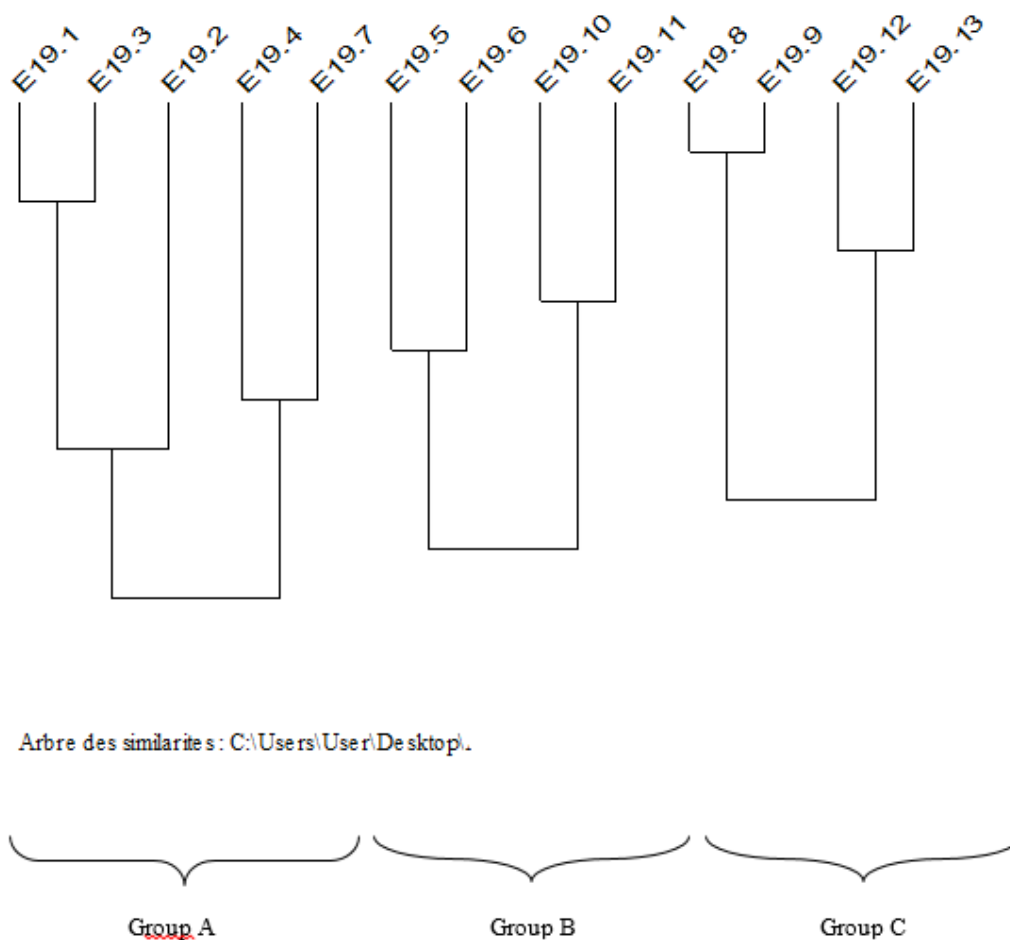
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Figure 3: Similarity graph

The hierarchical diagram: The hierarchical diagram (Figure 4) shows the inferential relationships between variables/items in order of importance. In addition in the hierarchical diagram we can see the direction of these relationships. Regarding the first hierarchy it refers to the items (E19.3 E19.2) (cohesion: 0.909) with very high coherence, where the belief that the Greek school embraces the principles of intercultural education (getting to know cultures, mutual respect, empathy, parity) in relation to parameters such as ensuring the conditions of attendance for all children of

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compulsory school education implies the belief that it applies to others parameters such as ensuring the right to education for all her children compulsory school education. The hierarchy is not only stronger in the team A but also in the whole hierarchical diagram. This hierarchy group is completed by the third variable E19.1 and creates the hierarchy (E19.1 (E19.3 E19.2)) (cohesion: 0.777), and essentially leads the hierarchy. Thus, the respondents who appreciate that the Greek school embraces its principles intercultural education (acquaintance of cultures, mutual respect, empathy, exchange rate) in relation to parameters such as general targeting and more specific targeting of our educational system appreciate that it is the provision of study conditions for all children of compulsory school education and consequently ensuring the right to education for all children regarding compulsory school education.

The hierarchy of the first group (E19.4 (E19.1 (E19.3 E19.2))) (cohesion: 0.625) which is important has the variable E19.4 which refers to combating student dropout and offering compensatory measures.

Consequently, when the respondents estimate that the Greek school embraces the principles of intercultural education (acquaintance of cultures, mutual respect, empathy, parity) in relation to combating student dropout and offer compensatory measures they estimate it does for perimeters as well of the hierarchy (E19.1 (E19.3 E19.2)) (cohesion: 0.777), ie the most general targeting and the more specific targeting of our educational system , the ensuring the conditions of attendance for all children of compulsory school education and in addition to securing the right to study for all children related to compulsory school education.

All the second hierarchical group ((((E19.7 ((E19.8 E19.9) E19.10)) E19.11) (E19.12 E19.13)) (E19.6 E19.5)) (cohesion: 0.376) has moderate consistency. The hierarchy (E19.8 E19.9) (cohesion: 0.768) which shows significant consistency indicates belief that the Greek school embraces the principles of interculturalism education (acquaintance of cultures, mutual respect, empathy, parity) in relation to parameters such as the teaching methodology which implies the pedagogical practices.

The hierarchy ((E19.8 E19.9) E19.10) (cohesion: 0.761), which is important demonstrates that the acceptance of the teaching methodology as a parameter consequently accepts the pedagogical practices and then accepts the school' climate.

In the hierarchy (E19.7 ((E19.8 E19.9) E19.10)) (cohesion: 0.686) the parameter Intercultural readiness of teachers leads the hierarchy. Therefore it becomes apparent that when respondents consider that the Greek school embraces the principles of

intercultural education in relation to the parameter intercultural readiness of teachers then the embraced on the basis of parameter teaching methodology, pedagogical practices and school climate. The coherence ((E19.7 ((E19.8 E19.9) E19.10)) E19.11) (cohesion: 0.613) which is important and whose driver is a parameter intercultural readiness of teachers, ie the variable E19.7 shows that the hierarchy (E19.7 (E19.8 E19.9) E19.10)) (cohesion: 0,686) leads to the belief that the Greek school embraces the principles of intercultural education in relation to the parameter named organization of school life.

The hierarchy (E19.12 E19.13) (cohesion: 0,768) brings to the surface the finding that when respondents believe that the Greek school embraces its principles intercultural education in relation to the parameter intercultural readiness of teachers then the embraced based on the parameter its connection school with the local community then the embraced based on the parameter offering opportunities for cognitive, social and psycho-emotional development in all levels they attend.

The hierarchy (E19.6 E19.5) (cohesion: 0,599), which is important, brings insurface finding that when respondents that the green school embraces the principles of intercultural education in relation to the parameter intercultural readiness of teachers then the embraced on the basis of parameter content of the study programs then the embraced on the basis of the parameter school textbooks and educational materials.
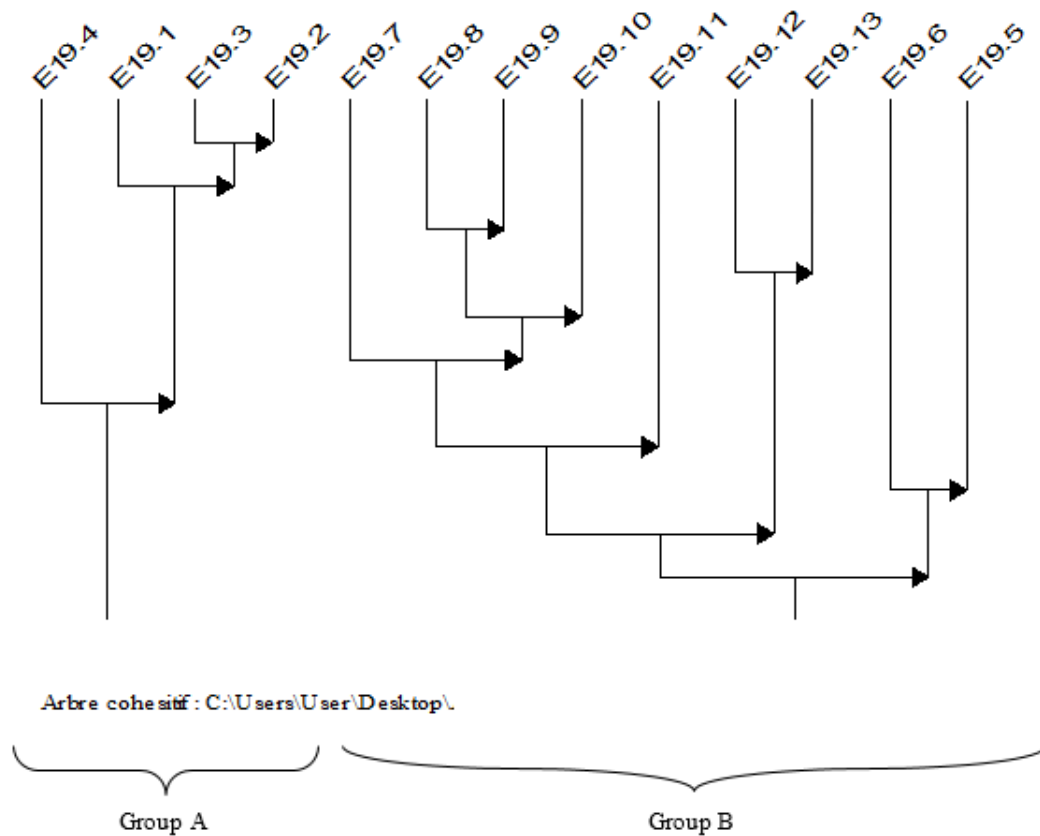
Figure 4: Hierarchical diagram

The hierarchy (E19.6 E19.5) (cohesion: 0,599), which is important, brings in surface finding that when respondents that the greek school embraces the principles of intercultural education in relation to the parameter intercultural readiness of teachers then the embraced on the basis of parameter content of the study programs then the embraced on the basis of the parameter school textbooks and educational materials. The hierarchy (((E19.7 ((E19.8 E19.9) E19.10)) E19.11) (E19.12 E19.13)) (cohesion: 0.474) is moderately significant indicates that the variable E19.7 guiding the hierarchy ((E19.7 ((E19.8 E19.9) E19.10)) E19.11) (cohesion: 0.613) guides the hierarchy (E19.12 E19.13) (cohesion: 0.768). In addition, the hierarchy ((((E19.7 ((E19.8 E19.9) E19.10)) E19.11) (E19.12 E19.13)) (E19.6 E19.5)) (cohesion: 0.376) is moderately significant indicates that the variable E19.7 that guides the hierarchy (((E19.7 ((E19.8 E19.9) E19.10)) E19.11) (E19.12 E19.13)) (cohesion: 0.474) guides the hierarchy (E19.6 E19.5) (cohesion: 0,599).
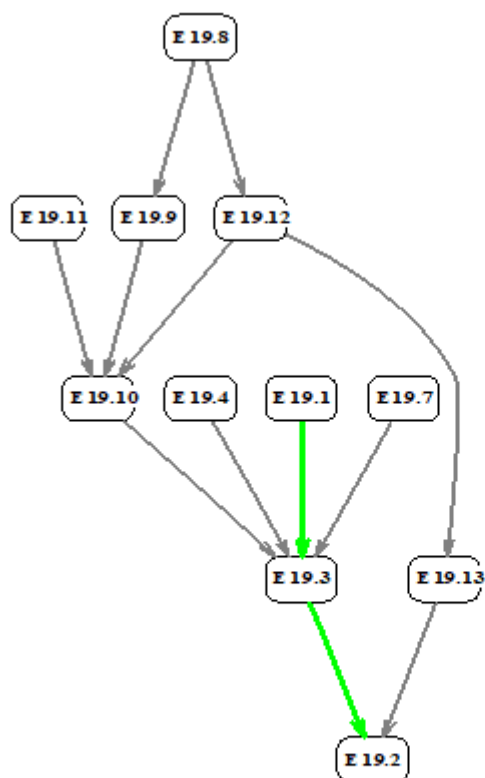
Implicative Graph

The implicative graph shows the implicative relationships between the variables (Figure 5). The inductive diagram shows a single chain, E19.8->E19.9,E19.12, E19.11,E19.9,E19.12->E19.10, E19.12->E19.13->E19.2, E19.10,E19.4,E19.1,E19.7->E19.3->E19.2. In the part of the chain E19.8-> E19.9, E19.12 it becomes obvious that when respondents believe that the Greek school embraces its principles intercultural education in relation to the teaching methodology implies the belief that he embraces it in relation to pedagogical practices and connection of the school with the local community.

In the part of the chain E19.11, E19.9, E19.12-> E19.10 emerges on the surface finding that when respondents believe that the Greek school is embraced the principles of intercultural education in relation to the organization of school life, in relation to pedagogical practices and the connection of the school with the local one society implies the belief that it embraces it in relation to its climate school.

The part of the implicative chain E19.12-> E19.13-> E19.2 shows that when respondents believe that the Greek school embraces its principles intercultural education in relation by connecting the school to the local society implies the belief that he embraces her in relation to the offer opportunities for cognitive, social and psycho-emotional development in all attending levels, which then implies the belief that is embraced in relation to securing the right to study for all children of compulsory school education.

The part of the inductive chain E19.10,E19.4,E19.1,E19.7->E19.3->E19.2 demonstrates that when respondents believe that the Greek school is embraced the principles of intercultural education in relation the school climate, with combating student dropout and offering compensatory measures, with the general goal setting and the specific goal setting of our teacher systemic and with the intercultural readiness of teachers imply the belief that it embraces it in relation to securing the conditions for all children in compulsory schooling, which in continuity implies the belief that he embraces it in relation to security the right to education for all children in compulsory schooling.

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Figure 5: Implicative Graph

The implicative chain we begin the belief that the Greek school embraces the principles of intercultural education in relation to didactics methodology and ends with conviction that the Greek school is embraced the principles of intercultural education (acquaintance of cultures, mutual respect, empathy, parity) in relation to parameters such as securing it the right to study for all children of compulsory schooling.

The reliability of the instrument was related to items E19.1 to E19.13 was estimated by Cronbach alpha coefficient (a). The value of Cronbach's α coefficient for this instrument was equal to 0.857 and it is a very high value in terms of internal consistency (Anastasiadou, 2007; Anastasiadou, 2008; Anastasiadou, 2009; Anastasiadou et al., 2010b; Anastasiadou, 2011; Anastasiadou, 2012; Anastasiadou, 2013a, Anastasiadou, 2013b; Anastasiadou, 2013c; Anastasiadou, 2018b; Anastasiadou, 2018c; Anastasiadou, 2018d; Anastasiadou, 2018e; Anastasiadou, 2019a; Anastasiadou 209b; Anastasiadou & Anastasiadis, 2011; Anastasiadou & Anastasiadis, 2019; Anastasiadou et al., 2016; Anastasiadou & Karakos, 2011; Anastasiadou & Kofou, 2013;

Anastasiadou & Pappa, 2009; Anastasiadou & Pappa, 2019; Anastasiadou & Loukas, 2009; Anastasiadou & Taraza, 2019; Anastasiadou & Taraza, 2020a; Anastasiadou & Taraza, 2020b; Anastasiadou et al., 2014; Florou, et al., 2015; Kofou, & Anastasiadou, 2013; Souravlas & Anastasiadou, 2020; Thapa et al., 2016; Theodoridou, et al., 2014).

Conclusions

Principles of intercultural education such as acquaintance with cultures, mutual respect, empathy, parity, equity, justice, recognition of diversity, social cohesion, absence of discrimination and intolerance, fanaticism and bigotry, ethnocentrism as discrimination, xenophobia, racism as well as stereotypes and prejudices are of a major importance. Thus, the scope of the present study is to determine the degree to which Greek secondary school teachers view the Greek school as embodied in the principles of intercultural education such as acquaintance with cultures, mutual respect, empathy, parity among others such as the right and conditions of study, the fight against leakage, the curriculum, pedagogical practices, the school climate and its connection to the local community and offer opportunities cognitive, social and psycho-emotional development of students.

Concerning the most key results is the finding that when respondents consider that the Greek school embraces the principles of intercultural education in relation to teaching methodology, it implies a belief that it embraces it in relation to pedagogical practices and the school's connection to local society. Additionally, the belief that the Greek school embraces the principles of intercultural education in relation to the school's connection with the local community suggests the belief that the Greek school offers the opportunity for cognitive, social and psycho-emotional development at all levels of study.

References

Anastasiadou S., (2007). It's the men's world: Greek males' students believe that the women's position must be home with the kids. *The International Journal of Interdisciplinary Social Sciences*, Volume 2, Issue 5, pp.123-132.

Anastasiadou S. (2008**).** Exploring Intrinsic and Extrinsic Motivation during a PhD completion with the aid of Principal Components Analysis. *The International Journal of Interdisciplinary Social Sciences,* Volume 3, Issue 2, pp. 171-178.

Anastasiadou S. (2009). The effects different modes of representations in statistical problems solving: A study with third grade primary school pupils. *The International Journal of Learning,* Volume 16, Issue 4, pp.27-36.

Anastasiadou, S. (2011). Reliability and validity testing of a new scale for monitoring attitudes toward learning statistics with technology. *Acta Didactica Napocencia*, vol. 4 number 1, pp. 1-10. http://adn.teaching.ro/.

Anastasiadou S. (2012). Diversifications between expected and perceived attitudes toward learning statistics with technology. *The International Journal of Learning,* vol 18, Issue 3, pp.161-176.

Anastasiadou S., (2013a). Evaluating a Structural Equation Model Measuring Attitudes toward Reading Books and E-books. *The International Journal of the Book,* vol 10, pp.1-10.

Anastasiadou S. (2013b). Evaluating a structural equation model measuring lifelong learning and continuing education factors. *The International Journal of Knowledge, Culture and Change Management.* Volume 12, Issue 3, pp.21-34.

Anastasiadou S., (2013c). Developing and Evaluating a Structural Equation Model Measuring Leadership Changes in a Lifelong Learning World. *The International Journal of Educational Organization and Leadership*, Volume 19, Issue 2, pp.1-17.

Anastasiadou, S. (2018a). *Comparison of multivariate methods in group/cluster identification.* Dissertation thesis of the degree of MSc. in Research Methodology in Biomedicine, Biostatistics and Clinical Bioinformatics, Faculty of Medicine, University of Thessaly.

Anastasiadou, S. (2018b). *Gap analysis between perceived and expected of service quality in Greek Tertiary Education.* Proceedings of EDULEARN18: 10th annual International Conference on Education and New Learning Technologies, Palma de Mallorca, Spain, pp. 8373-8382. doi:10.21125/edulearn.2018.1951.

Anastasiadou, S. (2018c). Evaluating Perception, Expectation of Students/Pre-service Teachers and Service Quality Gap in Greek Tertiary Education. *KnE Social Sciences*. The Economies of the Balkan and the Eastern European Countries in the changing World (EBEEC 2018), p0. 294–308.

Anastasiadou, S. (2018d). *Leadership according to EFQM Model in Tertiary education: The case of Greek Universities.* Proceedings of 10th International Conference The Economies of the Balkan and the Eastern European Countries in the changing world, EBEEC 2018, Warsaw, Poland, pp. 20-24.

Anastasiadou, S. (2018d). *Total quality management in Greek Tertiary Educational System. The case of Greek Universities.* Proceedings of 10th International Conference EBEEC 2018 - The Economies of the Balkan and the Eastern European Countries in the changing world, Warsaw, Poland, pp. 59-64.

Anastasiadou, S. (2019a). *Comparison of contemporary advanced statistical methods regarding construct validity evaluation of TEIque-SF instrument: Statistical Implicative Analysis vs. Principal Components Analysis.* 9ème Colloque International sur Analyse Statistique Implicative (ASI 10). Belfort – France. pp. 148-163.

Anastasiadou, S. (2019b). *Representations in statistics problem solving.* ICERI2019, the 12th annual International Conference of Education, Research and Innovation, Seville (Spain), ICERI2019, pp. 8993- 8996.

Anastasiadou S. & Anastasiadis, L. (2011). Reliability and validity testing of a new scale for monitoring attitudes toward electronics and electrical constructions subject. *International Journal of Applied Science and Technology (IJAST)*, Vol 1, No 1, pp. 1-10.

Anastasiadou S. & Anastasiadis L. (2019). *Quality Assurance in Education in the Light of the Effectiveness of Transformational School Leadershi*p. In: Sykianakis N., Polychronidou P., Karasavvoglou A. (eds) Economic and Financial Challenges for Eastern Europe. Springer Proceedings in Business and Economics. Springer, Cham, pp. 323-344. https://doi.org/10.1007/978-3-030-12169-3_21.

Anastasiadou, S., Anastasiadis, L, Vandikas, J. & Angeletos, T. (2010a). Implicative statistical analysis and Principal Components Analysis in recording students' attitudes toward electronics and electrical constructions subject. *The International Journal of Technology, Knowledge and Society*, Volume 16, Issue 5, pp. 341-356.

Anastasiadou, S. Anastasiadis, L, Angeletos, T. & Vandikas J. (2010b). A Multidimensional Statistical Analysis of Students' Attitudes toward Physics *International Journal of Diversity in Organisation*s, Communities and Nations Volume 16, Issue 5, pp. 341-356.

Anastasiadou S., Anastasiadis L. Kalabouka K. Florou G. (2014). Ethnocentrism, patriotism and animosity impact on freedom of competition and business activity. *Wseas Transactions on Business and Economics,* Vol 11, pp. 692-699**.**

Anastasiadou, S., Eliα, I. & Gagatsis, A. (2007). *Le rôle des représentations dans l´apprentissage des concepts de statistique des étudiants de l´école primaire de Grèce.* In Regis Gras, Pilar Orus, Bruno Pinaud, Pablo Gregori Eds, 4nd International Conference Implicative Statistic Analysis, Castellon, Spain, pp. 135-144.

Anastasiadou, S., Elia I. & Monoyiou, A. (2008). The effects of representations on the learning and understanding of statistics in Greek primary school. *Mediterranean Journal for Research in Mathematics Education,* Vol. 7, 1, pp. 67-80.

Anastasiadou, S. & Giossi, S. (2018). Implicative Statistical Analysis vs. Confirmatory Factor Analysis in evaluation of Lifelong Learning Impact on Human Resources Development. *Proceedings of CERI2018*: *12th annual International Conference on Education and New Learning Technologies*, Seville (Spain) pp. 6413-6413.

Anastasiadou, S. & Gagatsis, A. (2017). *Students' representations of linear motion.* Proceedings of 9ème Colloque International sur Analyse Statistique Implicative. 9th International Meeting Statistical Implicative Analysis. Belfort – France, pp. 479-494.

Anastasiadou, S. & Karakos, A. (2011). The beliefs of electrical and computer engineering students´ regarding computer programming. *The International Journal of Technology, Knowledge and Society*, Vol 7. Issue 1, pp.37-52.

Anastasiadou, S. & Kofou. I. (2013a). The Development of a Structure Equation Model, for Goal Achievement and Preparation for a Future Education Leader. *The International Journal of Educational Organization and Leadership* 19 (2), 41-55.

Anastasiadou, S. & Kofou, I. (2013b). *Incorporating Web 2.0 Tools into Greek Schools. International Journal of Technologies in Learning, Volume 20, Issue 1, pp.11-23.*

Anastasiadou, S. & Loukas, D. (2009). Greek pre-service teachers' cognitive abilities in understanding the concept of frequency: A multilevel statistical analysis. *The International Journal of Learning* Volume 16, Issue 5, pp.189-202.

Anastasiadou, S. & Panitsides, E. (2014). And now whither..? European Union lifelong learning policy: a two level analysis Proceedings of EBEEC 2014. The 6th International

Conference Economies of Balkan and Eastern Europe Countries in the changed world EBEEC 2014, Nis, Serbia, pp. 42-51.

Anastasiadou S. & Pappa A. (2009). Structural Equation Modelling in the Construction of Structural Model of Educational Research. *The International Journal of Interdisciplinary Social Sciences,* Vol 4, Issue 5, pp.151-158.

Anastasiadou, S. & Pappa. A. (2019). *Greek pre-service teachers' perceptions, emotions and attitudes toward representations of physic concepts.* ICERI2019, the 12th annual International Conference of Education, Research and Innovation, Seville (Spain), ICERI2019, pp. 8987-8992.

Anastasiadou, S. & Papadaki, Z. (2019). Consumers' perceptions toward E-Service Quality, Perceived Value, Purchase and Loyalty Intentions. *International Journal of Entrepreneurship and Innovative Competitiveness – IJEIC,* Vol 1, Issue 1, https://hephaestus.nup.ac.cy/bitstream/handle/11728/11391/paper1.pdf?sequence=1&isAllowed=y.

Anastasiadou, S.D, Fotiadou, X.G. & Anastasiadis, L. (2016). Estimation of Vocational Training School (IEK) students' contentment in relation to quality of their studies. *New Trends and Issues Proceedings on Humanities & Social Science*s, [On line].10, pp 09-18. Available from: www.prosoc.

Anastasiadou S., Taraza, E. (2019). *Total quality management: implementation of the six sigma methodology for improving quality in higher education*, ICERI2019, the 12th annual International Conference of Education, Research and Innovation, Seville (Spain), ICERI2019, pp. 9533-9537.

Anastasiadou, S. & Taraza, E. (2020a). *Resistance to Change as an Obstacle Regarding Quality in Higher Education Institutions (HEIS).* Proceedings of of 14th annual International Technology, Education and Development Conference (INTED2020), Valencia, Spain, pp. 396-401.

Anastasiadou, S. & Taraza, E. (2020b). *Six Sigma in Tertiary Education: A Win of Change regarding Quality Improvement in Education,* Proceedings of of 14th annual International Technology, Education and Development Conference (INTED2020), Valencia, Spain, pp. 9595-9601.

Anastasiadou S., Tiliakou C. (2014). Classical Item Analysis of the Greek State of English Language Proficiency "A" Level Exam. *The International Journal of Literacies*, Volume 20, Issue 3, pp.39-53.

Arthur, J. & Martin, P. (2006). Accomplishing lessons in postcolonial classrooms: comparative perspectives from Botswana and Brunei Darussalam. *Comparative Education,* 42(2), 177-202.

Baker, C. (2011). *Foundations of bilingual education and bilingualism* (5th ed.). Clevedon, England: Multilingual Matters.

Batelaan, P. (1983). *Intercultural Education.* In Commission for Racial Equality (ed) The Practice of Intercultural Education (pp. 13-18). London: Commission for Racial Equality.

Blanchard, J., Guillet, F. & Kuntz, P. (2009). *Semantics-based classification of rule interestingness measures*. Yanchang Zhao, Chengqi Zhang, Longbing Cao. Post-Mining of Association Rules: Techniques for Effective Knowledge Extraction, IGI Global, pp.56-79, 2009. <hal-00420971>.

Blackledge, A. & Creese, A. (2009). *Multilingualism: A critical perspective*. London, England: Continuum.

Brock-Utne, B. (2017). *Multilingualism in Africa, marginalisation and empowerment.* In Coleman, H. (ed.) Multilingualism and Development. London: British Council, pp. 64-80.

Bedeković, V. (2017). Intercultural education in the function of the European values promotion *Informatol,* 50, 1-2, 74-86

Coleman, H. (2015). *Language and social cohesion: An introduction and lessons learnt*. In Coleman, H. (ed.) Language and social cohesion in the developing world. London: British Council, pp. 1-14.

Couturier, R. (2008). CHIC: *Cohensive Hierarchical Implicative Classification.* Studies in Computational Intelligence (SCI), pp.41-53. Springer-Verlag Berlin Heidelberg.

Couturier, R. & Pazmiño, R. (2015). *Statistical implicative analysis for educational data sets: 2 analysis with RCHI*, XVIII Congreso Internacional EDUTEC "Educación y Tecnología desde una visión Transformadora", pp. 1-11

Creese, A. & Blackledge, A. J. (2010). Translanguaging in the bilingual classroom: a pedagogy for learning and teaching. *The Modern Language Journal*, 49(1), 103-115.

Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon, UK: Multilingual Matters.

Christodoulou, T., Gagatsis, A. & Anastasiadou, S. (2017). *Enquête internationale comparative: croyances et attitudes des élèves du secondaire inférieur relatives aux erreurs en mathématiques*. Proceedings of 9ème Colloque International sur Analyse Statistique Implicative, Belfort – France, pp. 404-418.

Dasli, M. (2018). UNESCO guidelines on intercultural education: a deconstructive reading. *Pedagogy, Culture & Society,* https://doi.org/10.1080/14681366.2018.1451913.

Florou, G., Anastasiadou, S., Karasavvoglou, A., S, Valsamidis, S, Mandilas A. (2015). Greek Public Tertiary Education Departments in Agriculture. *Proceedings of the 7th International Conference on Information and Communication Technologies in Agriculture, Food and Environment (HAICTA),* Kavala, Greece, pp. 471-479.

Fotiadis, Th. & Anastasiadou S. (2019). Contemporary advanced statistical methods for the science of marketing: Implicative Statistical Analysis vs Principal Components Analysis. *International Journal of Entrepreneurship and Innovative Competitiveness – IJEIC* Vol 1, Issue 1, https://hephaestus.nup.ac.cy/bitstream/handle/11728/11393/Paper3.pdf?sequence=1&isAllowed=y.

Frangoudaki, A. And Dragonas, T. (2000). *Intercultural Education in the European Union from a 'Southern' Viewpoint.* In J. Gundura and S. Jacobs (eds) Intercultural Europe: Diversity and Social Policy, pp.167-187. Brookfield: Ashgate Publishing Ltd.

Georgogiannis, P. (1999) *Immigrant Children's and Minority Populations; Educational Models*. In P. Georgogiannis (ed) Issues of Intercultural Education (pp. 45-56). Athens: Gutenberg.

Gundara, J. S., Portera, A. (2008). Theoretical reflections on intercultural education. *Intercultural Education* 19 (6) pp. 463-468.

Gras, R., P. Peter, H. Briand, & J. Philippé. *(1997). Implicative Statistical Analysis*. In C. Hayashi, N. Ohsumi, N. Yajima, Y. Tanaka, H. Bock, Y. Baba (Eds.). Proceedings

of the 5th Conference of the International Federation of Classication Societies, Volume 2, pp.412-419. Tokyo, Berlin, Heidelberg, New York : Springer-Verlag.

Gras, R. & Bodin, A. (2017). L'A.S.I., *Analyseur et révélateur de la complexité cognitive taxonomique.* 9ème Colloque International sur Analyse Statistique Implicative, Belfort – France, In Jean-Claude Régnier, Régis Gras, Raphaël Coutourier, Antoine Bodin (edus) pp. 128-142.

Gras, R. (1996). *The statistical implication-A new method for data esploration* (in french). La Pensse Sauvage, editor.

Gras, R. & Kuntz, P. (2008). *An overview of the Statitical Implicative Analysis (ASI) developmen*t, In Gras, R., Suzuki, E., Guillet,F and Spanolo, F. (2008). Statistical Analysis: Theory and Applications, Studies in Computational Intelligence Volumr No. 127, Berlin & Heidelberg: Springer- Verlag.

Gras, R. (1979). *Contribution étude expérimental et l'analyse de certaines acquisitions cognitives et de certains objectifs en didactique des mathématiques*, Thèse de doctorat, l'Université de Rennes 1.

Gras, R. & Couturier, R. (2013). Spécificités de l'Analyse Statistique Implicative par rapport à d'autres mesures de qualité de règles d'association. *Educação Matemática Pesquisa, 15*(2).

Gras, R., Couturier, R., Blanchard, J., Briand, H., Kuntz, P. & Peter, P. (2004). Quelques critères pour une mesure de qualité de règles d'association. *Revue des nouvelles technologies de l'information RNTI E-1,* 3-30

Gras, R., Regnier, J. C. & Guillet, F., (2009). *Analyse statistique implicative: Une* méthode d'analyse de données pour la recherche de causalités (p. 510). Cépaduès Editions.

Gras, R., Régnier, J. C., Marinica, C. & Guillet, F., (2013). L'analyse statistique implicative Méthode exploratoire et confirmatoire à la recherche de causalités (p. 522). Cépaduès Editions

Gras R., Suzuki E., Guillet F. and Spagnolo F. (Eds) (2008). *Statistical Implicative Analysis.* Springer-Verlag, Berlin-Heidelberg.

Herlo, D. (2015). *E-learning in intercultural learning.* International scientific Conference on eLearning and Software for Education, pp. 459-466 DOI: 10.12753/2066-026X-20-160.

Karamitrou, A. (2019a). *Educational policy and innovation of Greek secondary intercultural education: study of the Greek language teaching programs in the context of intercultural education programs.* Proceedings of ICERI2019 Conference, 2019, Seville, Spain, pp. 11102-11107.

Karamitrou, A. (2019b). *Organization and management of education, educational policy and evaluation of the institution of Greek secondary intercultural education.* Proceedings of ICERI2019 Conference, 2019, Seville, Spain, pp. 11044-11052.

Lerman, I. C. (1981). Classification et Analyse Ordinale des Données, Dunod, Paris.

Kofou, I., Anastasiadou S. (2013). Language and Communication Needs Analysis in Intercultural Education. *The International Journal of Diversity in Education.* Vol 12, pp.15-64.

Lerman, I. C. (1978). *Formes d' aptitude et taxinomie d' objectifs en mathematiques.* In: Revue française de pédagogie, Vol. 44, pp. 5-53.

Markou, G. (1997). *Intercultural Education — Teachers' Training: an Alternative Suggestion.* Athens: Center of Intercultural Education of University of Athens.

Masouras, A. (2019). Young entrepreneurship in Cyprus. Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie, 42(2), 27-42.

McGee Banks, C. A. (2004). *Intercultural and Intergroup Education, 1929-1959: Schools and Communities.* In J. A. Banks and C. A. McGee Banks (eds) Handbook of Research on Multicultural Education, 2" edn. pp. 753-769. San Francisco: JosseyBass.

Mokias, A.J. (2019). Comparative approach of educational policy of Greece to intercultural education with other European countries. *Journal of Contemporary Education, Theory & Research*, Vol, 3. No1, pp. 21-24.

Nikolaou, G. (2000). *Incorporation and Education of Foreign Pupils in Primary School. From "homogeneity" to multiculturalism.* Athens: Ellinika Grammata.

Nicolaou, S. Gagatsis, A., Deliyianni, E., Panaoura, A., Elia, I. & Anastasiadou, S. (2017). *Tracing the beliefs and self-efficacy beliefs of undergraduate economic sciences students: the case of the representations of functions*. Proceedings of 9ème

Colloque International sur Analyse Statistique Implicative. Belfort – France, pp. 461-478.

Ntotsi, P. & Anastasiadou, S. D. (2019). *Comparison of multivariate pattering methods in group/cluster identification regarding the science of educational research: Implicative Statistical Analysis vs. L' Analysee Factorielle des Correspondances*. New Trends and Issues Proceedings on Humanities and Social Sciences. [Online]. 6(1), pp 238–245. Available from from: www.prosoc.eu.

Panitsides, E., Anastasiadou S. (2015). Lifelong Learning Policy Agenda in the European Union: A bi-level analysis. *Open Review of Educational Research*, 2015 Vol. 2, No. 1, 128–142, http://dx.doi.org/10.1080/23265507.2015.1043936, Routledge.

Perera, S. (2015). *Reflections on issues of language in Sri Lanka: Power, exclusion and inclusion.* In Coleman, H. (ed.) Language and social cohesion in the developing world. London: British Council. Pp. 55-74.

Petridou, A., Elia, I, Gagatsis, A. & Anastasiadou, S. (2017). L'appréhension perceptive des figures géométrique. *Proceedings* of 9$^{\text{ème}}$ Colloque International sur Analyse Statistique Implicative. Belfort – France, pp. 231-247.

Pinnock, H. (2015). *Multilingual education: From 'why' to 'how'.* In Coleman, H. (ed.) Language and social cohesion in the developing world. London: British Council, pp. 36-43.

Sablić M. (2014). *Izazovi interkulturalizma u obrazovanju učitelja*. In: Hrvatić, N. (ed.) Interkulturalno obrazovanje i europske vrijednosti (pp. 94-107). Zagreb-Virovitica: Odsjek za pedagogiju Filozofskog fakulteta Sveučilišta u Zagrebu and Visoka škola za menadžment u turizmu i informatici u Virovitici.

Schwartz, M. & Abeer Asli, A. (2014). Bilingual teachers' language strategies: The case of an Arabic-Hebrew kindergarten in Israel, *Teaching and Teacher Education,* 38, pp. 22-32.

Souravlas, S., Anastasiadou, S. (2020). Pipelined Dynamic Scheduling of Big Data Streams. *Applied. Sciences.* 10, 4796.

Souravlas, S., Katsavounis, S. & Anastasiadou, S. (2020). On Modeling and Simulation of Resource Allocation Policies in Cloud Computing Using Colored Petri Nets. *Applied Sciences*. 020, 10(16), 5644; https://doi.org/10.3390/app10165644.

Thapa, K.B. Okalidou, A., Anastasiadou S. (2016). Teachers' screening estimations of speech–language impairments screening estimations of speech–language. *International Journal of Language & Communication Disorders.* Vol. 51, No. 3, 310–327.

Theodoridou, E., Alevriadou, A., Semoglou, A. Anastasiadou, S. (2014). Investigating Memory Strategies and Motor Memory in Dyslexic and Non-dyslexic Children, *International Journal of Learner Diversity and Identities*, Volume 20, Issue 3, pp.25-44.

Zergiotis, A. (2006). Intercultural School and the Role of School Psychologist. http://www.pee.gr/enall/sin_napl.htm.

UNESCO (2006). http://www.ugr.es/~javera/pdf/DB2.pdf.