

Proposal of a physical education program with multicultural elements in the Secondary Education and evaluation of student satisfaction

Lampaki Olympia¹, Pavlidou Eva¹, Antoniou Panagiotis² & Kyridis Argyris¹

¹ School of Early Childhood Education, Aristotle University of Thessaloniki, Thessaloniki. Greece

² Department of Physical Education & Sports Science, Democritus University of Thrace, Komotini. Greece.

Correspondence: Lampaki Olympia, PhD Candidate, Physical Education Teacher.

Address: 2^A Aristeidou, 67100 Xanthi, **Tel.:** 0302451072496 – 6937353339, **E-mail:** 2006@windtools.gr

Abstract: The aim of this study was the implementation of a Physical Education (PE) program with mobility cooperative games and dances of the world, and the assessment of the satisfaction of the participants. Several of the extra activities and impromptu events, as connecting elements, were created by the children and the Physical Education teacher. 54 male and female students in the first year of a Senior High School (Geniko Lykeio) of Xanthi, indigenous and non-indigenous, Christians and Muslims took part in this project. The program was applied to the experimental group throughout the course of the first term in the teaching hours of the course (16), while an additional 6 two-hour sessions were used, taken from the course of the Research Project. Furthermore, a set of Internet applications were used for motivation and feedback to the participants, asynchronously, outside the school hours. These applications were integrated into a blog, which served as a repository of knowledge and communication platform. The questionnaire 'satisfaction with the course of PE' by Papaioannou, Milosis, Kosmidou & Tsigilis (2002) was used for assessing satisfaction levels, given at the end of the semester. The analysis of data showed that students in the experimental group exhibited high performance in each of the factors of the questionnaire as well as the total score, compared with the control group, which participated in the PE course following the course curriculum of the Ministry of Greek Education and Religious Affairs.

Key words: kinetic games, dance, cooperation, social skills

1. Introduction

The involvement and motivation of students in physical education classes in Lykeio (senior high school) appears to be reduced and sluggish (Digelidis, Papaioannou, Christodoulidis & Lapidis, 2003; Gard, Moodey & Enright, 2013). The interests and attitudes of teenagers aged 15-18 are changing and as a result they fail to attend organized PE lessons or exercise within or outside the school environment (Allison, Dwyer & Makin, 1999). Personal and environmental factors, diminished self-confidence, lack of interest in exercise and inadequate family support, inhibit the involvement of senior high school students in Physical Education activities or in extracurricular athletic activities promoting health (Anderssen & Wold, 1992; Garland, Fox & Williams, 2002; Kimm, Gynn, McMahon, Voorhees, Striegel-Moore & Daniels, 2006). Part of the responsibility for this phenomenon lies in the experiences that students have had during PE lessons at school so far. In addition, it has been several years now that the composition of the student population in Greek

schools has changed (Motti Stefanidi, Pavlopoulos, Obradović & Masten, 2008; Gropas & Triandafyllidou, 2011).

Student populations are characterized, now more than ever, by heterogeneity and multiculturalism (Banks, 1991; Butt & Pahnos, 1998). The starting point of the learning process is the environment, experience and interests of the student. Students are provided with the opportunity to reflect on their own values and attitudes, including their prejudices and stereotypes. Students with different cultural backgrounds are invited to initiate lifelong exercise, the primary purpose in the Secondary level of education. However, to achieve the above, a new philosophy and learning climate is required. In place of the older model, which rewards the gifted athletically and marginalizes the less talented, a course framework is proposed that leverages all attendees, regardless of sex, race, religion, level of fitness and economic situation. In particular, apart from the development of motor skills, which for years remained the sole pursuit of teachers, emphasis is given on emotional-social goals. This change is also reflected in official instructions but not as a curriculum (Ministry of Education, Lifelong Learning and Religious Affairs, 2012).

Although as a subject PE deals with physical movement, it has become apparent that it is a cognitive area where ICT can play an important role with the use of the computer and the appropriate educational software (Antoniou, Derri, Mouroutsos & Kioumourtzoglu, 2003). Interactive multimedia offer structured information quickly and in an attractive way. You don't need to learn a specific language in order to interact with the system. They appeal to all the senses, primarily vision and hearing, and interact with students through modern and flexible tools, synchronously or asynchronously. Electronic books, power point presentations, videos and blogs have proven useful educational tools (Hayes & Silberman, 2007). Blogs, apart from leading to better academic performance, also enhance self-efficiency in the use of PCs (Papastergiou, Antoniou, Gerodimos & 2011).

In China the PC is widely used in higher education, because it maximizes the amount of time the students spend on PE, approach knowledge constructively, receive feedback and develop collaborative learning structures. Efforts are being made to extend its application in high school (Pang, 2010). In the U.S., Australia and other countries around the world students take distance courses or supplementary courses to the "face-to-face" lesson in schools, via computer (NASPE, 2007).

In recent decades a growing number of PE teachers acknowledge the need for the integration of ICT in the course of PE, not only as a means of feedback of various techniques taught through videos or the level of physical activity and heart rate using pedometers (Tearle & Golder, 2008). Technology alters the way in which we teach Physical Education - from its first use in creating fitness reports to the future use of holograms as personal instructors. Technology, however, is not an end in itself. This is a process and a tool for the enhancement of student learning and teacher productivity. As teachers of Physical Education, we should have access to it, learn, and use it (Mohnsen, 2014).

Despite the technical problems relating to teachers' computer skills and the lack of various software applications for the specific field in Greece, it is possible to use websites with collaborative and interactive spirit, such as blogs and wiki's. Moreover, in recent years, digital games, apart from enhancing physical health, help develop academic and social skills (Staiano & Calvert, 2011).

2. Movement – Overcoming differences – Social Skills

Sports and PE are often regarded as areas of equal opportunity and racial harmony, which facilitates the creation of an intercultural environment in Physical Education courses (Parry, 1998). Sports are considered the most appropriate field for the development of social values and skills for dealing with otherness and the smooth integration of all participants coming from multicultural environments (Morela, Elbe, Hatzigeorgiadis, Kouli & Xavier, 2013).

The subject of PE, because of its predominant kinaesthetic nature, has the best chance to unite, to cultivate rapport and inspire respect for others through the universal language of movement. Mobility games and dancing, basic building blocks of the contents of PE, create themselves a framework for integration and uniformity for students from different cultural environments and can be used as tools of approach and acceptance of differences (Hellison, 1985; Vorwald, 2012). Towards the same result contribute role-play, improvisation and cross-curricular activities by means of movement (Pavlidou, Arvanitidou, Chatizegeorgiadou, 2012 &).

PE is slowly but steadily acquiring a new framework for expanded action. The aim is for the course to become open to society through a focus on matters which are purely social, such as violence, racism, and gender relations, various prejudices, positive relationship with our bodies, with others and the natural environment (YPEPTH, 2014). PE teachers are invited now to show in practice that the course is not just about learning sports skills and creating an aesthetically beautiful body. Physical movement ought to become part of a set of social virtues associated with the spirit, so that it does not operate mechanistically. The disproportionate emphasis which has been placed on the body can be replaced by values, attitudes and skills through movement and communication. Non-verbal communication is perhaps the most important contact and interaction code and the role of the body at this point is crucial (Dittmann, 1987).

3. Methodology

3.1 Purpose

The purpose of the work was a) the implementation of a new PE program with kinetic games and events whose frame will be created by children themselves, with the support of the PE teacher, and will be enriched with dances from around the world, b) encouraging and fostering interaction between students and their communication with the PE teacher and researcher via a blog and c) evaluation of the satisfaction of participants.

3.2 Research Hypothesis

The hypothesis was made that the proper management of such a program can increase the satisfaction of students in the course of PE. Action research was used for the examination of the hypothesis.

Action research is a more holistic approach to solving a problem rather than one individual method of gathering and analysing data. At the heart of this investigation method the active participation of children is studied and examined, that is whether they are willing to participate in actions, to take initiatives and responsibilities without the close guidance of the teacher. Understanding of students

is placed at the heart of the research path. For this reason it allows using various research tools permitting critical, thoughtful, systematic and organized exploration of student participation (Elliot, 1991; Hollingsworth, 1997). The tools used for this specific research were questionnaires, logs and group discussions.

3.3 Sample

The participants were students in the first year of Lykeio (senior high school), 54 in total ($n = 54$), boys and girls, who were divided into a control and an experimental group. The sex distribution per group is shown in table 1.

Table 1: Distribution of students in the research Groups (sex distribution per Group)

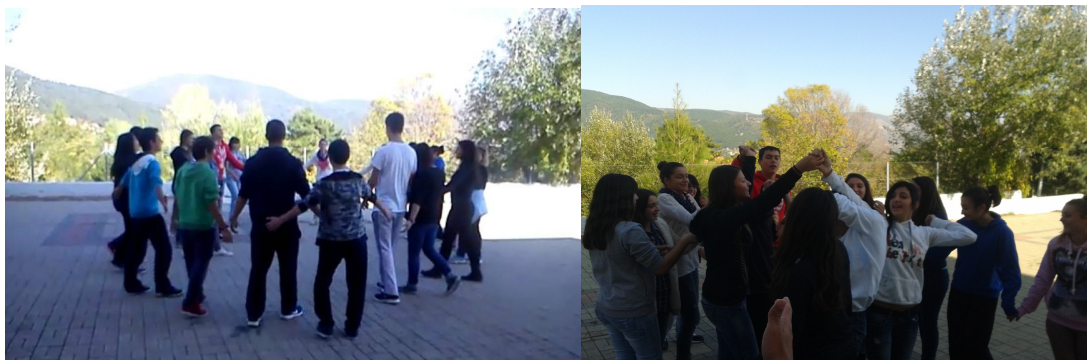
		Sex		
		Female	Male	Total
Group	Experimental	15	12	27
	Control	15	12	27
Total		30	24	54

31 out of the 54 participants were native (Greek citizenship) and 23 non-native. As far as religion is concerned, 33 were Christian and 21 Muslim (Table 2).

Table 2: Christians or Muslims * Native or Non-native

Count		Native or Non-native		Total
		Native	Non-native	
Christians	Christians	21	12	33
Muslims	Muslims	10	11	21
Total		31	23	54

Teamwork practices were implemented in the experimental group ($n=27$), which were the basis of the coursework from the beginning (Polvi & Telama, 2000). The participants worked either in groups of two to five members or all together ($n=27$) on collaboration games and dances of the world. Examples of activities include the Rain dance from Indian ceremonial functions, and the Gordian knot – a game of cooperation and trust from the Philippines, where the participants approach the center of a circle with their eyes closed, hold hands and then open their eyes, only to realize that now they are tangled. Then they try to untangle without leaving hands.



In the control group (n= 27) there was no teaching involvement by the teacher and researcher, and the students followed the typical PE program based on the curriculum.

3.4 Program implementation process

Shortly before the start of the whole process, the blog was designed and the initial choices of activities were made by the teacher. In particular, there were some games presented in the classroom and played by the children. It was set from the beginning that the participants would have the obligation to recommend their own games and dances every time and that the role of the PE teacher would be simply advisory. This was followed by briefing the students and asking the permission of their parents for participating and uploading photos – videos on the Internet. After having the consent of parents-guardians, participants acquired personal passwords and started the first posts with games, dances and other kinetic symbolic representations in hours outside the course of the PE. In any technical difficulty, students received immediate assistance from the PE teacher or their more experienced peers in issues of posting in a website via texting and closed group on social network.

Each time, in the weekly two hours of PE, on the initiative of some students who had taken the role of trainer, there was a brief presentation of the activities and their implementation by the whole class, in which the PE teacher also participated. The intervention of the teacher was only to provide clarifications, if something was not directly understood by the children. Immediately after the end of the lessons, participants tracked what was experienced in logs either in conventional printed form or digital. Emphasis was placed on participation and pleasure derived from the lesson, on difficulties encountered or not by the use of PCs and the level of cooperation with classmates and their teacher. The teacher finally kept her own brief notes.

3.5 Limitations

The students who took part in the research came from a single school in an urban area which, however, is also attended by students from rural areas commuting daily to the city.

3.6 Measuring Tools

For the assessment of students' satisfaction the "satisfaction" questionnaire by Papaioannou, Milosis, Kosmidou & Tsigilis (2002) was used. Cronbach's α index has a value of 0.94, value corresponding to high internal reliability. The instrument was weighted and modified for the Greek population of this age from the original questionnaire of Duda and Nicholls (1992) and consists of a factor and five questions ("find the course/activity interesting", "had fun", "time flew by", "I liked the activity" and "I was fully dedicated to the activity").

The participants provided answers based on the five-degree Likert type scale (1 = strongly disagree, 5 = strongly agree). The significance level was defined as $p < 0.05$. The questionnaire was distributed to the participants immediately after the end of the first term and was completed in an enclosed space in the presence of the PE teacher.

Throughout the semester the participants tracked their experience and feelings in logs, which they submitted to the PE teacher. Several of them, optionally, apart from their own individual log also submitted a team log of the group in which they participated each time. Logs are considered to be a key tool of qualitative research because the emotional state of the subject of research and everything experienced is recorded directly (Harvey, 2011; Punch, 2012).

4. The role of ICT in the research

The use of ICT has been one of the key elements of this approach for the interaction of students with each other and with the teacher, and for the digital recording of the material. The face-to-face courses were supported via a cooperative blog used asynchronously as a means of communication, exchange of views and knowledge repository. Once a week there were posts, which reached a total of 105. After posting their material – non-competitive games, world dances, symbolic events, improvisations – students then implemented it in the school yard. Several free software applications for creating and editing video, images, animation and presentations were used.

The PE teacher's role was primarily supporting and coordinating. Also, she provided feedback and technical instructions about uploading as well as information about the quality of the material. At the start of the project several hours were devoted on technical issues which were resolved with face-to-face meetings in the school's computer lab and/or with messages directly to children.

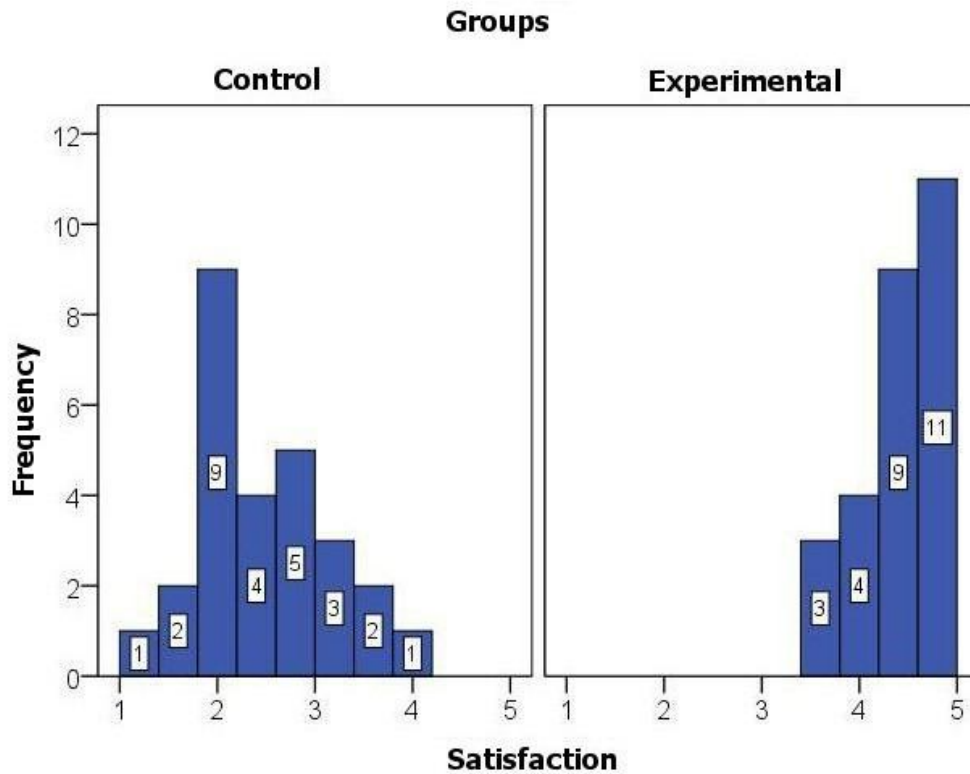
5. Statistical Analysis

For statistical confirmation of the study case, variance analysis was used with independent factors being the type of group (control and experimental) and sex of students and performance dependent on the scale, as measured by the average value of the 5 questions that comprise it.

For the detection of the influence of the factor of "citizenship" and "religion" in the mean value of the scale while examining in relation to the group the student belonged to, ANOVA test was applied and the test χ^2 to determine whether citizenship is statistically dependent on religion.

6. Findings

The mean satisfaction value for the control group was found to be 2,36 (SD = 0,7, N = 27) and that of the experimental group 4,31 (SD = 0,38, N = 27), while the mean value for girls was 3,44 (SD = 1,14, N = 30) and for boys 3,21 (SD = 1,1, N = 24). The comparative distribution of values among students of the experimental group and the control group is shown in the following diagram (Figure 1).



1: comparative distribution of score values among the students of the sample

Figure

It was found that there was a statistically significant influence of the group on the performance on the satisfaction scale $F(1, 50) = 163,752, p < 0,001$, while sex did not appear to have any significant impact on performance $F(1, 50) = 2,331, p = 0,133$.

ANOVA testing showed that being native or non-native was not a significant factor influencing scores ($F(1, 52) = 3,46, p = 0,07$).

In the sample citizenship is not statistically dependent on religion ($\chi^2(1, n = 54) = 1,347, p = 0,246$). (table 3)

Table 3: Correlation of citizenship and religion in the sample

	<i>Value</i>	<i>Df</i>	<i>Asymp. Sig. (2- sided)</i>	<i>Exact Sig. (2- sided)</i>	<i>Exact Sig. (1- sided)</i>
Pearson Chi-Square	1,347(b)	1	,246		
Continuity Correction(a)	,771	1	,380		
Likelihood Ratio	1,344	1	,246		
Fisher's Exact Test				,273	,190
Linear-by-Linear Association	1,322	1	,250		
N of Valid Cases	54				

ANOVA testing was used for the detection of the influence of the “citizenship” and “religion” factors on the scale mean value with parallel control of the group the student belonged to.

Testing confirmed the differences between the experimental and the control groups ($F(1, 46) = 143,076$, $p < 0,001$) while a statistically significant relation was detected between the score and the combination of religion * citizenship ($F(1, 46) = 4,460$, $p = 0,04$) (table 4).

Table 4: detection of “citizenship” and “religion” on the mean scale in correlation to the group

<i>Source</i>	<i>Type III Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Corrected Model	54,564(a)	7	7,795	28,053	,000
Intercept	559,907	1	559,907	2015,065	,000
Religion	,033	1	,033	,120	,730
Citizenship	,798	1	,798	2,873	,097
Control_or_experim ent	39,755	1	39,755	143,076	,000
religion * citizenship	1,239	1	1,239	4,460	,040
religion * control_or_experimen t	,090	1	,090	,325	,571
citizenship * control_or_experimen t	,004	1	,004	,014	,905
religion * citizenship * control_or_experimen t	,384	1	,384	1,381	,246
Error	12,782	46	,278		
Total	668,680	54			
Corrected Total	67,346	53			

Clarification of the differentiation of the two factors as to the values of scores can be given by the following diagram where it seems clear that the indigenous Christians have a lower average in scores than non-indigenous, while the opposite happens in Muslim students (figure 2).

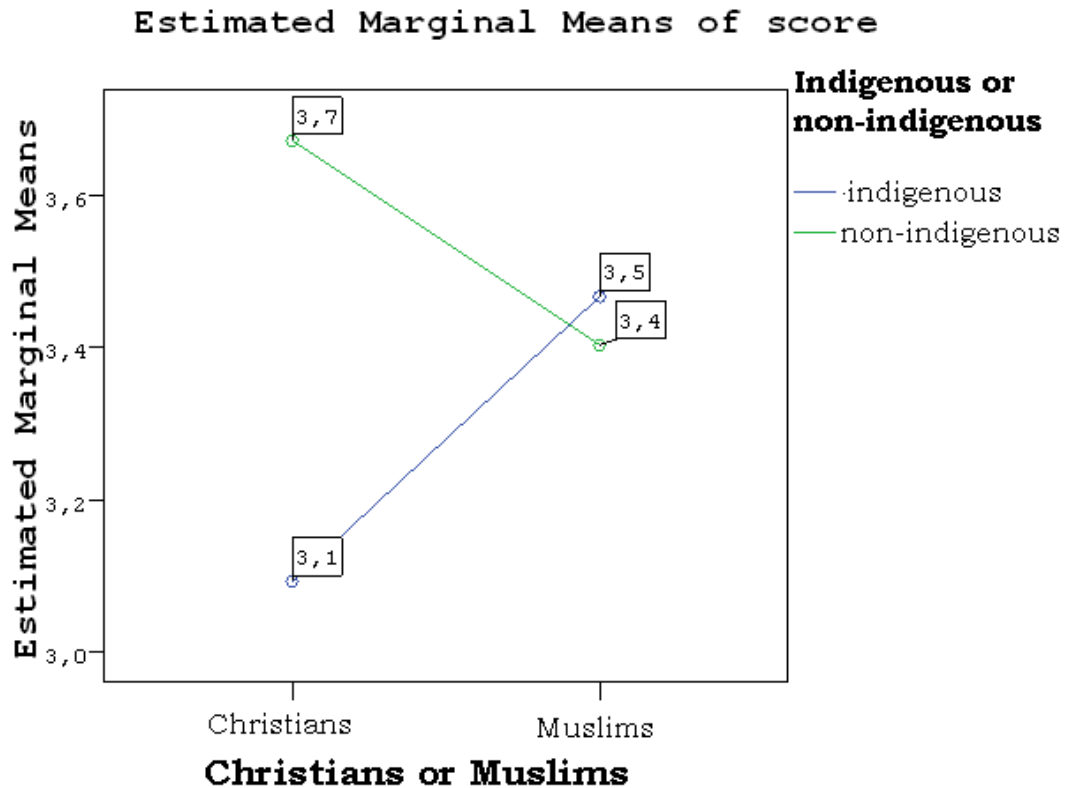


Figure 2. Influence of citizenship * religion on the mean value of score

7. Discussion - Conclusions

The purpose of the research was the application of a PE program with new objects, enriched with cultural elements, which focused on the participation, development of cooperation and initiative, and the evaluation of the satisfaction of students of different origin and religion. The results of the statistical analysis showed that the students who took part in the program under examination derived satisfaction from content that does not promote competition or award the best. An illustrative example of their preference for collaborative games and issues of ideological backgrounds and respect for human values is that students staged a re-enactment of a game that was suggested by a social anthropologist to children of a tribe of Africa.

Fruit were placed in the middle of the members of the tribe and on the starting command they were instructed to run fast to get them. The amazing thing was that instead of moving toward the center individually, they all held together and went towards the fruit. Then they sat in a circle to eat the

fruit. When he asked the children why they had done this since one of them could have got all the fruit, the children responded "ubuntu" meaning "we cannot be happy if at least one of us is unhappy!" the word "ubuntu" in their language means "I exist, because we exist."



Examples of sensitivity and interest shown by the children in the implementation of mobility games and PE in less privileged communities of their peers are as follows: through kinetic routines, with improvised balls or without, they attempted to emulate the lesson of PE in a corresponding grade school in Malawi or Ethiopia. In addition, they simulated with natural materials, wood, stones, etc. an informal lesson of PE in open spaces or clearings of Asian villages. Also, when performing free throws in basketball, they introduced themselves in their native language and saluted. Another role-playing game focused on women's position in the world. There was a recording by one group of typical school sports activities in which the girls in the Islamic world take part. Another group undertook to present them in the school yard. At the end of all the events there was comparison, discussion, reflection and self-reflection. The role of targeted collaborative games in social change through reflection/direct reaction caused by the key questions at the end of the activities is well known (Fletcher & Kunst, 2003).

In their research in primary schools of Greece Kellis, Vernadakis, Albanidis, Derri & Kourtesses (2010) created a tool for self-evaluation of the behavior of children who do not share the dominant culture. They noticed that the activities associated with the culture of these children contribute to their participation in the course and their satisfaction, while improving their self-confidence and collaborative skills. Something similar can also be seen in the present study, i.e. students who in previous years did not participate in PE, now participate with satisfaction and recommend games and dances which are closest to the interests, needs and culture. Also, in the primary schools of many countries multicultural games have been used as part of the program of PE (Gross & Buchanan, 2011). This is probably a great step for the creation of a society where all sorts of stereotypes will gradually subside. Even in senior high school surveys showed that the teaching of world culture is not treated negatively by a majority of the students (Patterson, 2012). In this particular senior high school of a provincial Greek city, participants, despite the fact that they were not at all familiar in the past with similar content and purely collaborative and learner centred structures in PE, welcomed with enthusiasm the new course frame, acquiring greater tolerance to different approaches and diversity in General.

The major differentiation of the experimental group from the control group in all scales of the questionnaire of satisfaction, is probably a criterion for implementation of similar programs in senior high schools, where there are students with different cultural background and religion.

Research in Norway showed that Muslim girls receive the same satisfaction in the lesson of PE, as boys do (Walseth, 2013). The orientation of the participants in learning and active participation, and not towards victory or preeminence, through contents which alert children, depends on PE teachers (Treasure & Roberts, 1994).

Physical Education can assist in the transmission of values, as movement and games are a unique way of communicating, because for the exercises the different culture and language that children might speak is not a problem (Patsiaouras, 2008). Also, mainly teamwork activities, such as dances and non-competitive games that were used, can lead to communication channels, casting practical doubts on racist and xenophobic stereotypes (Clements & Kinzler, 2003) and contribute to eliminating phenomena of competition, empathy and even violence, by cultivating social skills and virtues.

In addition, the parallel use of the PC in the lesson of PE seemed to upgrade the entire process by promoting new forms of work and cooperation, which coupled with the appropriate content can lead to greater satisfaction of the participants. The creation of so many posts (105) by the students in a short period confirms the fact that the use of the PC in combination with traditional teaching is an means not only of stimulation but also of creating team spirit. The above facts are reinforced by the existence of a "team log of the experimental group", which was additionally submitted to the PE teacher.

8. Recommendations

The activities that inspire respect and understanding towards every cultural group at a time when societies change in composition and texture, should become part of a formal and organized framework in PE programs. The contents of the course ought to be enriched with objects that meet the needs of all students, from larger or smaller minorities, so as to encourage active participation and provide satisfaction (Gibson, 2011). Moreover, programs could be implemented that focus on the development of social skills and cooperation of heterogeneous groups within student classes (Derri, Kellis, Vernadakis, Albanidis & Kioumourtoglou, 2014).

Such programs are likely to respond positively to the Muslim natives (Roma-Gypsies, Pomaks, those of Turkish origin) and non-indigenous Christians (repatriated, expatriates). In the same light we might interpret the statistical variation in the experimental group, namely that in the combination of nationality and religion, the native Christians had a lesser score than non-indigenous Christians, while non-native Muslims, higher than the indigenous ones. The above require further investigation, both from the perspective of sociology and PE to reveal those factors and to make appropriate correlations with the activities that led to this behavior.

REFERENCES

- Allison, K. R., Dwyer, J. M. & Makin, S. (1999). Perceived barriers to physical activity among high school students. *Preventive Medicine*, 28, 608-615.
- Anderssen, N. & Wold, B. (1992). Parental and peer influences on leisure-time physical activity in young adolescents. *Research Quarterly for Exercise and Sports*, 63, 341-348.
- Antoniou, P., Derri, V., Kioumourtzoglou, E. & Mouroutsos, S. (2003). Applying Multimedia Computer-Assisted Instruction to Enhance Physical Education Students' Knowledge of Basketball Rules. *Physical Education & Sport Pedagogy*, 8(1), 78-90.
- Banks, J.A. (1991). Multicultural education: For freedom's sake. *Educational Leadership*, 49, 32-35.
- Butt, L. K. & Pahnos, L. M. (1995). Why We Need a Multicultural Focus in Our Schools. *Journal of Physical Education, Recreation and Dance*, 66, 48-53.
- Clements, Rhonda L. & Kinzler, Suzanne K. (2003). *A Multicultural Approach to Physical Education: Proven Strategies for Middle and High School*. Human Kinetics
- Derri, V., Kellis, I., Vernadakis, N., Albanidis, E., & Kioumourtzoglou, E. (2014). The Effect of an Intercultural Physical Education Program in Comparison to the Typical One on Students' Social Skills Learning. *Journal of Human Sport & Exercise*, 9(1), 91-102.
- Digelidis N., Papaioannou A., Lapidis K., & Christodoulidis T. (2003). A one-year intervention in 7th grade physical education classes aiming to change motivational climate and attitudes towards exercise. *Psychology of Sport and Exercise*, 4, 195-210.
- Dittmann, A.T. (1987). The role of body movement in communication, In Siegman & Feldstein (Eds) chapter 2 *Nonverbal behavior and communication*. Psychology Press, Taylor & Francis Group.
- Elliott, J. (1991). *Action Research for Educational Change*. London: Open University Press

- Fletcher A. & Kunst K. (2003). So you wanna be a playa? A Guide to Cooperative Games for Social Change. The Freechild Project. Available at <http://www.freechild.org/>
- Gard, M, Moodey, A.H. & Enright, E. (2013). Youth culture, physical education and the question of relevance: after 20 years, a reply to Tinning and Fitzclarence. *Sport, Education and Society*. 18, (1), 97-114. *Special Issue: New Directions, New Questions: Relationships between Curriculum, Pedagogy and Assessment in Physical Education*
- Garland, A., Fox, R. & Williams, C.(2002).Overcoming reduced activity and avoidance: a Five Areas approach. *Advances in Psychiatric Treatment*, 8, 453-462.
- Gibson, S. Gary. (2011). African-American Students' Responses to a Culturally Relevant Curriculum in Physical Education. *The Journal of Multiculturalism in Education*. 7, 1-32. Available at http://www.wtamu.edu/webres/File/Journals/MCJ/Volume%207-2/Hastie_JME.pdf
- Gropas, R. & Triandafyllidou A. (2011). Greek education policy and the challenge of migration: an 'intercultural' view of assimilation. *Race Ethnicity and Education*.14, (3), 399-419.
- Gross, K. Michael & Buchanan, M. Alice. (2011). Integrating Global Games in the Elementary Physical Education Curriculum. *Strategies: A Journal for Physical and Sport Educators*. 25, (1), 8-12. Available at <http://www.tandfonline.com/doi/abs/10.1080/08924562.2011.10592126?journalCode=ustr20#.VHmfgDGsXtt>
- Harvey, L. (2011). Intimate reflections: private diaries in qualitative research. *Qualitative Research*. 11, 664-682.
- Hatzigeorgiadis, Antonis; Morela, Eleftheria; Elbe, Anne-Marie; Kouli, Olga; Sanchez & Xavier. (2013). The integrative role of sport in multicultural societies. *European Psychologist*, 18 (3), 191-202.

- Hayes, E. & Silberman, L.(2007). Incorporating Video Games into Physical Education. *Journal of Physical Education, Recreation & Dance*, 78(3), 1-58.
- Hellison, D.R. (1985). *Goals and strategies for teaching physical education*. Champaign, IL: Human Kinetics.
- Hollingsworth, S. (1997). *International Action Research. A Casebook for Educational Reform*. London: FalmerPress.
- Huang, Chun-Hong, Su-Li Chin, Li-Hua Hsin, Jason C. Hung, Yi-Pei Yu. (2011). A Web-based E-learning Platform for Physical Education. *Journal of Networks*, 6(5), 721-727.
- Kellis I., Vernadakis N., Albanidis E., Derri V. and Kourtesses T.(2010). The development of a student's behaviors' self-evaluation scale (SBSS) in multicultural physical education class settings. *Educational Research and Review*. 5 (11), 637-645. Available at http://www.academicjournals.org/article/article1379652640_Kellis%20et%20al.pdf
- Mohnsen, B. (2014). *Using Technology in Physical Education*. Greek language edition published by DISIGMA PUBLISHING. Editor: Antoniou Panagiotis.
- Motti - Stefanidi, F., Pavlopoulos, V., Obradović , J. & Masten Ann S. (2008). Acculturation and adaptation of immigrant adolescents in Greek urban schools. *International Journal of Psychology*, 43 (1), 45- 58.
- National Association for Sport and Physical Education, an association of the American Alliance for Health, Physical Education, Recreation and Dance. *Initial Guidelinesfor Online Physical Education*. Available at <http://www.dpi.state.nc.us/docs/curriculum/healthfulliving/resources/onlinepeguidelines.pdf>

- Pang, Y. (2012). Hybrid Learning of Physical Education Adopting Lightweight Communication Tools. In *Advanced Information Technology in Education*. Available at [Advances in Intelligent and Soft Computing](#), 126, 153-160.
- Papastergiou, M., Gerodimos B. & Antoniou, P. (2011). Multimedia blogging in physical education: Effects on student knowledge and ICT self-efficacy. *Computers & Education*, 57 (3), 1998-2010.
- Patterson, D. (2012). Building the case for culturally responsive teaching in physical education: Using high school Current Issues in Education, 15, 3. Available at <http://cie.asu.edu/ojs/index.php/cieatasu/article/view/876/378>
- Patsiaouras, A. (2008). Racism & Xenophobia in Society, Education & Sport settings. *Inquiries in Sport & Physical Education*, 6 (3), 290-302.
- Parry, J. (1998). Physical Education as Olympic Education. *European Physical Education Review*, 4, (2), 153-167.
- Pavlidou, E., Arvanitidou, V. & Chatizigeorgiadou, S. (2012). The effectiveness of a pilot intervention program of physical education in multicultural preschool education, *MENON: Journal of Educational Research*, 1, 53-66.
- Polvi, S. & Telama, R. (2000). The Use of Cooperative Learning as a Social Enhancer in Physical Education. *Scandinavian Journal of Educational Research*, 44, (1), 105 – 115. Available at <http://www.staff.uni-mainz.de/kesslet/arbeit/kriss/telama.pdf>
- Punch, S. (2012). Hidden struggles of fieldwork: Exploring the role and use of field diaries *Emotion, Space and Society*. 5, (2), 86–93.
- Staiano E. Amanda & Calvert L. Sandra. (2011). *Exergames for Physical Education Courses: Physical, Social, and Cognitive Benefits in Child Development Perspectives*, 5, (2), 93–98. Available at <http://onlinelibrary.wiley.com/doi/10.1111/j.1750-8606.2011.00162.x/pdf>

- Treasure, C. Darren & Roberts, C. Glyn. (1994). Cognitive and Affective Concomitants of Task and Ego Goal Orientations During the Middle School Years. *Journal of sport & exercise psychology*, 16, 15-28.
- Tearle, P. & Golder, G. (2008). *European Journal of Teacher Education*, Vol. 31, No. 1, February 2008, 55–72.
- Ministry of Greek Education and Religious Affairs. (2012) «Anouncement for the School Games of Primary Schools and High schools for the school year 2011-2012 (Athlopedia matches)». Available at http://www.fa3.gr/nomothesia_2/nomoth_fa/sxol-agonas/prokirixi2011-12.htm
- Ministry of Greek Education and Religious Affairs. (2014). Completion of teaching hours for primary and secondary education teachers. N.4203/2013. FEK 235/1-11-2013] article 25 paragraph 6.
- Vorwald M. (2012). Best practises. Integrating Multicultural Games & Activities into your PE Curriculum. Available at <http://www.uwsp.edu/conted/ConfWrkShp/Documents/bestpractice/handouts/Vorwald.pdf>
- Walseth, K. (2013). Muslim girls' experiences in physical education in Norway: What role does religiosity play? *Sport, Education and Society*. Available at <http://www.tandfonline.com/doi/abs/10.1080/13573322.2013.769946#.VHm0kTGsXts>