Original Article

The effects of reciprocal and self-check teaching styles in students' intrinsic-extrinsic motivation, enjoyment and autonomy in teaching traditional Greek dances

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Abstract:

Teaching of traditional dances is mainly done through an educational process where imitation of a prototype model prevails. In reciprocal and self-check teaching styles, part of the decisions is handed to the students so they are known as student-centered teaching methods. The purpose of the present study was to examine the effects of the reciprocal, the self-check and the command teaching styles in students': a) intrinsic-extrinsic motivation, b) enjoyment and c) perceived motivational climate, while being taught Greek traditional dances. An independent group's post-test comparison experimental design was used in the present study. Seventy university students (19-20 years old) were divided into three teaching style groups: a) reciprocal (n=21, nine males and twelve females), b) self-check (n=25, eleven males and fourteen females) and c) command (as control group n=24, eleven males and thirteen females) and were taught Greek traditional dances with the respective teaching style. All scales had acceptable levels of internal consistency ($\alpha > .74$). A two-way analysis of variance (two-way ANOVA) was used to examine the differences among the three teaching styles and between males and females on the aforementioned factors. Overall, results show that the self-check style triggers a significantly greater increase in intrinsic motivation, identified regulation, enjoyment and autonomy in comparison to the reciprocal and command-teaching styles. It is also connected with a decrease in external motivation and amotivation. Male students seem to opt for the self-check style due to it reinforcing or reducing psychological factors in contrast with the other styles ($p < .05$) while female students have a preference for the reciprocal style as well ($p < .05$). The implementation of the reciprocal and the self-check styles in teaching traditional dances creates a positive atmosphere which is deemed extremely important for an efficient and qualitative lesson.

Key words: reciprocal and self-check teaching styles, intrinsic-extrinsic motivation, enjoyment, autonomy, greek traditional dances.

Introduction

The Greek philosopher Plato points out that "he who knows nothing of dancing is an ignorant man" thus, highlighting the important role of rhythm in the psychosomatic benefits stemming from dancing (Laws by Plato, B' 654d). Dancing, as a non-verbal form of communication, can provoke, teach, express, inspire, dominate and even cure, since a single dexterous move is a form of thinking. According to Schmitt and Schmitt (1998), dancing can trigger powerful emotions in the individuals and can alter significantly their mood, both relieving stress and depression and reinforcing one's self-esteem regarding creativity, trust, relaxation, motivation, health, intelligence, stimulation and energy during the lesson.

In traditional Greek societies, the process of learning traditional dances began from an early stage through lullabies and nursery rhymes, which were essentially the first musical-kinetic experiences for the children. As they grow up, they learnt more by observing and mimicking the adults. The subsequent clash with the traditional style of living in Greece gradually replaced this primary reproduction of dancing with a secondary one, where the triangle teacher-curriculum-student prevailed (Serbezis, 1995).

In Greece, organized traditional dance teaching occurs at all levels of education, because folk dance is both a cultural form of dance and a lifetime recreational activity. It holds an important part of the course of Physical Education in primary and secondary education, the curriculum in Day Primary Schools (Greek Republic Ministry of Education, Culture and Sport. Day Primary School 2012-2013. Operation and organization 50/268/102487/Γ1/06-09-2012/) and the secondary schools of arts, under the general category Dancing (Official Gazette of the Greek Republic, Sheet No 786, 2004), because it helps children to understand their own culture and respect dance as part of the heritage of many cultures. Learning dances from all cultural groups, children gain skills and knowledge that help them participate in a varied society. It is also integrated into the curricula of all University Departments of Physical Education and Sport in Greece.

Teaching Styles

The term teaching style refers to a complex of pedagogical strategies forming a method, a way to achieve an educational purpose (Digelidis, 2007). It was initially presented by Mosston (1966), who being based on the principle that teaching is a process of decision-making, classified teaching methods according to the criterion of “the decision-maker in teaching Physical Education”. Depending on the amount of contribution that teachers and students offer to the aforementioned process respectively, he identified 11 different styles which are divided in two basic categories that is, reproducing or teacher-centered styles, whereby the teacher is in total control of all teaching stages, and productive ones, whereby a big part of decision-making is in the hands of the learner whose autonomy is being reinforced.

The command teaching style is the most teacher-centered method and is widely used in teaching physical education. It targets at learning an activity with accuracy, as soon as possible under the directions of the teacher. In reciprocal methods, a part of the decisions is handed to the students who as assistant-observers give their peers feedback based on the instructions already given by the teacher. In self-check styles, students learn an exercise and are involved in self-evaluation according to criteria set by the teacher, while being responsible for assessing correct or incorrect movements on their own (Mosston & Ashworth 2002). Thus, their personal responsibility for the evaluation of their performance is critical for this method to bear fruits, but it also poses a challenge to them since it represents a different way of learning from what they are accustomed to (Byra, 2006a).

Several studies in physical education examined the efficiency of different teaching styles in learning (Donnelly, 2002; Abd Al-Salam & Al-Naddaf 2004; Patmanoglou, Digelidis, Mantis, Papapetrou, & Mavvidis, 2007; Mizios, Digelidis, Goudas, & Papaioannou, 2009; Kollovelonis & Goudas 2012) and their influence on pupils’ goal orientations (Salvara, Jess, Abbott, & Bognár, 2006), student self-perceptions (Chatoupis & Emmanuel 2003b), motivational climate and pupils’ motivation (Morgan, Sproule, & Kingston, 2005), intrinsic–extrinsic motivation and lesson satisfaction (Mizios et al. 2009), mastery-oriented climate, achievement goals, and intrinsic motivation (Papaioannou, Theodosiou, Pashali, & Digelidis, 2012). In addition it has been examined the formation of teacher and student beliefs resulting from the application of these styles (Kulinna & Cothran, 2003; Cothran, Kulinna, Banville, Choi, Amade-Escot, MacPhail, Macdonald, Richard, Sarmento, & Kirk, 2005; Byra 2006; Cothran & Kulinna, 2006). The reciprocal teaching style has been studied more than any other style from the reproduction cluster, while the divergent production style has been studied more than any other from the production cluster of styles (Byra, 2000; Digelidis, 2006).

Because of the nature of dances, there aren’t studies using or comparing a variety of teaching styles so far. There is limited knowledge regarding the effects of teaching styles in dance learning or in several psychological factors during the dance teaching. Gibbons (2007), in order to teach various styles of dancing, including traditional dances, used Mosston’s teaching styles arguing that this can help both beginner and experienced teachers of dancing equally, both at school and university levels. Based on the principle of “non-versus” reality, she highlights that the overall course objectives should define the selection of the most suitable style so that these objectives are finally met.

Motivation

Deci and Ryan (1985) claimed that intrinsic motivation stems from three fundamental innate needs of the individual: a) the need of self-determination of one’s actions, b) the need of experiencing one’s ability and efficiency and c) the need of forming social relations. In the field of dancing, Ryan and Deci (2000) found that certain dancing environments may not be able to satisfy basic needs and are unlikely to contribute to the personal development of dancers and their well-being. Bond and Stinson (2007), following qualitative methodologies regarding the intrinsic motivation of young people involved in dancing, focused on fundamental principles based on their responses during the lessons. Such responses included emotional connections with dancing and personal interests: “*I like dancing*”, challenging skills and the reinforcing beliefs that effort is all that matters: “*I like new challenges*”, and feelings of autonomy and personal control, especially in defining goals and assessing the extent to which the latter are achieved: “*It’s like I’m in charge of myself, I’m good at it and I’m getting better*”.

Autonomy, is one of the three dimensions of the social environment and a reason for the improvement of intrinsic motivation (Whaley, 1988), is realized when individuals have the opportunity to make decisions and have the ability to choose (Black & Deci 2000). In an environment where autonomy is fostered, students are more likely to report a bigger satisfaction of this need and more reasons to get involved in the lesson in comparison with a more controlled environment (Vansteenkiste, Simons, Soenens, & Lens, 2004). Regarding dancing, research focuses on studying the characteristics and the mechanisms of the social environment which influence the psychological well-being of dance students (Queste & Duda 2010). Researchers studied the relationships among the perceived climate of autonomy, the satisfaction of the three basic needs according to the self-determination theory (SDT), motivation and several indexes of physical and psychological well-being (Quested & Duda, 2009; Quested & Duda, 2011; Geme, 2010; Kamarova, 2010), and the relationship between personal interest and situational interest (Shen, Chen, Tolley, & Scrabis, 2003), according to the theory of motivation based on interest (Krapp, Hidi, & Renninger, 1992). The hierarchical model of internal-external motivation allows us to study the motivation at the situational level, the “here and now” of motivation, the

motivation that is experienced by an individual at a specific time (Vallenard, 1997). Given the complex nature of human motives, Vallenard (1997) supports that it is vain to study motivation on a general level and a more thorough understanding might stem from studying several types of motivation and different global levels. The importance of the above is that each level of generality can be affected by the next adjacent level (situational by contextual and less by global motivation) and the experience of motivation at a lower level can affect motivation to a higher level (successful situational experiences may lead to the development of contextual intrinsic motivation) (Standage & Treasure, 2002). Concerning motivational climates, it is argued that regular control of the motivational climate at the situational level leads to a desirable reconsideration of teaching or training methods, so that high levels of students' or athletes' motivation are maintained (Papaioannou, Milosis, Kosmidou, & Tsigilis, 2007).

Extrinsic motivation, non-self-determined behavior, is a construct that is driven by different external factors so that a specific outcome is attained or an external reward is given (Deci & Ryan, 1985). It is divided in "external regulation", where behavior is driven by external sources like rewards or sanctions, "introjected regulation", where individuals put pressure on themselves in order to feel pride in themselves or avoid anxiety, "identified regulation" where individuals recognize the value of their task even if they do not feel any satisfaction, and "integrated regulation" where an experience is internalized and assimilated to a complex of behaviors that express an individual (Deci & Ryan, 1985; Ryan & Connel, 1989). Amotivation on the other hand, is expressed when people fail to grasp the relationship between the causes and the results of their actions, have low self-esteem and have no control over the environment of their activities (Pelletier, Fortier, Vallerand, Tuson, Briere, & Blais, 1995).

Moreover, given that students learn in different ways, have different cultural backgrounds and differ in their kinetic skills, abilities, talent and personality (Mainwaring, Pysch, & Krasnow, 2010), it is deemed necessary for teachers to vary their teaching approaches so that the students' different kinetic, cognitive and social needs are met (Garn & Byra, 2002).

In current bibliography though, there seems to be a lack of references to the ways teaching styles may affect intrinsic-extrinsic motivation during lessons of traditional Greek dancing. Teaching traditional dances in Greece takes place mainly through educational processes where imitation of a prototype model prevails. Teachers usually model movements and learners respond to orders with accuracy. The teacher has the central role defining the curriculum and is the decision-maker of the learning process demanding total compliance and discipline. Aiming at learning in the shortest period of time possible, this approach often transforms students into inactive recipients, lacking development of creativity, imagination, critical thinking and improvisation. Given, however, that terms like creativity, improvisation, collectivity and everlasting progress are by principle innate characteristics of traditional Greek dancing, means that alternative teaching approaches of dancing, such as teaching styles where students play active roles in the learning process would be preferable.

The above information does not concern only the Greek traditional dances, but the traditional dances internationally. Traditional dances have many common characteristics regardless of their country of origin. Regarding socio-cultural aspects, knowledge about the culture, the role of the man and the woman in the society, the dance contribution in the individual and the collective expression, the dance interactions that occurred at times between countries and cultures, are taught to all people around the world. As far as it concerns psychomotor aspects, elements like time (even-uneven rhythm, tempo, musical meter, accent, numeration), space (levels, directions, type of step, group formations, relationships) and dynamics are also teaching objectives for traditional dances internationally. In addition, the building blocks of dance education (course, unit, lesson, episode), the observation techniques and the type of feedback that focuses on both subject and behavior objectives, are applicable to teaching traditional dances regardless of its place of origin.

The aim of the present study was to examine the differences between the reciprocal, the self-check and the command teaching styles in intrinsic-extrinsic motivation, enjoyment and the motivational climate focusing on autonomy, during one lesson of traditional Greek dancing in male and female students. These results would be important to select the appropriate teaching style to make students more active, satisfied and therefore, more motivated during the learning process.

Method

Participants

Seventy university students (31 male and 39 female) aged 18-20years participated voluntarily in the study. The students, having been ranked as beginners, were randomly divided into three groups. Before the lesson began, all of the participants were asked if they had previous knowledge of the dance that they were about to be taught; those who gave a positive answer were excluded from the lesson. Before the whole process started, all necessary instructions and guidelines were given to students in terms of a) the purpose of the study, b) how to fill in the questionnaires and c) their anonymity. Finally, the students were advised to give personal and honest answers and it was explained to them that they could depart if need be.

Instrumentation

The following questionnaires were used for the purposes of the study:

1. Intrinsic-extrinsic motivation at the situational level. The intrinsic-extrinsic motivation measurement questionnaire was used (Guay, Vallerand, & Blanchard, 2000), with suitable modifications so that all types of motivation at the situational level within a single lesson were measured. The questionnaire has been successfully adapted to the Greek language for school subjects from Papaioannou et al. (2007). It consists of sixteen questions and includes four factors. Following the general stem question “Why did you participate in the activities of today’s traditional Greek dancing lesson?” the students were asked to respond in a five-point Likert scale ranging from “I totally disagree” to “I totally agree” answers, in the subscales of: a) intrinsic motivation (e.g. “because I liked them”), b) identified regulation (e.g. “for my own benefit”), c) extrinsic motivation (e.g. “because I had to do it) and d) amotivation (e.g. “because I had no other choice”).

2. Scale of measuring enjoyment during Physical Education. The scale of measuring enjoyment consists of five questions. It was developed by Duda and Nicholls (1992) and has been successfully adapted to the Greek language from Papaioannou et al. (2007). The students responded in a five-point Likert scale ranging from “I totally disagree” to “I totally agree” answers (I totally disagree= 1, I disagree= 2, I’m not sure= 3, I agree= 4 and I totally agree= 5), in five questions regarding the general topic “I found today’s traditional dancing lesson interesting”.

3. Motivational climate focusing on learners’ autonomy. Only a part of the measurement scale that was developed by Soini, Liukkonen, and Jaakkola (2004) and has been successfully adapted to the Greek language from Digelidis, Kotsaki, and Papaioannou (2005) was used in order to measure the motivational climate focusing on autonomy during lessons of traditional Greek dancing. The scale consists of 5 questions (e.g. “Students play an important role in decision-making during the lesson”). The students answered in a 5-point Likert scale ranging from “I totally disagree” to “I totally agree” answers (I totally agree= 5, I agree= 4, I don’t know= 3, I disagree= 2, I totally disagree= 1).

Experimental Procedure

For the validation of the research hypotheses, three groups were employed. Each group attended one lesson of Greek dancing following exactly the same curriculum while being exposed to different teaching styles each time. The reciprocal style was implemented in the first experimental group (n=21, nine males and twelve females), the self-check style was used in the second group (n=25, eleven males and fourteen females) and the third group functioned as the control group (n=24, eleven males and thirteen females), where dancing was taught in the ordinary way that is, following the command teaching style. For the implementation of the three different lessons, a series of steps took place: a) based on the structural-morphological sketch of Martin and Pesovár (1961) and of the International Folk Music Council (I.F.M.C. 1974), cards for the structural analysis of the dance to be taught were created so as to determine its kinetic motifs, b) lesson plans for each group were prepared aiming at fostering the acoustic-rhythmic perception and learning the movement patterns of the dance and c) cards including criteria for reciprocal (pairs) and self-check styles (individual) were created.

The card with the criteria for each teaching style was divided in four separate learning objectives: 1. The development of the acoustic-rhythmic perception of the participants in the specific dance lesson, 2. Learning the first and second motifs of the dance and synchronizing them with its melody, 3. Learning and synchronizing the third motif of the dance with its melody and 4. Learning and synchronizing the movement phrase of the dance with its melody.

The tasks for the learning objectives were common among students. A variety of songs was chosen during the learning process, not only to let students develop knowledge of the wealth of melodies and songs accompanying the dance but also to avoid monotony. For the development and improvement of students’ kinetic responses to the dance rhythm (first aim), three exercises were created and the observable criteria had to do with: a) the amount of students’ coordination of various movements with the rhythm of dancing, b) their ability to perform the un-isochronous parts of the duple musical meter of dancing in the time signature 5/8 and c) their ability to rhythmical numerate these un-isochronous parts.

The tasks regarding the other objectives had to do with i), learning the dance motifs separately, ii) learning the whole movement phrase of the dance and iii) the coordination with the music-rhythm of the dance. Likewise, the objectives initially referred to the step types (simple-complex), accurate direction, correct body stance and hands positioning, emphasis on the dynamic elements of movement and finally, the coordinated performance of all the above while listening to the dance beat. After a series of drills, the student-observer (reciprocal) or the students themselves (self-check) noted down in the criteria cards if the criteria were met or if there was room for improvement. Each pair of students (reciprocal) or every student on his/her own (self-check) had the opportunity to devote as much time as they thought was needed for the completion of the task thus, moving on to the next task by setting their own time. The pair of students or the students themselves who completed the tasks for every learning objective got the instruction to repeat any exercise considered himself that he needed more practice, until the whole group was completing all the exercises. Then, the whole group gathered in a circle and performed the dance. The aim was the improvement of team coordination in the performance of the dance in a round pattern from the whole team.

The duration of the lesson was one hour and 30 minutes. On the whole, 45 minutes were devoted to learning how to dance. The rest of the time was spent videotaping each student regarding their cognitive and kinetic assessment, and filling in the questionnaires.

Before being put into practice, the program with the two teaching styles (reciprocal and self-check) was pilot tested, whereby exactly the same process was followed. The pilot study was conducted in order to track any problems in terms of the effective use of the criteria sheet for each teaching style, the time required to complete the lesson and the allocation of tasks both among students and in relation to the location and music. The questionnaires were filled in at the end of the lesson; it took students about 15 minutes to answer them and this was done individually.

Statistical analysis

In order to track any differences in the aforementioned psychological factors, a two-way analysis of variance (two-way ANOVA) was used with the independent variables of: a) gender (male-female students) and b) teaching styles (reciprocal, self-check, command). A Tukey post-hoc test was used to locate significant differences among means. The significance level was set at $p < 0.05$.

Results

Reliability

In order to assess the internal consistency of the scales, a Cronbach's alpha test was computed (Cronbach, 1951). The internal consistency of the scales was acceptable with reliability coefficients ranging from 0.79 - 0.86 (Table 1). The reliability coefficient of the autonomy factor was 0.69. The 4th question, however, for this factor was removed and the reliability coefficient reached a value of 0.74.

Table 1. Internal Consistency of the scales.

	α-Cronbach
Intrinsic Motivation	.86
Identified Regulation	.79
Extrinsic Motivation	.81
Amotivation	.83
Enjoyment	.86
Autonomy	.74 (.69)

Differences by Gender and Teaching Style

Mean values and standard deviations of the three groups (males and females separately) in motivation parameters are shown in Table 2.

Table 2. Mean values and standard deviations ($M \pm SD$) of the three groups (males and females separately) in motivation parameters.

	Reciprocal			Self-Check			Command (control group)			Total
	male	female	total	male	female	total	male	female	total	male female
Intrinsic Motivation	3.25±0.43 ^a	4.29±0.61 ^c	3.9±0.75	4.43±0.46	4.32±0.59	4.4±0.53	3.61±0.74 ^a	3.75±0.48 ^b	3.7±0.60	3.80±0.74 4.12±0.60
Identified Regulation	3.2±0.45 ^a	4.02±0.62 ^c	3.7±0.69	4.25 ±0.37	4.2±0.63	4.2±0.52	3.5±0.72 ^a	3.65±0.5 ^b	3.6±0.60	3.67±0.69 3.96±0.61
Extrinsic Motivation	3.39±0.56	3.1±0.91	3.2±0.78	2.55±0.97	2.64±0.95	2.6±0.94	3.43±0.53	2.44±0.61	2.9±0.76	3.10±0.81 2.72±0.87 ^{e,f}
Amotivation	2.9±0.27 ^a	2.0±0.61 ^c	2.4±0.68	1.82±0.63	1.82±0.75	1.8±0.69	2.61±0.69 ^a	2.4±0.63	2.5±0.66	2.43±0.73 2.07±0.70
Enjoyment	3.77±0.6 ^a	4.55±0.34 ^c	4.2±0.60	4.47±0.39	4.37±0.56	4.4±0.49	4.09±0.79	3.97±0.62 ^d	4.02±0.69	4.13±0.66 4.30±0.57
Autonomy	3.08±0.32 ^a	3.57±0.63 ^c	3.4±0.56	3.89±0.39	3.49±0.59	3.7±0.54	3.27±0.64 ^a	3.15±0.43	3.2±0.53	3.44±0.58 3.40±0.57

a: $p < 0.05$ from self-check group males, b: $p < 0.05$ from self check group females, c: $p < 0.05$ from reciprocal group males, d: $p < 0.05$ from reciprocal group females, e: $p < 0.05$ from reciprocal group total, f: $p < 0.05$ from males total

Intrinsic Motivation

From the two-way analysis of variance between the two factors, a statistically significant interaction $F_{(2, 64)} = 6.286$ ($p=0.003$) was found. Significant differences in intrinsic motivation between male students of the reciprocal and self-check style groups ($p=0.001$), and between male students of the command (control group) and self-check style groups ($p=0.008$) were observed. The self-check style was the most prevalent in both cases. In females, significant differences in intrinsic motivation were found only between the self-check and the command groups ($p=0.032$), with the style of self-check presenting higher values. Significant differences were found also between females and males of reciprocal group ($p=0.000$).

Identified Regulation

Regarding identified regulation, the analysis of variance of two factors showed a significant interaction of the two factors $F_{(2, 64)} = 3.858$ ($p=0.026$). In males, significant differences between the reciprocal and the self-check groups ($p=0.001$) and between the command style and the self-check groups ($p=0.008$) were noticed. The score of self-check teaching style had higher values in both cases. Statistically significant superiority was found among females of self-check and control group ($p=0.046$), while females of reciprocal group noticed significant difference from males of the reciprocal group ($p=0.001$).

Extrinsic Motivation

From the two-way analysis of variance between the two factors (teaching style-gender), no statistically significant interaction ($p=0.066$) was noticed. A significant main effect for the gender factor $F_{(1, 63)} = 4.137$ ($p=0.046$) was observed with males presenting higher values compared to females ($p=0.046$). In addition, a significant main effect for the teaching style factor $F_{(2, 63)} = 3.777$ ($p=0.026$) was observed with the reciprocal style having higher values compared to the self-check style.

Amotivation

Regarding amotivation, there was a statistically significant interaction between the factors gender and teaching style $F_{(2, 64)} = 3.372$ ($p=0.041$). Statistically significant differences in males were found between the self-check and both the reciprocal and the command styles. In addition, females of reciprocal group noticed statistically significant lower values in amotivation than males from the respective group ($p=0.001$). No differences were observed between the three teaching styles in females.

Enjoyment

The results indicated a statistically significant interaction between the two factors $F_{(2, 64)} = 4.356$ ($p=0.017$). Statistically significant differences were indicated between male students of the reciprocal and self-check groups ($p=0.025$) with the latter style presenting higher scores. Also, significant differences were found between female students of the command and the reciprocal groups ($p=0.039$) with the reciprocal teaching style being the most prevalent. Females from the reciprocal group noticed significant differences from males of the respective group ($p=0.003$).

Autonomy

The results of the analysis between the two factors indicated a statistically significant interaction $F_{(2, 64)} = 4.078$ ($p=0.022$). In males, significantly higher scores were found in the self-check group compared to both the reciprocal and the command styles ($p=0.002$). Females also from the reciprocal group noticed significant differences from males of the respective group ($p=0.043$). No differences were observed between the three teaching styles in females ($p=0.116$).

Discussion

The current study was conducted in order to investigate the effects of reciprocal and self-check teaching styles on intrinsic motivation, identified regulation, extrinsic motivation, amotivation, enjoyment and autonomy, among male and female students during one lesson of traditional Greek dancing. It was found that both teaching styles resulted in an increase of intrinsic motivation, identified regulation, enjoyment and autonomy while contributing to a decrease of extrinsic motivation and amotivation compared to the most widely used teaching style, the command style. Overall, the self-check teaching style was the most prevalent of all. On the contrary, the command teaching style was much less associated with motivated behavior. For male students, it was the self-check style that was found to reinforce motivated behavior more than the other two styles while for female students, apart from the self-check teaching style, the reciprocal style was found to be equally reinforcing.

Regarding intrinsic motivation, the results indicated that the self-check style was the most preferable in comparison with the reciprocal and the command teaching styles both for males and females. These findings, which are in agreement with the results of relevant studies in the field of school physical education (Mizios et al. 2009), make clear that the self-check style plays a crucial role in enhancing intrinsic motivation. This is also indicated by the high score ($M=4.40 \pm 0.53$) given by the students which reveals that all of them agreed that they experienced satisfaction, fun and generally, felt well during the lesson. As for male students, the self-check group, felt intrinsically motivated to a much greater extent than the other two groups which followed the other styles. Further, it was shown that the reciprocal teaching style is less preferred by male students than the command teaching style, which is evidently the most teacher-centered style. For female students the reciprocal style seems to be equally effective with the self-check style for increasing intrinsic motivation. The less preferred

style for female students is the command teaching style. Apparently these differences between males and females owes to the fact that the self-evaluation and self-triggered knowledge expansion experienced by male students during the lesson, matched their temperament more. In contrast, female students are more likely to be motivated by cooperative methods, given that they have the potential to attract as much attention from their fellow dancer-observer as possible (Digelidis, 2007).

Significant differences were also found in the factor of identified regulation. The experimental group that was exposed to the self-check style of dancing attracted more participants than the reciprocal and command (control group) groups in total. The male students of the self-check group almost totally agreed ($M=4.25\pm0.37$) that the self-check style enhanced their perceptions about the usefulness of that specific lesson. This was not evident for the males of the other two styles. Female students of the reciprocal style had almost as high scores in identified regulation as the females of the self-check style. It can be therefore deduced that, for female students both teaching methods play an equally important role in the reinforcement of identified regulation, in contrast with male students who showed uncertainty ($M=3.2\pm0.45$) as to the amount of usefulness of the activities in the way they were organized in the reciprocal style. It could be mentioned here that the sense of autonomy stemming from the male students' ability to diagnose their strong or weak points, may originate in gender behavior.

As for as it concerns extrinsic motivation, female students were less extrinsically motivated ($M=2.7\pm0.87$) and more confident about their answers than male students. Male students, regardless of the teaching style, were not as confident in the question: "Why were you involved in the today's lesson activities?" since options like "because I had no other choice" or "because I had to do it" monopolized their responses ($M=3.1\pm0.82$). In other words, their uncertainty as to whether their participation to the lesson stems from their extrinsic motivation is obvious. On the other hand, this similar finding could be considered a sign of good organization of the lesson itself. Across the measurements, those who were exposed to the self-check style showed the lowest extrinsic motivation. They disagreed with the fact that they participated in pre-planned activities (self-check group) "because they had to" or "because they had no other choice". This finding is a testimony to the prevalence of the self-check style against reciprocal and command styles in the factor of extrinsic motivation.

Regarding amotivation, male students from the self-check group gave the lowest rates and were significantly different from the corresponding rates of male students from the reciprocal and command (control group) groups. Male students totally disagreed ($M=1.82\pm0.63$) with the fact that the activities of the specific lesson "were no good" or "weren't worth doing". The same views were expressed by the female students from the self-check group ($M=1.82\pm0.75$) although the difference in the rates from the other two groups of female students was not different (reciprocal $M=2.0\pm0.61$, command $M=2.4\pm0.63$). They clearly stated the lack of amotivation, especially when they were exposed to styles where most part of decision-making was handed over to them (self-check and reciprocal).

As for enjoyment, male students were satisfied by the lesson conducted in the self-check style more than female students, whereas it seems that female students converge on the reciprocal style for enjoyment, giving no different results from the self-check style but different from the command style. The same findings applied to the autonomy factor, where male students felt greater autonomy in the self-check group than those in the other two groups, possible due to the greater sense of self-regulation in learning during that lesson (Papaioannou et al. 2012). After all, high levels of autonomy and feelings of self-determination are known to lead to an increase in intrinsic motivation (Deci & Ryan, 1985). However, female students seemed to consider the reciprocal style activities as a more supportive motivational climate. The present study indicates a positive attitude of both male and female students towards the use of the two teaching styles as they experienced a motivational climate that was supportive of their autonomy thus, leading to their satisfaction from the lesson of traditional Greek dancing.

There is no doubt that during the specific lesson of traditional Greek dancing followed in the present study, the self-check style was the most prevalent for male students across all measured factors. A highly positive attitude towards the reciprocal style was also shown on behalf of female students, considering that it equally favors all the psychological factors responsible for a suitable learning environment for Greek dancing as the self-check style. Taking into account the current teaching practices, where the teacher is the rule-maker in teaching Greek dances, while the student is expected to follow orders and mimic actions, we would expect that male and female students opt for the command teaching style. Yet, it was proved that the self-check and reciprocal conditions were preferred to those of the command style, which leads to the conclusion that students expressed the need to participate in a learning process different than the ordinary. In such a learning process, the learners' need to enact their multiple roles is satisfied through a teaching approach where a sense of autonomy, self-regulation, self-observation and peer feedback is provided.

The command style is being used almost exclusively in learning not only the steps of the traditional dances internationally, but also all the elements coming from them (i.e. the form of motion of the human body, the relationship between a man and a woman, the relationship between the dancers in various dance formations) that represent each cultural group. Gibbons (2007) states that the performance of traditional dances and aerobics, where a group of people is moving synchronously, is based mainly on the command style and the students are more familiar with this style because of its exclusive use. However, the exclusive use of the command style can

lead to negative student feelings since many times teachers overuse it for control and punishment. The reciprocal and the self-check styles offer new experiences to the students, since they have the opportunity to observe, to compare performances and provide feedback to their pair (reciprocal) or to themselves (self-check). In addition the use of these two styles makes teachers aware of students' social and psychological needs, resulting in a more favorable learning environment. Of course, there is room for further research in order to generalize current findings to cater for students from different age groups or different levels of experience in dancing or to curriculums for different cultural groups or for advanced dancers.

The main aim of the present study was not to prove the superiority of the self-check and the reciprocal teaching styles against all others that could be put to use in learning traditional dances, but rather to examine the properness of the above two styles as teaching styles. Indeed, this is one of the first research attempts regarding the aforementioned styles which are recommended for teachers of dancing to use when they target at fostering a supportive environment to reinforce psychological factors, self-regulation and other emotional skills. Therefore, this study highlights the need for teachers of dancing to be aware of the various teaching styles that will help them make optimal decisions as to select the appropriate style in order to achieve their teaching goals. Finally, the existence of different learner strategies for the acquisition of knowledge stemming from their different kinetic, cognitive and social needs makes the use of different and varied teaching approaches necessary.

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