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STUDENT'S ATTITUDES TOWARDS DIFFERENT WAYS OF GROUPING STRATEGIES IN PHYSICAL EDUCATION.

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SUMMARY

The aim of this study was to examine the effects of group forming in motivation's perception in P.E. class. The group formation concerned the initiative (teacher's-students'), and the kind of groups (mixed-homogeneous) in football and volleyball. The sample was 108 male and 100 female junior high school students in Eastern Macedonia aged 13.1, who answered in anonymous questionnaires (Theodorakis, 1994, McAuley, Duncun & Tammen, 1989, Fox & Corbin, 1988), which measured the usual class training, group formation's attitudes, the internal motivation considering pleasure, effort, perception of athletic ability and pressure. For the statistical analysis one-way ANOVA has been used. The results about football have shown statistically significant differences between the sexes, towards attitudes, where the girls preferred the teacher's group formation ($F_{(1,203)}=3.89$, $p<.05$), the cooperation with people of opposite sex ($F_{(1,203)}=10.77$, $p<.001$), and mixed group formation ($F_{(1,201)}=5.75$, $p<.05$), whereas boys preferred homogeneous group formation ($F_{(1,206)}=9.35$, $p<.01$). In volleyball, girls preferred their own group formation ($F_{(1,204)}=5.21$, $p<.05$) and the cooperation with the opposite sex ($F_{(1,203)}=4.02$, $p<.05$). Also, in football, boys scored higher as far as pleasure is concerned ($F_{(1,190)}=19.76$, $p<.001$), and the perception of athletic ability ($F_{(1,198)}=71.42$, $p<.001$), whereas in volleyball girls scored higher in pleasure scale ($F_{(1,196)}=29.79$, $p<.001$), and psychological pressure ($F_{(1,199)}=10.79$, $p<.001$). Above outcomes could be of great help to the P.E. teachers trying to create groups for the specific sports, in order to achieve high internal motivation.

Key Words: attitudes, motivation, sex, group formation, P.E.

Introduction

In the later years, student motivation in physical education (pe) has become an attractive issue for researchers of pe as well as for teachers in school environment.

Researches in Greece during the past years have shown that children motivation is gradually decreased as the school years are going by. In a research conducted in 30 Greek schools (10 elementary schools, 10 junior high and 10 high schools), Mr. Digelidis and Papaioannou (1999), have found that while children are growing up, they put less effort in pe course, they feel less capable, have less fun and their mood for learning even the teacher's emphasis on learning is gradually becoming less.

Similar researches have shown that from fifth grade of elementary school, until last year of high school, student motivation is dramatically decreased (Papaioannou, 1992, 1995a, 1997; Papaioannou & Digelidis, 1996; Papaioannou, Goudas & Theodorakis, 1999). Those researches have shown that high school students have been showing much less interest in pe course, they have been treating it as the least useful course for their future and their activities during it have been much less enthusiastic compared to those noticed in junior high school students. In advance, they were considering that this course was less focused on the task compared to junior high school one.

Worth mentioned are the differences in the division of class into teams in P.E. course, as well as the different ways of choice and categorization of students into them. For the purpose of pe course, students can be divided (Avgerinos, 2000) : a) in lines, b) in small or larger groups, c) in teams and d) in free row. Categorization of students can be done according to a) sex, b) teacher or students and c) random or pre decided way.

Eipstein (1988, 1989) suggests the random way of grouping students in pe, as far as the given priority is the creation of a positive motivation during the class. Also, same researcher has suggested the adoption from teachers' point of view, a frame of disciplines which promote creation of positive reinforcement in P.E. class, enhancing this way the learning orientation of students. This frame was named TARGET (Task, Authority, Recognition, Grouping, Evaluation, and Time). Among those dimensions, target and grouping can be considered as elements of educational intervention that have to do with class organization. Creation of small groups of two to six persons is one of the factors that maximizes academic learning time and practice of students.

Group of teachers (2004) mentions that the teacher should take into account the group division that can be done in three ways: a) by the teacher, b) by the students and c) by cooperation of the two mentioned above. The last two ways are those fitting most in a modern school, and the best among them is the second one, grouping by the students. Case students are incapable of doing so, teacher has to cooperate in order to solve the situation.

In advance, Mountakis (1992), mentioning the course organization indicates that grouping the students becomes less effective when it is done based on sex, since it is already known that there are no innate differences between girls and boys. He suggests the class division in two teams of same more or less capabilities, and teaching should be adjusted to students' potentials.

Grouping the students in P.E. class can be done in various ways, affecting their motivation. According to researches, differentiation noticed in class motivation in P.E. course is often affected by the course content and influenced by the sex. More precisely, it has been mentioned that boys prefer team sports compared to girls who choose individual ones (Figley, 1985; Luke & Sinclair, 1991). It is also possible for a student to show different levels of motivation in different sport activities (Goudas & Biddle, 1993), and as a result he has different way of reacting in them.

All mentioned above have been a source of thinking, offering the incentive for more detailed research of the factors deal with student motivation. More specifically, it refers to the impact of grouping student based on sex in order to find out the positive or negative reinforcement the course offers depended on the way the groups are formed.

Aim of the above project was to find out the effect of grouping students in terms of equality and motivation in pe classes.

The importance of the specific research is the discussion of differences coming up while grouping the class in different ways during pe class and reporting those different opinions based on course content and sports that most probably have to do with participants' sex (e.g. football).

Methodology

Participants

In the specific research 209 students from northern east Greece have participated(108 boys and 100 girls) of average age 13.1 (SD± 0.4). None of them has revealed sex. Sample has been taken from a first year of junior high school class, each one belonging to a different region of the area mentioned above. Random sampling has been used to choose specific classes, taking into account only sex factor.

Data collection methods

Data have been collected after questionnaire distribution which included questions about:

- a) Casual group forming in class(teacher grouping, student grouping, mixed or single sex grouping),
- b) Student opinion (7grade scale from 7= very good to 1= very bad), on grouping (2 questions: one from teaching and another from students' point of view), cooperation(2 questions: with people from same and different sex), and group forming(2 questions: mixed and unmixed groups) (Theodorakis, 1994).
- c) Internal motivation of students (5grade scale, 5= absolutely agree to 1= absolutely disagree) about pleasure/ interest (4 questions) (McAuley, Duncun & Tammen, 1989), effort/importance (3 questions) (McAuley, Duncun & Tammen, 1989), perception of sport capability (5 questions, 5= that's exactly the way I am and 1= not myself at all) (Fox & Corbin, 1988) and finally pressure/intense (2 questions) (McAuley, Duncun & Tammen, 1989). Questionnaire's grading have been formed in such way so students answer questions about football and volleyball respectively.

Measurement process

Research has been conducted in May, so participants have had a complete view of how the course had been done. Sports that took part in it had been football and volleyball. Each student participating in it, had to complete an anonymous questionnaire before the P.E. class begins without the teacher being present. Time to complete the task was settled to 15-20 minutes.

Research design

Statistical analysis

Statistic software SPSS 11.0 has been used for results analysis. Also analysis of another factor has been conducted (one-way anova).

Results

1. Group forming initiative

81.3% replied that football teams were formed after students' initiative, and 18.2% replied that it was teacher's initiative. Respectively on volleyball, 69.9% of students claimed it has been their initiative, where 28.7% said it was the teacher's one.

2. Grouping on sex factor

As far as the type of groups is concerned, for football, 61.2% claimed that teams were mixed, whereas 38.3% replied that teams were of same sex. In same percentages were the volleyball replies, 61.7% on mixed teams and 36.8% on same sex teams).

3. Students' point of view

3.1 Football

Statistically important differences have been noticed on football as far as students' grouping by the teacher is concerned ($F(1,203)=3.98, p<.05$). Girls have had higher scores ($M=4.71 \pm 0.98$) compared to boys ($M=4.3 \pm 1.34$). Similar results have been noticed on the formation of mixed groups ($F(1,201)=5.75, p<.05$), with girls scoring higher ($M=5.25 \pm 1.17$) compared to boys ($M=4.82 \pm 1.38$). Students' reactions on forming single sex groups had revealed important differences ($F(1,206)=9.35, P<.01$) having boys scoring higher in their answers ($M=4.92 \pm 1.14$) compared to girls ($M=4.10 \pm 1.36$). Cooperation with different sex students showed important differences too ($F(1,203)=10.77, P<.001$) with girls scoring respectively higher ($M=4.92 \pm 1.14$) than the boys ($M=4.29 \pm 1.55$).

3.2 Volleyball

In volleyball statistical differences have been noticed in students' opinions on forming group themselves ($F(1,204)=5.21, P<.05$) with girls scoring higher ($M=5.21 \pm 1.22$) compared to boys ($M=4.81 \pm 1.28$).

Finally, cooperation with same sex students has shown important differences ($F(1,203)=4.02, P<.05$) with girls scoring again higher ($M=4.87 \pm 1.16$) compared to boys ($M=4.52 \pm 1.33$).

4. Internal student's motivation

4.1. Football

In particular, in football there have been significant changes in having fun during the lesson ($F(1,190)=19.76, p<.001$), as the boys have more fun ($M=4.04 \pm .77$) in comparison with the girls ($M=3.54 \pm .77$). Similar results have been shown in their perception of their athletic ability ($F(1,198)=71.42, p<.001$), having the boys presenting higher scores ($M=3.49 \pm .82$ in contrast to $M=2.48 \pm .87$ from the girls).

4.2 Volleyball

In volleyball, having fun during the lesson ($F(1,196)=29.79, p<.001$), has been remarked significantly higher in girls ($M=4.22 \pm .62$). in comparison with the boys ($M=3.58 \pm .99$). Finally, the mental pressure they feel before the lesson ($F(1,199)=10.79, p<.001$), had remarkable differences between boys ($M=2.64 \pm .135$) and girls ($M=2.06 \pm .115$).

5. Connection between variables in internal motivation

5.1 Football

In football, there have been statistically significant connections between effort and fun ($r=.21, p<.01$) having the children who enjoy more, putting more effort than those who do not enjoy it. Moreover, there has been statistically significant connection between the perception of their ability and fun ($r=.42, p<.01$), where the children that feel more capable, enjoy more than those who do not feel as capable as them.

5.2 Volleyball

In volleyball, there have been statistically significant connections between effort and fun ($r=.41, p<.01$), having the children who enjoy more, putting more effort than those who do not enjoy it. Furthermore, there has been detected connection between the perception of their ability and fun ($r=.39, p<.01$), where the children that feel more capable, enjoy more than those who do not feel as capable as them. Finally, there has been statistically significant connection between the perception of ability and the effort

that students believe that they put during the lesson ($r=.22$, $p<.01$), with those who feel more capable of trying even more.

5.3. Football – Volleyball

Between variables of football and volleyball there have been statistically significant connections between having fun at the volleyball course and at the effort that students put at football ($r=.22$, $p<.01$), where the children that enjoy volleyball more, try more at football as well. In addition there has been a connection between the effort that student put at volleyball and the effort that they put at football ($r=.47$, $p<.01$), where the children that put an effort at one sport, act the same in the other too. Additionally, connection has been detected between mental pressure that students feel at volleyball with the mental pressure they feel in football ($r=.40$, $p<.01$), where the children that feel mental pressure at volleyball, feel the same mental pressure at football too. Moreover, there has been statistically significant connection between the mental pressure that students feel at volleyball with the perception of their ability at football ($r=.28$, $p<.01$), where the children that feel more capable in football, feeling more mental pressure in volleyball. Finally, there has been connection between the perception of ability in volleyball and the perception of ability in football ($r=.35$, $p<.01$), where children that feel more capable in one sport, feel more capable in the other as well.

Conversation – Results

The result analysis of the current study indicates that there is a great difference as far as student's attitude and internal motivation are concerned in association to sex. This difference is detected both at the type of the course and the way that the groups are formatted in the P.E. course. The kind of activity differs significantly the student's motivation as well as their preferences concerning the group formation.

More specifically, it has been ascertained that student's attitude towards the sport of football was different depending on their sex. Girls preferred the teacher's formation of the groups, maybe because they believed that he/she would be fair enough on separating the groups, having as a result equal groups. They were also more positive in creating mixed groups and collaborating with people of the opposite sex, something which is probably explained by the different way the boys face football contrary to the girls. On the contrast, the boys preferred mere group formation, something which may be

rooted in the fact that boys assume girls as less capable, having as result the participation of girls in the same group with them as an obstacle in the smooth conduction of the game.

As far as the attitude towards volleyball is concerned, it has been ascertained that girls prefer the groups to be formatted by themselves, not by the P.E. teacher, something which is probably happening due to fact that in volleyball the differences between the two sexes are not as obvious as they are in football. The results also showed that, the girls were more positive in collaborating with people of the opposite sex in volleyball. This preference may rise from the chance the girls have to show their skills, since they do not lack in it from the boys.

As far as student's internal motivation in football is concerned, it has been ascertained from the results that boys feel more capable than girls, something which leads to the boys' occupation with football. According to Mountakis (1992), boys at the 1st grade of junior high school know how to play football better than girls, a fact that lies in the boys' occupation with football. According to Mountakis (1992), boys at the 1st grade of junior high school know how to play football better than girls, because it is more socially accepted to play football on the street or in the school's yard than the girls. The perception of ability, meaning how capable a person feels, is one of the factors that affect motivation. The internal motivation towards an activity is high when the person feels capable in that activity (Deci, 1975). Furthermore, it has been shown that boys have more fun during the P.E. course, when they play football, than girls, a fact that is probably happening due to their perception of ability that they feel in contrast to girls.

As far as internal motivation in volleyball is concerned, it has been ascertained that girls have more fun than boys, maybe because volleyball is a sport that is more familiar to them, and they know how to play it better than football, having as a result their participation creating positive feelings to them and higher levels of fun. Moreover the results have shown that boys feel more mental pressure when they have to play volleyball during the pe course contrasting to girls. This may occur because volleyball is a group sport, however the results of a personal effort are immediately obvious to the participants. Consequently, many boys (especially those who are not, or do not feel, capable enough) may be assumed that if they do not handle the situation, they will be judged by their classmates. This is a situation that raises their mental pressure levels when they have to play volleyball.

It has also been ascertained that students who feel capable enough, have more fun. The perception of their ability seems to be more significant and affects not only the choice, or not, of one activity, but also their desire to continue taking part in it (Bibik, 1993). In addition it has been ascertained that the more fun they have, the more effort they put. The enjoyment that someone feels participating in a sport activity seems to be an important key to keeping the person attached to regular exercising. (Scalan & Simons, 1992).

Moreover it has been remarked that there is a connection between the perception of ability and the effort they put in volleyball. Research data enforce this result, since it has been proved that the more capable a person feels, the more effort he/she puts during the exercise (McAuley & Tammen, 1989, Williams & Gill, 1995, Granleese, Turner & Trew, 1989; Weiss & Horn, 1990; Bibik, 1993, Whitehead, 1995, Welk, Corbin & Lewis, 1995), and the more he/she is interested in the activity (Jourden, Bandura & Banfield, 1991).

It is remarkable that students who perceived how capable they were in one sport, had high perception of ability as well in the other one and when they put an effort in one sport, they put an effort in the other too. Zinsser and Gambarella (1993) indicated that someone may think he/she is going to make it, or that he/she is able to make it, without necessarily this happening. However it seems that this enforces them psychologically in participating and trying.

It has also been shown that children, who feel mental pressure in volleyball, feel mental pressure in football as well. According to Papaioannou, Theodorakis and Goudas (2003), the most basic causes of creating stress are the insecurity in association to the importance of the result, as people perceive it. When students doubt about their abilities, then they are prone to present stress.

Additionally, a connection between the perception of ability in football and the mental pressure in volleyball has also been remarked, a fact that is possibly related to the finding of statistically important differences on boys' perception of ability in football contrary to volleyball, and the accession of greater mental pressure in volleyball. The fact that they feel more capable in football, may cause the a feeling of greater mental pressure.

Finally, there has been a connection between the enjoyment in volleyball and the effort in football, a fact that is probably related to the accession of differences between boys

and girls in volleyball, where girls have more fun than boys, and the lack of statistically significant differences concerning the effort both sexes put in football.

Everything mentioned according to Goudas and Bible (1993), who mention that a student can show different levels of motivation in different athletic activities. Moreover in Goudas, Bible and Fox's research (1994b), where the students' internal motivation has been compared in two different athletic activities, accredited the difference in internal motivation to the content of the course and mostly to the children's different perceived ability depending on the activity. The different levels of motivation in comparison to the different P.E. courses may be rooted partly in prejudices that regard exercising in general. According to Goudas, Dermitzakis and Bagiatis' research (2000), prejudices on the kind of the exercises in connection to the sex may affect the students' motivation through their expectations they have for each P.E. course.

All the results mentioned beyond may be of great help to P.E teachers trying to create their groups for the specific sports, so that they can have a course that conform with the students' preferences, raising the possibilities for the students to participate in it by this way eagerly. As a result, it could be remarked that it would be advisable the P.E. teachers to try to integrate all the students in each course, using different ways of group formation, depending on the situation, and find out different methods for the balance of the students' differences for each athletic activity, so that on the one hand they can achieve an atmosphere of high internal motivation and on the other hand all the children participating in it.

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