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EFFECTS OF TOGETHER LEARNING ON UNIVERSITY STUDENTS TO ACHIEVEMENT MOTIVATION

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ABSTRACT:

The purpose of this paper is to describe the effects of Together Learning (TL) on the achievement motivation of college students, as well as to compare the achievement motivation of physical education students learning basic tennis skills via Together Learning versus those using the traditional learning method. In this study, an intervention approach was designed as part of a novel learning method to encourage the performance of physical education, and students (average age =20.3 years, N= 60) were encouraged to participate as part of their physical education classes to learn fundamental tennis abilities. The survey was administered as a pre-test at the start of therapy for both the treated and control groups. The Achievement Motive Scale (AMS) was used in this study, as well as the Hewitt test to basic tennis abilities and as post-tests at the conclusion of 10 weeks. The T-test was performed to determine whether there were statistically significant differences in achievement motivation across the groups. Conclusions and Suggestions: According to the data, the jointly learning classes boost college physical education students' accomplishment motivation and basic tennis skill acquisition.

Keywords: Together Learning, Physical education, Students motivation.

1. INTRODUCTION

Since 2003, Iraq's political system has begun to shift toward local democracy and autonomous diversification. These changes in Iraq's political and economic systems have created a favourable environment for educational reforms, which have shifted from a rigid and closed system to one that is more open. In addition, the national curriculum has undergone significant revisions. Following the adoption and implementation of a new curricular concept in educational institutions after 2003, the Iraqi Ministry of Higher Education and Scientific Research (2007) officially launched the Course Standard of Educational Institution and Health, which outlines the general direction and aim for educational institution reform in the next decade, suggests that educational institution focus must shift from sport skill-related goals to health, fitness, cognitive, and social goals. In this new concept, the advanced curriculum intends to develop motor competencies as well as sports participation, promote healthy and safe lifestyles, and social adaptability of students (The Iraqi Ministry of Higher Education and Scientific Research, 2007). To achieve the goals of the current curriculum in the classroom, should shift educational institution the teaching from direct instruction that focuses on the mastery of techniques to a facilitative style of teaching that emphasizes student interests and needs necessary in the education process (The Iraqi Ministry of Higher Education and Scientific Research, 2007). Based on these recommendation principles, various new pedagogical models have begun enter in the primary and secondary schools in Iraq. As a student-centered and inquiry-based pedagogical model, together with learning (TL) was introduced in Iraq after 2003. At present, together learning method is provided as part of a pedagogy course and a pedagogical model in during and pre-service in several schools and universities. Nevertheless, no studies on the effects of TL on students'

achievement motivation in Iraq have been conducted.

TRADITIONAL TEACHING:

The traditional learning model was influenced by Kairov's pedagogy (1956) in the Soviet Union (Tzu-Pu Wang, 2007). This teaching method begins with the instruction the teacher, then practice on students (Au, 2011). Instructor's behavior occupies a dominant position in the whole learning process educational, which cannot provide students with a chance in active learning and less opportunity to communicate with the classmate. As well, the physical educator may use inappropriate learning practices which can lead to students stand. Monotonous teaching method and boring teaching content not only restricted a variety of learning(Dunn & Wilson, 1991) "Waiting" students rarely experience the joy of involvement in activities methods' developing but also make a student lose interesting for educational curriculum (Wang, 2012). which can provide them a sense of worth, accomplishment, belonging, and pride.

TOGETHER LEARNING:

Cooperative Learning (CL) has been shown to be an efficient teaching strategy to both the instructor and learner (Al-Yaseen, 2014). CL refers to a variety of education methods in which the students work in a small team to assist one another learn academic content. In cooperative classrooms, students are expected to help each other, to argue and discuss with each other, to evaluate each other's current knowledge and fill gaps in each other's understanding (Gillies, 2007). Cooperation is working together in accomplish shared objectives. Working together to achieve a common purpose to produces achievement greater productivity than does working individualistically or competitively. A CL design is a model that guarantees to increase the motivation of students in a way that collaborates with the demands of the 21st century (David W Johnson, Johnson, & Smith, 2014). It has been asserted that CL has positive impacts on the learning process of the students, including success and their motivation (Ray, Leeper, & Amini, 2014). When it comes to academic success, it has been suggested that CL has a positive result on the school success of the students in numerous areas such as science (Ahmadpanah et al., 2014). In a longitudinal research in Hong Kong, the results of CL were found to be advantageous for improving attitudes towards learning such as 'having a voice' and 'self-learning'(Chan, 2014). Similarly, CL has been found to increase intrinsic values(Ning & Hornby, 2014). (Ning & Hornby, 2014) Found that CL increases intrinsic motivation more than traditional instruction. CL also affects the academic success of the students at university level(Tran, 2014). The together learning method is a technique developed by (David W Johnson & Johnson, 1989). The together learning shifting the focus of learning to the student (Dyson, Griffin, & Hastie, 2004). A primary goal in TL is that each student becomes heterogeneous groups to master the content. The students are not only responsible for learning the material, but also for helping their group-mates learn (Antil, Jenkins, Wayne, & Vadasy, 1998).

There is a growing body of study in education that reports the advantages to CL Considerable evidence exists to sustain the idea that students working in small cooperative teams can master the material presented by the teacher best than students working on their own (Slavin, 1996). CL also has social outcomes such as positive inter-group relations, the ability to work collaboratively with others, and the development of self-esteem (Slavin, 1996).

There is four major CL strategy: (a) structural, (b) conceptual, (c) complex instruction, (d) and curricular. First, (David W Johnson & Johnson, 1989) have established the theoretical approach, which is based on the facility that instructors can learn the fundamental elements of structuring productive CL strategy activities. (David W Johnson, Johnson, & Smith, 1998)

Presented five main elements that they believe are necessary for cooperative learning to be successful.

First, positive interdependence refers to each team member learning to depend on the rest of the team while working together to complete the task. Second individual accountability is defined as practices teachers, and trainers use to establish and maintain the student's responsibility inappropriate behavior, engagement, and outcomes. Third, promotive face-to-face interaction is head-to-head discussion around the group near each other. Fourth, interpersonal and small team skills are established via the tasks and include listening, shared decision making taking responsibility, learning to encourage each other and learning to give and receive feedback. Finally, group processing refers to time allocated in discussing how well the team members achieved their aims and maintained effective working relationships. One of the most attractive attributes of CL strategies is its dual focus on academic and social outcomes (Geok & Malaysia, 2011). Research has shown that TL can have a positive impact on social variables including inter-group relations, the ability to work collaboratively with others, and self-esteem (Slavin, 1996).

CL strategies work to place students at the center of learning. In a CL strategies lesson, all the students contribute to group work, and students rely on each other to complete the task achieve the goal. The teachers act as a facilitator and work to shift the responsibility to students while holding them accountable. Moreover, refers, (Barrett, 2005) that educators are not typically aware of the conditions that are essential to cooperative learning strategies to lead to positive outcomes in the classroom.

(Barrett, 2005) Suggested that "simply placing students in groups and asking them to will not ensure higher achievement or positive interpersonal outcomes." The implementation of CL is a complex process (Dyson, 2002), and it may take three or more years for an educator to feel comfortable with this instructional model (Dyson et al., 2004).

In physical education, CL has improved students' objectives for lessons, assisted students take responsibility via roles, enhanced students' communication skills, improves students' motor skills and strategizing, enhances students' working together, and aid students accountable via the use peer assessment and task sheets (Dyson, 2002). (Barrett, 2005) found that cooperative structures increased students' trials in sports skills units. Also, low- skilled male and female students also showed improved performances.

ACHIEVEMENT MOTIVATION:

Accomplishment Motivation was proposed by(Atkinson & Feather, 1966), They stated "the strength of motivation to perform some act is assumed to be a multiplicative function of the strength of the motive, the expectancy (subjective probability) that the act will have as a consequence the attainment of an incentive, and the value of the incentive: Motivation=f (Motive × Expectancy × Incentive)". Moreover, refers, (Atkinson & Feather, 1966)that a person's achievement-oriented behavior is based on three parts: the first part being the person's predisposition to achievement, the second part being the probability of success, and third, the person's perception of the value of the task.Motivation, as it relates to the students, is imperative. The training literature has reported exhibiting positive relationships with learning outcomes (Colquitt & Simmering, 1998). According to, (Wang, 2012) the students who have high motivations to accomplish succeed academically, and students with reduced motivation do not well succeed academically. In this article, the first purpose is to examine the effect of TL on students accomplishment motivation. The second aim of this experimental study is to investigate the effects of two different teaching methods on achievement motivation of college physical education students in Baghdad University, Iraq.

RESEARCH METHOD:

This research is implemented with quantitative approach. Two groups of students participated in this study including one control (Teacher-centered techniques) group and one experimental group. A pre-test/post-test research design was followed to investigate the effects of an intervention program using TL on the achievement motivation of college physical education students in the university.

30 students are in the experimental group while 30 students are in the control group. Experimental group are exposed to TL cooperative learning, while the control group is given the traditional. The subjects were 20-21 years old and were composed of 2 cohorts: (1) The first group (N=30) was used TL method (2) The second group (N=30) was applied the traditional teaching method. Instruments used in this study are the

The Achievement Motive Scale (AMS) was adopted in this study and Hewitt test to basic skills tennis tests which is measured using performance test tools.

This test is given to both groups before and after instruction is completed.

Data gathering is done twice – pre-test and post-test. The time duration for this research is 10 weeks.

This technique was employed to achieve an unbiased selection in subjects (Ary, Jacobs, & Razavieh, 1990). The intervention program was sent to a supervisory committee and experts in the field physical education in Iraq for checking the content of the plans. Most of the plans were amended to fit with the purpose of the study.

The two teachers aged from 38 to 40 Ph.D. title in physical education and sports science and had sixteen years of teaching experiences. The person who undertook has the expertise training of the teaching. The pretest scores assisted in determining the current level of the achievement motivation and the motor skills of students. After week tenth of the study, both two groups were subjected to the post-test which was administrated the same procedure as the pre-test. The Achievement Motive Scale (AMS) was adopted in this study and Hewitt test to basic skills tennis tests. AMS (Gjesme, Nygard, & others, 1970). This scale has 30 items, consisting of the motivation for seeking success and intention to avoid failing. Responses were coded on a five-point scale (from not at all =1, to very much =5). The individual's understanding of possibility for achieving the task would cause a need in achieve and a fear of failure. Both are strong emotions that influence the individual's decision on whether to attempt the task (Bar-Tal & others, 1974). If a task simultaneously arouses a person's motivation to approach the task and motivation to avoid the task, then the sum of the two motivations will be the results. If the result is more positive to approach the task, then the person will be motivated toward the task. If the results are more positive to avoid the task, then the person will be motivated to avoid the task (Atkinson & Feather, 1966). AMS has been translated into too many languages(Yeo & Tan, 2012) and widely used in many fields [32, 33]. The scale's split-half reliability is 0.75 and validity is 0.56, the coefficient of internal consistency is 0.63. Statistical program SPSS analyzed the quantitative data. Means were calculated for the experimental and control group based on the responses of the subjects from the AMS. The Paired-Samples t-test was adopted to examine the difference of student's achievement motivation between pre- and post-TL program. The Independent-Samples t-test was applied to compare the effects of the traditional teaching and TL on student's achievement motivation.

RESULTS

TABLE 1. INDEPENDENT-SAMPLES T-TEST OF ACHIEVEMENT BETWEEN TL GROUP AND CONTROL GROUP AT POST-TEST

	Achievement motivation	**SD**	**M**	**SD**	**M**
Ms	-5.27*	4.09	38.19	5.13	48.88
Mf	6.88**	6.36	30.09	3.18	22.9
Achievement motivation (Ms-Mf)	-2.00***	8.63	7.12	6.99	21.17

*p<0.05 **p<0.01 ***p<0.001

TABLE 2: PAIRED-SAMPLES T-TEST OF ACHIEVEMENT MOTIVATION BETWEEN PRE- AND POST-TEST IN CL GROUP

	Achievement motivation	SD	M	SD	M
Ms	-3.42*	6.30	38.25	5.13	48.88
Mf	6.48**	7.43	30.39	3.18	22.90
Achievement motivation (Ms-Mf)	-2.13***	8.70	6.90	6.99	21.17

*p<0.05 **p<0.01 ***p<0.001

Based on the result of Table 1, Difference was between the traditional teaching and the cooperative learning (t=-2.00, p=0.000<0.001). The mean scores of motivations in the control group (M=6.90, SD=8.70) was significantly lower than the experimental group (M=20.39, SD=6.96). From the result of Table 2, CL group had significant difference of pre-and post- test (t = -2.15, p =0.000<0.001). The scores of pre-tests (M=21.17, SD=6.96) is lowered than that of post -test (M =6.90, SD=9.76).

DISCUSSION AND CONCLOTION:

The application of TL at the university level revealed positive outcomes in terms of intrinsic value ((Tombak & Altun, 2016)

Self-determination theory asserts that students value education, gain self-confidence, and obtain interested in learning when they are fundamentally motivated (Deci & Ryan, 2000). Thus, educators claim intrinsic motivation to be a desired component of education as it positively affects learning in classroom(Ann MacPhail , Deirdre Lyons , Sheelagh Quinn, 2010), particularly its quality rather than the quantity according to a meta-analysis (Cerasoli, Nicklin, & Ford, 2014). For institution performance at university, intrinsic motivation has also been discovered to be an estimator in a meta-analysis where longitudinal studies were included(Chan, 2014). Hence, the positive impact of TL on the intrinsic motivation beliefs of university students is a gleaming sign for educators to apply the strategy.

In parallel with the increase in intrinsic motivation, the 'learning belief' of students considerably differed as a result of TL, implying that students not only considered themselves to be more motivated (intrinsically), but they also believed in their learning. It was found that students learn better when they have learning belief(Dandy & Bendersky, 2014), and teachers attend 'Continued Professional Development' in relation with their learning and teaching beliefs(Ibrahim, 2014).

Therefore, it is important to acquire learning belief for students and it was discovered from this research study that university students enhanced their learning beliefs as a result of TL.

Many studies have shown that self-efficacy is advantageous for academic success and students' learning in classroom(Tombak & Altun, 2016). Also, achievement motivation is better to be gained at university as teaching is strongly linked with the efficacy(Gerdner & Mcbride, 2015). Through TL, achievement motivation of students could be improved, which is advantageous for the bachelor programs.

Nevertheless, it was observed from the outcomes that the achievement motivation sub-scale did show a considerable difference between pre- and post-tests. This implies that students to direct themselves to the objectives of the lesson. This might be discussed in two ways: students had already directed themselves to lesson objectives were not obligatory but based on the will of the students to take it, or students did not direct themselves extrinsically as they had intrinsic motivation. ((Scheier & Carver, 2014; Cadima, Doumen, Verschueren, & Buyse, 2015). Nevertheless, a conclusive explanation for this problem might be investigated further in future research studies.

Students in this research study were expected to obtain the gist of 'different learning styles' and integrate this into their learning environments.

Correspondingly, the most frequent theme was discovered to be "learning styles". There are various reasons to reach this objective of the lesson: the lesson was designed in accordance with an effective method: TL; the lesson was focused on the big idea: "Everyone is different, so everyone learns in a different way"; and students received rubrics and corrections throughout the 10-week implementation process.

When student findings were analysed through the document analysis technique, it was observed that students integrated TL items in their posters and lesson plans. "Active learners, support learner, instruction stratgies, team work, and student interaction" were all components of TL, which was the medium of the lesson plan rather than the goal.

Consequently, one essential side effect of this implementation process was that students integrated TL strategy and components in lesson plans.

Research study supports the notion that implied learning is as effective as explicit learning(Çubukçu, 2012), so teaching students in the method they are expected to teach could be classified as an advantageous practice. This method, students would be utilizing TL as they are reported to require a deeper understanding of TL strategy(Chin, 2002). Nevertheless, when students utilize constructivist strategies, their achievement motivation increase(D.W. Johnson et al., 2014) and it has been noted that achievement motivation brings success within itself (Singh, 2011).

Altogether, TL has been discovered to provide an active learning environment for students at the university level. When an active learning environment is fostered, student participation (Obenland, Munson, & Hutchinson, 2012;Yazan et al., n.d.) and motivation to create a product(Ruan, Duan, & Du, 2015), both increase. Certainly, during the implementation of TL, students participated in the lessons and they were observed to be achievement motivated. They also reflected how well they learned the subject in their findings. Additionally, they improved their metacognitive awareness and reflected their awareness in their findings and dialogues in classroom.

Recommendations

TL has been observed to offer active learning. Through this kind of learning, students are offered an achievement motivation regarding themselves. Thus, TL must be encouraged at university level for the class involvement, motivation, metacognitive awareness improvement.

The specialists of TL would understand the positive and the negative elements of the strategy, they would utilize it more effectively, and they would obtain more accurate information regarding the strategy when it is executed in faculties of physical education. So, they could utilize the strategy in their teaching experiences more precisely and motivated. Their use of TL when they are practicing teaching might be investigated in relation with the TL implementation at university. Also, it is suggested for the researchers that the impact of TL application at university attitude towards teaching as a subject.

Two recommendations could be made for university classes: First, Integration of TL is beneficial for the motivation and learning of the students, second. The way of instruction is also not a hidden for the students. This study and suggested to be applied for further research. This way, the effect of TL could be put forward more clearly.

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