

Original Article

The effect of an interdisciplinary Greek traditional dance, history, and anthropology program on male and female students' achievement goal orientations

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Abstract

The aim of this study was to investigate the effect of an interdisciplinary program of Greek traditional dance with issues from history and anthropology on high school students' achievement goal orientations. 262 students (136 males & 126 females) from 7th class were participated. The experimental group (n=124) followed the new eight-week program (two lessons/week) while the control group (n=138) followed the typical physical education program. To evaluate students' achievement goal orientations during lessons, the Achievement Goal Orientations Questionnaire (Papaioannou et al, 2002) was used with its 4 dimensions (ego-strengthening, ego-protection, social goal & personal development). Students completed it before the initiation (1st lesson) of the intervention and after its completion (16th lesson). The following statistical analyses were performed: a) Descriptive statistic b) Reliability analysis (Cronbach's alpha test), and c) Anova with Repeated Measures. Results showed that a. Cronbach's alpha was satisfactory (ranging from .98, .98, .99 and .97 for the initial and from .92, .97, .98 and .98 for the final measure), b) the experimental group decreased the levels of "ego-strengthening" and "ego-protection", and enhanced their "social goal" and "personal development". c. Also, experimental group's male students decreased their "ego-strengthening" and "ego-protection" and increased "social goal" more than experimental group's female students. These findings support the view that an interdisciplinary program of traditional Greek dance and topics from history and anthropology reduces the rates of ego-strengthening and ego-protection while simultaneously increases students' social goal and personal development's levels, and especially those of males.

Key words: folk dance, ego-strengthening, ego-protection, social goal, personal development

Introduction

Many researchers claim that the interdisciplinary teaching of physical education could may be the answer to students' lack of interest in participating to the course. (Gotzaridis, Papaioannou, Antoniou, & Albanidis, 2007) and as consequence to their reduced effort during the course as well as to the absence satisfaction the gain from that (Diggelidis & Papaioannou, 1999).

According to Placek and O' Sullivan (1997), the internal integration provide teachers with the opportunity to make their course within the field of physical education without the cooperation between other scientific fields, by teaching students specialized concepts like heart rate and health's improvement as well as special skills for the development of specific domains of students personality as personal and social responsibility and commitment. Furthermore, internal integration is still an innovative way for teaching executive skills that develop critical thinking and help to solve various problems (Placek & O' Sullivan, 1997).

When it comes to traditional Greek dance, there are many differences of opinion about which is the appropriate educational method for his teaching. Basically, there are two current trends in the selection of Greek traditional dance's teaching method.

The first one, represented by Serbezis (2012), argues that all the multiple skills and especially those which require great precision in their performance should be taught only with instructor-centered methods like is the method of giving orders. One of these skills is traditional dance, as which requires a combination of music and movement as well as he requires accuracy precise execution in every movement.

The second trend approaches dance from two different angles, kinetic and culturally at the same time (holistic approach). The upcoming result is dance to affect equally all the three domains of students personality

(bodily-kinetic, emotional and cognitive) (Pitsi, Diggelidis, & Filippou, 2013) and also to contribute the creation of attitudes and skills concerning to real life (Stivaktaki, Mountakis, Bournelli, 2009).

If are comparative these two trends, welcome to the conclusion that the first one is exclusively focused on dancer's kinetic dimension, by ignoring some other basic functions of dance, such as communication, expression, aesthetic sensibility and by resulting in that way to dance's unilateral approach through different learning technique about steps and rhythmic movement.

On the contrary, the second trend, through its holistic approach, exploits equally all the aspects of dance and emphasizes both his kinetic and conceptual-semantic side. Thereby, dance's inherent potential force is exploited as an important art form. Finally, the interdisciplinary approach is giving teachers the opportunity to use a variety of melodies and songs due to considerably improve student's musical listening, to increase their musical experiences and finally, to double the chances for students to be motivated about participatory learning.

He motives generated in such processes lead student to set some goals in his life. According to Kostaridou-Efklidis (1999), goals in general are some already defined situation by the person itself and for the sake of which is willing to do everything possible in order to come to a wanted result. Similar to that is the view of Schunk (2012), according to whom as goal's achievement is defined the reason that forces a person to express the appropriate behaviour to an achievable environment.

As for Ames (1992), achievement goals are nothing more than a grand total of ideas and beliefs which make students to try hard so that their effort to be succeeded. Ames' personal point of view as well as all the others' researchers' mentioned above, is focused not only on the reasons that make students to put a lot of effort to achieve the academic results they want to, but also to the criteria have chosen by the students themselves due to evaluate their successful or unsuccessful trying.

The reasons for which students decide to participate in an activity are not exactly same for all. Some of them are keen on educational process because they want to be separated from others. Some people because they want to improve their cognitive level and some others because they desire to achieve high scores (Elliot, 2005). The same is happening with the standards for evaluating their effort. They aren't the same for all, as well. This is happening since some students are based on their accomplishment and their improvement compared to their previous levels in order to contemplate the result, while some others compare themselves with others' results.

The aim of this study was to investigate the effect of an interdisciplinary program of Greek traditional dance with issues from history and anthropology on high school students' achievement goal orientations.

Methodology

Sample

The same of the study constituted of 262 high school students (7th class) (table 1). There were divided into two groups, the experimental (n=124), who participated in an intervention program for a period of eight weeks and the control (n=138), who followed the typical weekly physical education program.

Table 1. The sex of sample

	Experimental group		Control group		Total	
Boys	64	51.6%	72	52.2%	136	51.9%
Girls	60	48.4%	66	47.8%	126	48.1%
Total	124	100%	138	100%	262	100%

Intervention program

The intervention program lasted eight weeks. Sixteen (16) cross curricular classes of Greek folk dances with topics from history and anthropology were held for the experimental team. The classes were held during school timetable Physical Education sessions/classes. Both the experimental and the control teams, during the eight weeks of the research, attended classes with the same educational targets. Survey's data gathered in the 1st and 16th lesson.

Measurement

To evaluate students' achievement goal orientations during class time, we used Papaioannou's et al, (2002) questionnaire. The scale consists of 29 questions divided into four factors: a) The first factor is called "Personal development" and consists of seven variables b) The second factor is called "Social goal" and consists of seven variables c) The third factor is called "Ego – strengthening" and consists of nine variables and d) The forth factor is called "Ego – protection" and consists of six variables.

The answers were given in a five-point Likert type scale, where 1 was "absolutely disagree" and 5 was "absolutely agree".

Measurement process

The questionnaires were anonymous. Students and their parents gave their consent for their participation in the study. The completion of questionnaire was anonymous and it was carried out in within school.

Statistical analysis

The following statistical analyses were performed:

1. Descriptive statistics
2. Reliability analysis to examine the reliability of the factors was conducted (Cronbach's alpha).
3. Repeated Measures ANOVA were conducted in order to find any group (experimental and control, sex) differences. As significance's level was set $p < .05$.

Results

Reliability analysis

A reliability analysis was performed in order to examine the consistency, and therefore the reliability of the items constituting the four factors under study. The reliability test was based on the calculation of Cronbach's alpha. The analyses have shown that the factors have a satisfactory reliability score ($\alpha > .60$) (Table 2).

Table 2. Reliability analysis

Factors	Cronbach's α	
	Initial measure	Final measure
Goals		
Ego - strengthening	.98	.92
Ego - protection	.98	.97
Social goal	.99	.98
Personal development	.97	.98

Univariate analyses (Repeated Measures ANOVA)

The analyses revealed statistically significant group differences:

For the factor of "Ego - strengthening" ($F_{(1,260)}=121.51$; $p < .05$). Post hoc multiple comparisons Bonferroni test indicated the differences occurred only within the experimental group. More specifically, ego-strengthening was reduced from the initial measurement ($M=3.40$ & $SD=.82$), to the final ($M=2.45$ & $SD=.37$) (table 3). Additionally, experimental group's boys reduced their levels of ego - strengthening (initial measurement $M=3.96$ & $SD=.65$, final measurement $M=2.47$ & $SD=.32$) in comparison to girls (initial measurement $M=2.81$ & $SD=.69$, final measurement $M=2.43$ & $SD=.41$).

For the factor of "Ego - protection" ($F_{(1,260)}=118.47$; $p < .05$). Post hoc multiple comparisons Bonferroni test indicated the differences occurred only within the experimental group. More specifically, ego-protection was reduced from the initial measurement ($M=3.26$ & $SD=1.15$), to the final ($M=2.08$ & $SD=.61$) (table 3). Additionally, experimental group's boys reduced their levels of ego-protection (initial measurement $M=4.02$ & $SD=.92$, final measurement $M=2.07$ & $SD=.63$) in comparison to girls (initial measurement $M=2.45$ & $SD=.74$, final measurement $M=2.10$ & $SD=.59$).

Table 3. *M* & *S.D.* of Goals

Factors								
	Initial measure				Final measure			
	Experimental		Control		Experimental		Control	
	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>
Ego - strengthening	3.40	.82	3.10	1.03	2.45	.37	2.83	.78
Ego - protection	3.26	1.15	3.04	1.16	2.08	.61	2.75	.75
Social goal	2.11	.75	2.67	.89	3.45	.89	3.20	.75
Personal development	2.50	.84	2.95	.69	3.59	.90	3.21	.75

For the factor of "Social goal" ($F_{(1,260)}=176.89$; $p < .05$). Post hoc multiple comparisons Bonferroni test indicated the differences occurred only within the experimental group. More specifically, social goal was increased from the initial measurement ($M=2.11$ & $SD=.75$), to the final ($M=3.45$ & $SD=.89$) (table 3). Additionally, experimental group's boys increased their levels of social goal (initial measurement $M=2.09$ & $SD=.77$, final measurement $M=3.97$ & $SD=.73$) in comparison to girls (initial measurement $M=2.14$ & $SD=.75$, final measurement $M=2.89$ & $SD=.52$).

For the factor of "Personal development" ($F_{(1,260)}=156.76$; $p < .05$). Post hoc multiple comparisons Bonferroni test indicated the differences occurred only within the experimental group. More specifically, personal development was increased from the initial measurement ($M=2.50$ & $SD=.84$), to the final ($M=3.59$ & $SD=.69$) (table 3). No sex differences were indicated.

Discussion – Conclusions

The aim of this study was to investigate the effect of an interdisciplinary program of Greek traditional dance with issues from history and anthropology on high school students' achievement goal orientations.

Many considerable differences about female and male students of experimental group and those of control group are arising out of data's analysis.

Particularly, it seems that there was a significant reduction of the percentage of both the ego - strengthening and ego - protection of the experimental team students after each measurement. On the contrary, although the control team students also showed a reduction in their percentage, this was of minor significance statistically. On the other hand, the results showed an important increase, after each measurement, in the percentage of the personal development and social goal of the experimental team members, while the relevant percentage of personal development and social goal of the control team students were insignificant statistically.

This survey's results are in agreement with those of Arapitsa (2014), Tsapatori, Pollatou, Gerodimos and Mavromatis (2009). In particular, a program of interdisciplinary teaching of traditional Greek dances was applied to students of 7th class by Arapitsa (2014), with issues taken from domains like music, sociology, geography and history. In the end, she finds out that the program had a positive effect on students' achievement goals. Tsapatori, Pollatou, Gerodimos and Mavromatis (2009) have tried a music-kinetic program in students of 1st class of elementary school and got relative results with Arapitsa. Through his research, Kaprinis (2009) came up to similarly conclusions with the others mentioned above, about the positive effects of interdisciplinary teaching of physical education. According to researches' results, the interdisciplinary teaching of physical education alongside with mathematic issues is significantly reducing the percentages of "ego-protection" and "ego-strengthening" factors.

Our study's results are in contrast with those of Gotzaridis, Papaioannou, Antoniou, and Albanidis (2007), in which someone couldn't observe any changes in students' achievement goals. The authors attribute this change of students behavior to program's short duration.

As it is came out of survey's results, students of experimental group have paid much more attention on their business by believing that their personal improvement is the one and only success for their selves. For this reason, they have tried hard by focusing on learning process. They haven't been disappointed by their mistakes, since they took them as the perfect chance for learning and improving their personal level.

The above results give us the opportunity to claim that traditional dance is an activity which not only reduces people's strict orientation in their selves but also leads them to hard work. Furthermore, dance's interdisciplinary teaching is the most suitable and appropriate method of that achievement. Although the traditional dance is an activity which, according to researchers, requires a perfect technical performance from participants (Serbezis, 2012), it is still not treated as a difficult and painful physical activity, but as a social activity which is the appropriate one for learning, fun and team's spirit stimulation (Baxevasos, 2008).

According to several surveys, boys are more self-centered than girls, since they are caring more about their promotion and recognition in others' eyes and afterwards, they have a positive perception of their own skills, by feeling really confident at the same time (Bredemeier & Shields, 1984). However, program's impact can be showed in that situation as well, since the students of experimental group, by reducing their percentages in factors such as "ego-protection" and "ego-strengthening" and by increasing their rates in factors like "personal development" and "social goal", they finally result in their behavior's change.

When it comes to girls students of experimental group, they reduced their percentages in "ego-protection" factor and they increased them in "personal development" factor.

These findings support the writer's view that an interdisciplinary program of traditional Greek dance and topics from history and anthropology reduces the rates of ego - strengthening and ego - protection while simultaneously increases students' personal development's and social goal's levels, and especially those of males.

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