

**EFFECTS OF TENNIS ACTIVITIES ON ATTITUDE OF FIRST  
AND SECOND GRADE CHILDREN DURING  
PHYSICAL EDUCATION CLASS**

**Submitted by:**

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**Abstract**

The purpose of this study was to examine the effects of tennis activities on the attitudes of first and second grade children during physical education classes. The participants of this study were one hundred subjects, fifty first and fifty second grade students, with equal number of gender from each grade. The games were introduced to the subjects in groups of fifty representing the first grade, and fifty representing the second grade. Thirty minutes was allotted for game participation, and fifteen minutes to complete the inventory. Instructions and demonstrations were given prior to each of the activities. The subjects, after the conclusion of the activities, were asked to indicate their responses non-verbally, by selecting the appropriate face of like, dislike, or I don't know. The subjects were instructed before entering the responses to review the games, and stressed the fact that it was very important for them to be aware of the displaced position of the faces on each page, by asking them to point their fingers to the faces before choosing their preference. Design to analyze the data was Chi square. Analysis of variance by computer using GB-Stat. In conclusion there is no significance based on the .05 Alpha level. There was no difference between the attitudes of gender or grades toward games.

### *Introduction*

Today, children are experiencing more involvement in sports, with physical education classes contributing to the expansion of knowledge related to different sport fields. Interest into the investigation relative to students attitude in physical education has prompted several previous research studies into the area for many years. An important determinant contributing to the attitude in the physical education class, Figley (8) confirms the significance of the role of teacher to attitude development by the atmosphere created during the presentation of the activity. Humphrey (10) is supportive that presentation of the task should be intrinsically to motivate interest in the sport to insure future involvement. Studies by Cheffers, Mancini, and Zaichkowsky (5) measured attitudes of lower elementary school children using the CAMHM attitude scale with non verbal responses from the use of pictures. Figley's (8) investigation was based on the identification of causal determinants of attitude in physical education. Subjects were college students using critical incident reports regarding their experiences in physical education. Kelly (11) states it is worthwhile to measure attitudes in the attempt to seriously measure the achievement and success of a program by using a five interval scale from strongly agree to strongly disagree, explaining that yes and no answers do not provide a response opportunity for the child who does not know.

In an attempt to discover why tennis is not included in the curriculum of elementary school physical education program, reasons used to support the theory are based on the attitude responses from children in the first and second grade regarding tennis activities. The age group was selected because at this time motor skills such as running and balance are being developed, according to Cratty (6). It is the purpose of this study to investigate the attitudes of children during their participation of tennis activities and to analyze individual responses of boys and girls during their participation of tennis activities. The objectives is not to involve tennis skills and tactics, but the intent is to familiarize the children with the game, equipment, the racket and how to hold it, and how to make contact with the ball, contributing to hand-eye coordination. Additionally, the addition of these activities could be performed in

the gymnasium, tennis courts are not required, and can be taught by the physical education teacher, not requiring a tennis background.

#### *Purpose of the study*

The purpose of the study is to investigate the attitude of children regarding tennis activities in the first and second grade physical education classes and the factors that contribute to attitude development.

#### *Review of literature*

The following is a review of literature focusing on the attitudes of children in physical education classes and contributing factors relating to sport, with the application of this information to tennis activities.

Figley (8) attempted through critical incident reports to classify what aspects of physical education contributed to positive and negative attitudes. Subjects in the study were college students majoring in physical education, reflecting on experiences from grades K-12. Comments were collected from five broad categories: teacher, curriculum, atmosphere of the classroom, peer behavior, and perceptions of self. Each of the categories had varying degrees of determinants, most contributions from the curriculum itself, and the teacher reinforcement to their personal characteristics. 41.6% of the students involved in the interview cited the teacher as a significant determinant for positive attitude. However, the great majority of determinants for negative attitude were amenable to change.

Aicinima (1) definition of attitudes as a persons feelings, ideas, fears, and conviction about a topic, but they are acquired through positive and negative experiences. Teachers have a great impact on their attitudes in physical education. Teacher methodology has been correlated with student attitudes, decision making resulted in positive attitudes, as well as the quality of their interactions with students. Students like personal interaction with teachers, and there is a significant correlation between the two.

Kelly (11) speculates that if physical education programs are successful attitudes will carry over to recreational use as well, the activities they like and are successful in performing. Attitude surveys can indicate the true reaction of students, encourage honest responses. Questions included in the survey depended on the teaching situation and level. Areas covered included: organization of classes, teacher, space arrangement and facilities, and program. Many purposes are served from the information obtained, shows instructors what children are thinking, used as a basis for curriculum improvement, understand pupil reaction with the ability to modify that reaction if necessary.

According to Werner, Almond (16) trends can influence the addition of more activities to the physical education curriculum. Within the games curriculum, it occupies 65% of the time for physical education. But the problem is, the end can't justify the means, by the large variety of sports offered, there is not enough time to acquire proficiency in any. As a result, teachers must decide, with feedback from the student, and the use of a framework provide a basis for selection of what sports to include that would provide students with ample time to become skillful. The Mauldon and Redfern framework call for a critical reappraisal of contribution of games to education, and to learning.

From the research of Stein, Keeler, Carpenter (14) children who enjoy physical activities are encouraged to work harder and stay involved. There are not many practical guidelines to help physical education teachers increase enjoyment. Sport enjoyment literature reveals a list of six experiences: winning, mastery, doing the activity, friendship, positive teacher/coach relationships, and independence, that work together to enhance enjoyment. Caring and concerned youth sport coaches have the best opportunity to increase athletic enjoyment by allowing them to share in decision making, feedback techniques and open communication.

Based on the studies of Zaichkowsky, Zaichkowsky, Martinek (17) the hope of physical educators is that positive attitudes will be the result of that experience. The importance of attitudes, but moreover, how they can be changed should be taken into consideration. An attitude is a feeling or reaction to other people, it is important to understand how those attitudes are formed. Behavior disposition (tendency to respond)

is one component of attitude made up of three. The others are, affect (feeling) and cognition (knowledge), and are interrelated and dependent of one another. Attitudes are an important part of learning, and those attitudes can be in the hands of the teacher to develop positive ones. Since attitudes are formed by learning, therefore, the teacher can influence future implications with what students do or do not do.

Boucher (3) children commonly reply when asked why they play sport, because it is fun. To optimize enjoyment, therefore, it is necessary to understand what fun is when related to sports. His analysis was delivered from three important questions, the first and most important, "Is sport play for children?" Perhaps for children, the fun of sport lies in its play qualities.

Caldwell (4) stipulates the importance of evaluation as it is connected with the physical education program, and it is significant to understand during the evaluation process where we were, where we are now, how well we are doing, and are we going. It is important, to analyze changes, goals, purposes and realize the ability to progress towards those goals. This would include evaluation of all aspects of learning, involving the teacher and the pupil, the emotional, social and intellectual make-up of the whole person.

Physical education classes, Doolittle (7) may be the only time students will have the opportunity to learn net games. Few resources offer ideas for teaching beginning tennis, however, this pilot study is designed to a teaching approach for beginners for use with the limited time and space often found in physical education classes. It focuses on playing and understanding the game rather than skill performance and to modify the games to adapt developmentally to the mixed ability levels found in physical education classes.

Humphrey (10) states that the only difference between physical education learning experience and teaching learning is the fact that the children are moving. Physical education can contribute to the physical, social, emotional and intellectual growth of the children. Good teachers need to apply the principles of learning when they teach physical education. Six principles were listed that have a direct bearing on the attitude of children. Intrinsic motivation is "determination of behavior that is resident within an activity and that sustains it, as with autonomous acts and interests".

Interest is needed because a child accepts as valuable the things that are important, and will develop an attitude of fun toward those activities.

Cheffers, Mancini, Zaichkowsky, (5) used the CAMHM scale, adapted for this study, used to measure the attitudes of the children using pictures instead of the verbal and written, taking in mind children cannot read, and that language and culture had no bearing on the answers. It was administered after the activity, the responses were obtained by selection of the appropriate face, either from one with a smile, as favorable, as frown as unfavorable, or a neutral face.

Boucher (3) reinforces the theory that the motor learning process for the age group from 6 - 7 year old that movement is fundamental process for children as they grow and learn. Motor play is important to a child's physical, social and mental development. Today, young children, from 5 years are given more opportunities to enroll in structured programs, that are appropriate for motor development.

Graham (9) encourages tennis to be included in the physical education program. Tennis is a game that helps develop thinking skills, concentration and emotional development. The sport can be enjoyed both short term and long term as a lifetime sport.

USTA, (15) states that programs designed to teach tennis to the beginner, should address the three common needs: hitting the ball, clearing the net, and positive reinforcement.

New York City Board of Education (12) was at this time attempting to design a New York City school teacher who would conduct tennis classes inside school buildings and use school playgrounds for courts. This program is intended to give students a sense of the game. They also confirmed that learning and playing tennis helps develop students cognitive and affective skills.

USTA (15) in agreement with this study stresses participation in tennis as part of a program to introduce large numbers of children to tennis, it offers the opportunity to develop both cognitive and affective skills. Supported by Arthur Ashe, the goal of USTA Schools Program is to help with financial support so that physical educators can include tennis as a regular activity. The motto: Tennis. Learn it in school. Enjoy it for life.



Reinforcing the theory of child development and readiness, Cratty (6) states that at the end of the first 5 years of life, movements become more integrated, children can run at a reasonable speed, broad jump nearly 3 feet, and balance on one foot. Between the ages of 5 and 6, children will be seen to take a step, make a weight shift as they release the ball, and catch a ball 8" in diameter. They are beginning to throw efficiently and can run in a well-coordinated manner. They require only experience to further enhance their capabilities for movement.

Substantiated by Paiget (13) attention to stimuli increases for the 6 year old, and they can pay attention to more than one factor at the same time. This ability is called decentering; these are different attentional strategies. For example, the child can pay attention to the ball, be aware of where the hands should be to catch it, and where the ball should fall.

These references gave valuable insight and information supporting this investigation regarding the attitudes of children towards tennis activities as presented in physical education classes in the public school system.

### *Method*

Subjects used for this study were 100 (N=100) random sampled from a list of names given by the physical education teacher from two groups of first and second grade classes in English Privet Elementary School in Kuwait City Two groups of 100 students (50 girls and 50 boys per group) took part.

### *Apparatus*

The test was administered in the gymnasium, a portable net was placed to divide the court, individual areas were marked with tape on the wall of the gym in preparation for the 5th activity. Equipment of tennis rackets and balls were provided to each child. The attitude scale was composed of 6 (N=6) activity sections, designed to measure the attitude regarding each one. The scale was adapted from CAMHM, Cheffers, Mancini, Zaichkowsky (5) The test consisted of pictures illustrating 5 tennis activities: racket quickness with partner, racket quickness, run of balls, balance the ball, and off the wall. The sixth picture of a tennis court, was shown basically to obtain

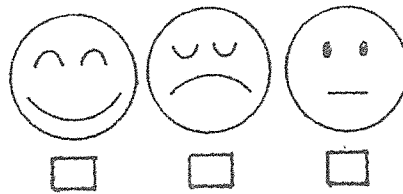
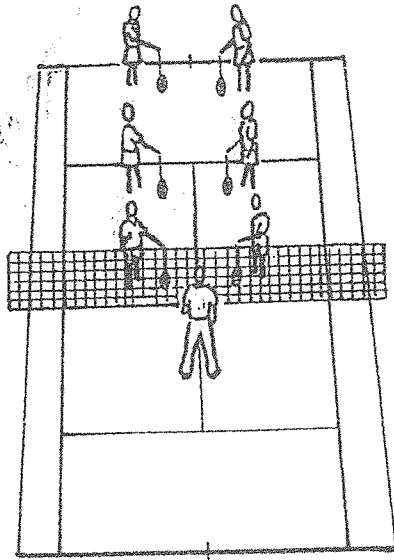
a yes or no response if they were interested in learning to play tennis in the future. The subjects had the option, to respond non-verbally based on their opinion of the activity, three possible choices of happy, sad, or no opinion faces. Happy face indicated yes, I like the game; the sad face, I do not like the game, or the no opinion, I don't know. The code of the scale was of 3, for like, 2, for no opinion, and 1, for do not like. Data was collected from their responses for analysis.

### *Procedure*

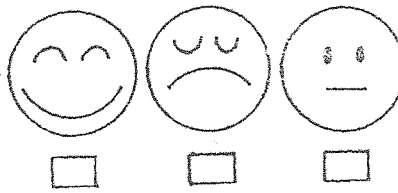
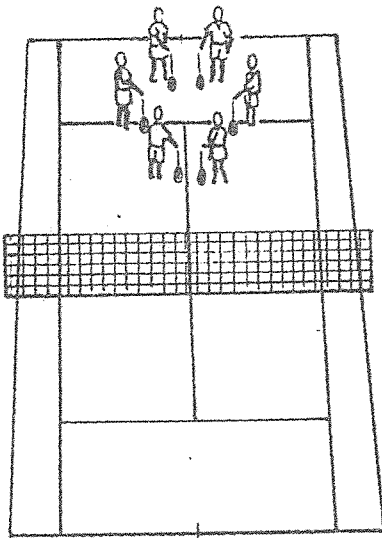
Prior to the study, the principle was contacted by letter explaining the purpose, asking for consent to administer the test at the school, and permission to use the children as the subjects under investigation.

I instructed the tennis activities to the two classes of children, ten from 11:00 to 12:45, the second grade, and ten from 1:00 to 1:45, the first grade. Thirty minutes was allowed for the activities, with 15 minutes allocated for completion of the inventory. Following an introduction, explanation of the purpose, inventories were distributed for consent signatures from the subjects. Clear instructions and a demonstration was given for the first activity. The children were told they were to remember the game, if they liked the game, if they did not like the game, or if they had no opinion. The purpose of the first game of racket quickness was improvement of reaction time and quickness / coordination. Subjects were positioned in two straight lines, paired off with a partner, approximately 3 feet apart. Each subject was told to place one finger on the end of the racket balancing it on the floor. At the command of "go" they were to release the racket and change positions with their partner. With practice the distance between the subjects was gradually increased. A warm-up time consisted of one minute, the game, 4 minutes, and the same time applied to the remaining games. The second game was racket quickness, (in circle), also to improve reaction time and quickness / coordination. Subjects were instructed to stand in a circle, perform the same procedure as in the previous racket quickness, at the command of "go" the rackets were to be released, run to the left, and to catch the racket before it fell to the floor. The third activity, run of balls, purpose was directed at throwing skills and co-ordination.

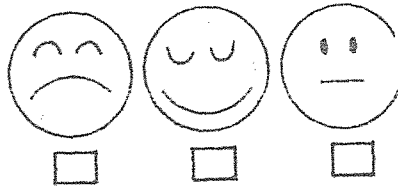
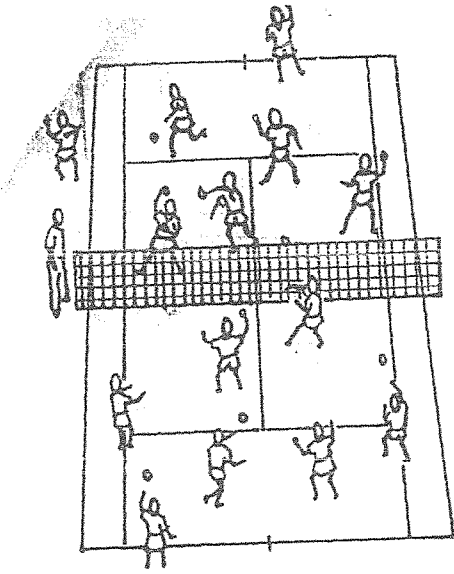
An even number of subjects was placed on each side of the net. Both sides had an even number of balls, (25) the object to get rid of the balls by throwing them to the other side as fast as possible. After the 60 second time limit, the team with the fewest balls on their side, won. The purpose of the fourth activity of balance the ball, is balance, and hand-eye co-ordination with movement. Subjects were to stand on the side of the gym, walk balancing a ball on the strings of their racket, to the opposite side, walk around a target and return to the other side without dropping the ball. If the ball fell off, they were to replace the ball and continue. Off the wall, the fifth activity was played in the individual sections marked off, consisted of the subjects hitting the ball against the wall, and to try to return it. The purpose was to familiarize them with the feel of the racket and ball contact. After completion of the activities the subjects were seated on the floor. Each had an inventory sheet in front of them and a pencil to mark their response. They were asked to point to the first activity, remember it, and express their opinion by marking the appropriate face. This procedure was followed for each of the activities, emphasizing that the position of the faces changed on each page. The subjects were asked to point to the happy face, sad face or no opinion face before marking their answer.



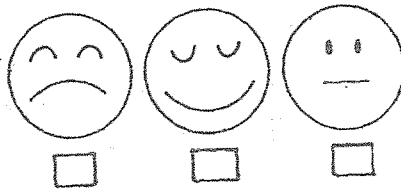
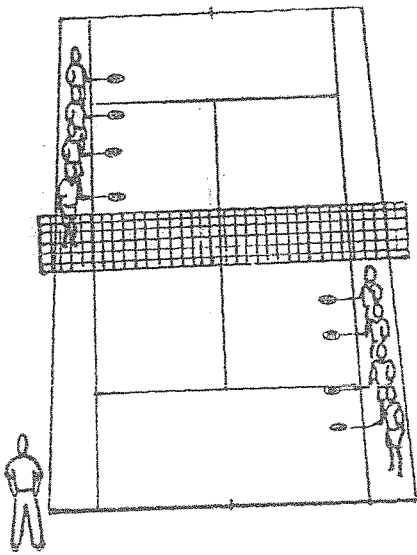
Game 1 - Racket quickness



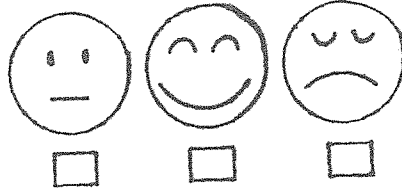
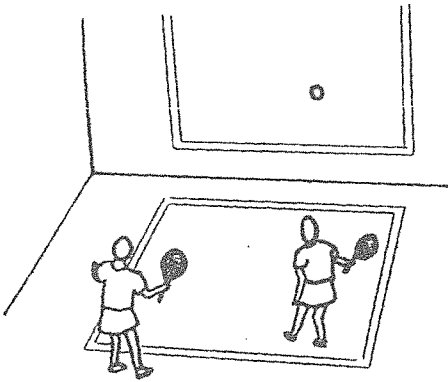
Game 2 - Racket quickness circle



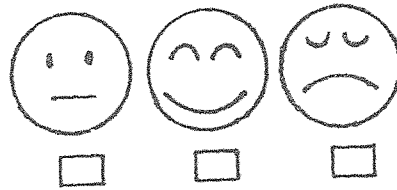
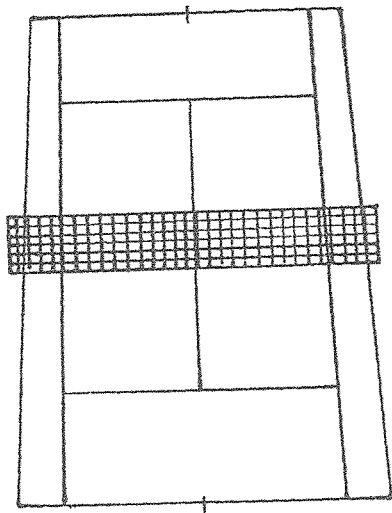
Game 3 - Run of balls



Game 4 - Balance the ball



Game 5 - Wall Tennis



Game 6 - Tennis court

### **Results**

Following the data collection, chi-square statistical test was used to investigate the association between student's attitude toward six different tennis games, gender (boys/girls) and grade (first/second) The association was considered to be statistically significant if p-value is less than 0.05 significant level (alpha), otherwise it is considered to be statistically non-significant.

Frequencies and p-values of student attitude by gender, grade and type of game (Table 1) **Game 1, Racket quickness** measured the attitude of the student, 45 boys and 45 girls liked the game. The p-value 0.368 is greater than .05 , no significant difference between girls and boys. Attitude based on grade, 45 from grade 1 and grade 2 responded like, p-value of 0.368.

**Game 2, Racket quickness (circle)** indicated that 45 boys liked and 45 girls liked, p-value of 0.823 not significant. Grade 1, 45 liked, grade 2, 40 liked. P-value of 0.823.

**Game 3, Run of balls**, attitude of boys, 45 like, and all 50 girls liked. P-value of 3.05. Grade one responded with 50 like, grade 2, 45 yes.

**Game 4, Balance the ball**, 45 boys and 25 girls liked, p-value of 0.126; grade 1, equal distribution with 35 like, p-value of 1.000.

**Game 5, Wall tennis**, 45 boys and 35 girls liked, p-value of 0.325; grade 1, 45 liked, grade 2, 35 liked, p-value of 0.325.

**Game 6, Tennis court**, results would indicate if children would like to continue to play tennis, 45 boys and 35 girls they would. P-value of 0.535 grade 1, 45 indicated yes and from grade 2, 35 indicated yes, p-value of 0.535. Table 1, indicates that there were no statistically significant differences between the attitude of gender and grade, based on alpha level 0.05.

(Table 1)

Frequencies and p-value of student Attitude by Gender, Grade and Type of the Game

	Game 1 Racket Quickness			Game 2 Racket Quickness (Circle)			Game 3 Run of Balls			Game 4 Balance the Ball			Game 5 Wall Tennis			Game 6 Tennis Court		
Gender	Attitude			Attitude			Attitude			Attitude			Attitude					
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Boys	5	0	45	5	0	45	0	5	45	0	5	45	0	5	45	5	0	45
Girls	0	5	45	10	0	40	0	0	50	10	15	25	10	5	35	15	0	35
P-Value	0.368			0.8219			0.305			0.126			0.325			0.5353		

Gender	Attitude			Attitude			Attitude			Attitude			Attitude					
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
Boys	0	5	45	5	0	45	0	0	50	5	10	35	0	5	45	5	0	45
Girls	5	0	45	5	5	40	0	5	45	5	10	35	10	5	35	15	0	35
P-Value	0.368			0.8219			0.305			1.000			0.325			0.5353		

Significant differences ( $P \leq 0.05$ ) between games

(Figure 1,2) shows a bar chart of student's attitude by gender and type of tennis games. The charts show that there are no significant differences between the attitude of gender toward games. ( $p=0.368, 0.822, 0.305, 0.126, 0.325, 0.535$ , respectively) as indicated from Table 1.

Figure 1. Students Attitude by Gender and Type of Game

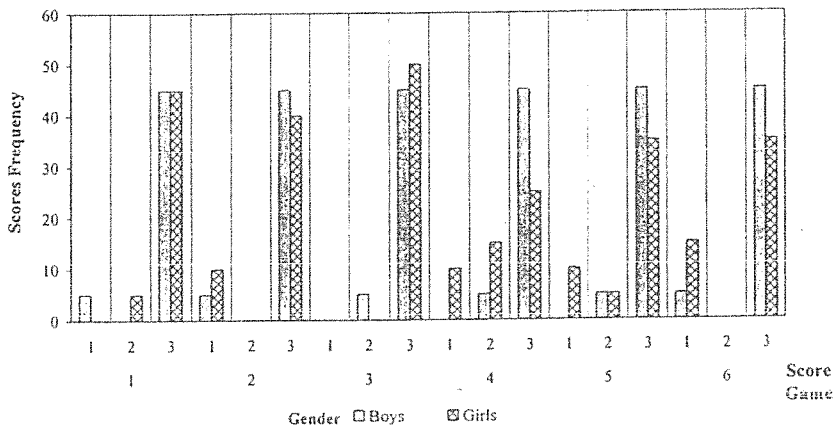
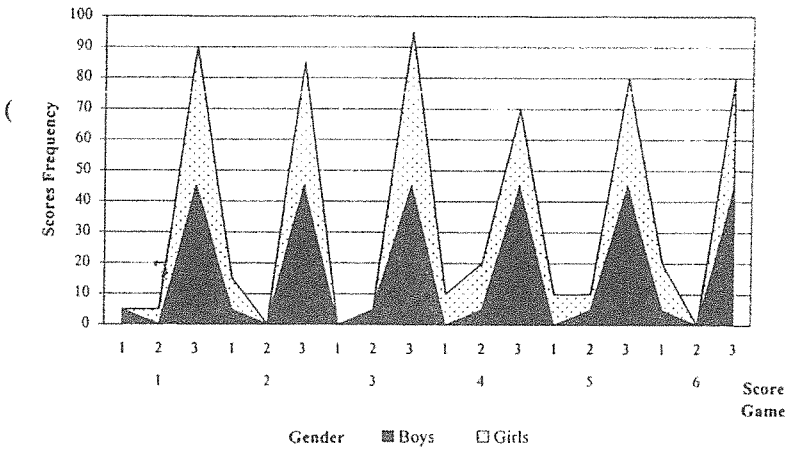


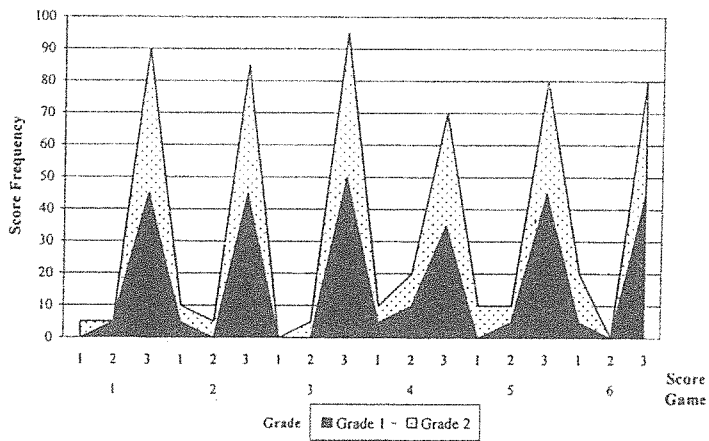


Figure 2. Students Attitude by Gender and Type of Game



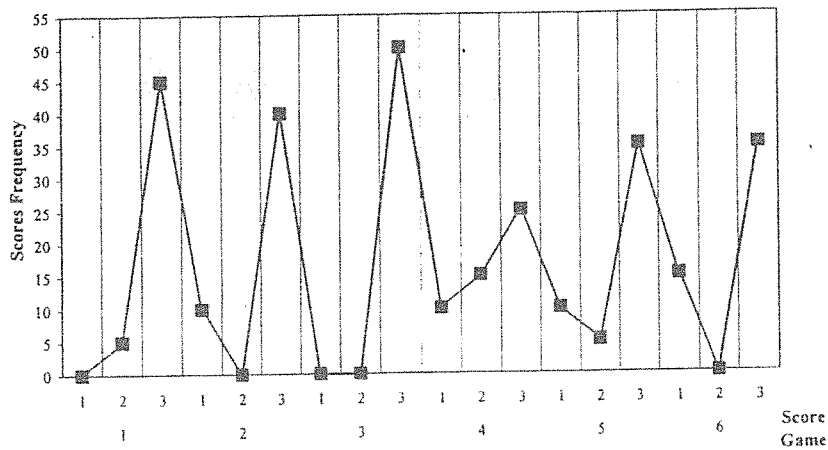
(Figure 3) shows a bar chart of student's attitude by grade and type of tennis games. The chart shows that there are no significant differences between the attitude of grades toward games. ( $p=0.368, 0.822, 0.305, 1.000, 0.325, 0.535$  respectively) as indicated in Table 1.

Figure 3. Students Attitude by Grade and Type of Game



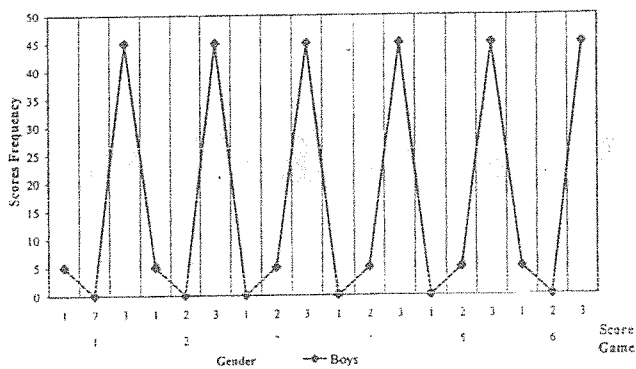
(Figure 4) shows a bar chart of Girl's attitude by gender and type of tennis games. The chart shows that there are no significant differences between the attitude of gender toward games as indicated in Table 1.

Figure 4. Girls Attitude by Gender and Type of Game



(Figure 5) shows a bar chart of Boy's attitude by gender and type of tennis games. The chart shows that there are no significant differences between the attitude of gender toward games as indicated in Table 1.

Figure 5. Boys Attitude by Gender and Type of Game



**Appendix A**, List all the data that has been used in this study. Included are the number of participants, grade level, and responses numerically of 1 – 3 scale of the game activity.

**Appendix B**, provides output of the analysis from the statistical software. Lists all the data used in the study, participants, grade and gender, and responses of like, do not like, and do not know, participant direct responses.

### *Validity*

Validity of the instrument was obtained, from the one hundred students that represented the first and second grade physical education classes, by having them point their fingers to the activity they had participated in. Next they were to point their finger to be sure they were aware of the change in the placement of the faces. By observing each child, while pointing to the activity and the picture, the scale was assumed valid.

### *Discussion*

The results from this study regarding the effects of tennis activities on the attitude of the first and second grade children supports the research that the tennis program would be a good addition to the curriculum of this elementary school. If the children have positive attitudes as a result of physical education classes, then existing programs could be expanded to include tennis. Children of this age group are physically prepared for involvement, supported by Cratty (6) they have developed in motor control in running, co-ordination and throwing. Also applicable to tennis, Piaget (13) substantiates that attention to stimuli increases for the 6-7 year age group, and they can pay attention to more than one factor, with the ability to watch the ball, know about where it would fall, and attempt to hit the ball with the racket. Tennis, when used in the physical education for this age level, should be presented, Doolittle (7) to focus on playing and understanding the game, rather than on skill performance. This is an effective way to capitalize on beginning tennis, and its use as a fun activity. Emphasized by USTA (15) for the player more advanced beginner, to hit the ball,

clear the net, and positive reinforcement, are some necessities to be shared by tennis students. Boucher (3), believes in the importance that motor play can contribute to a child's physical, social and mental development. Tennis involvement can contribute to fun, fitness and a positive attitude. A good point from Cratty (6) is that children participate to have fun, but it is necessary to understand from the children what their interpretation of fun is as it relates to sport. The physical education programs offered in the school system, provide the opportunity for the children to become acquainted with tennis as a fun activity, but the introduction to the game and according to Doolittle (7) the game must be adapted to fit the environment of the gymnasium and modified to fit the limited space. Because of the time element, Werner, Almond (16) state that since there is not enough time in the program, to allow for a student to become proficient in one sport, there should be a well designed framework to use as a basis for the sports included with in the program. In agreement with Zaichkowsky, Zaichkowsky, Martinek (17) should be presented positively by the physical education teacher, who research has shown has a direct impact of the attitude of the children. Further supported by Aicinema (1) teacher have a big impact on the attitudes of children, and he found that decision making by the children resulted in positive attitudes. Stein, Keeler, Carpenter (14) believe that are not enough guidelines to help teachers increase enjoyment. Caring and concerned youth coaches and teachers have the best opportunity to increase their enjoyment of the game. Caldwell (4) believes that the teachers need understand the goals of the program and there is the need to evaluate those goals from where they are now to where we should go for the future of the program. From the activities that were included in the attitude scale, it was not necessary to use a tennis court, only the equipment of racket and balls. The scale adapted from CAMHM Cheffers, Mancini, Zaichkowsky (5) enabled the researcher to gather the data from the non verbal responses to the activities which provided the means to statistically analyze their opinions about tennis activities. Groups such as the The United States Tennis (9) organizations strongly promote and support, through funding tennis the development of programs in schools and park summer programs. One of the greatest benefits of this program is the fact many opportunities are provided for the children to pursue tennis in the neighborhood and in the school The New York

City Board of Education (12) assisted in the development of the original edition of the USTA Schools Program curriculum. Their original program was designed to conduct tennis classes inside school, in the gymnasium to provide the children with as understanding of the game, and promote participation in summer program as well.

### *Recommendations*

Accordingly the researcher suggested a number of recommendations, of which most importantly as assist in achieving and developing Tennis in the state of Kuwait

- 1) From personal experience as a teacher of physical education, I found it is beneficial to provide tennis activities because from this experience the children will have the opportunity to choose tennis as a lifetime sport.
- 2) Tennis, in the Kuwait is a popular sport, and I believe that physical education is the foundation to initiate basic fundamentals, a "touch" of the game. It is not essential to have access to a tennis court for the games. a gymnasium will serve the purpose, and as many as 25 children can participate at a time. Equipment can be modified for indoor use, for example instead of the regulation tennis ball, a Nerf, or soft tennis ball is just as effective for the beginner.
- 3) I chose this study to investigate the attitudes of children and tennis in physical education, because of the similar conditions that exist in the school curriculum in . The results from this study will encourage me to strongly promote and apply tennis activities into the Kuwait school system.
- 4) Recommendations and suggestions have been made in order to improve tennis game for our children supported by review of literature and the study results.

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Appendix A, Data Listing  
 Students Attitude towards Tennis Activity

OBS	GRADE	Racket Quickness	Racket Quickness (Circle)	Run of Balls	Balance the Ball	Wall Tennis	Tennis Court
1	1	3	3	3	3	3	3
2	1	3	1	3	2	2	3
3	1	3	3	3	3	3	3
4	1	3	3	3	3	3	3
5	1	3	3	3	3	3	3
6	1	3	3	3	3	3	3
7	1	3	3	3	3	3	3
8	1	3	3	3	3	3	3
9	1	3	3	3	2	2	3
10	1	3	1	3	3	3	3
11	1	3	3	3	3	3	3
12	1	3	1	3	3	3	3
13	1	3	3	3	2	2	3
14	1	3	3	3	3	3	3
15	1	3	1	3	3	3	3
16	1	3	3	3	3	3	3
17	1	3	3	3	2	3	3
18	1	3	3	3	3	2	3
19	1	3	3	3	3	3	3
20	1	3	3	3	3	3	3
21	1	3	1	3	3	3	3
22	1	3	3	3	2	3	3
23	1	3	3	3	3	3	3
24	1	3	3	3	2	3	3
25	1	3	3	3	3	2	3
26	1	3	3	3	1	3	1
27	1	2	3	2	3	3	3
28	1	3	3	3	3	3	3
29	1	3	3	3	3	3	3
30	1	3	3	3	2	3	3
31	1	3	3	3	1	3	3
32	1	3	3	3	2	3	3
33	1	2	3	3	3	3	1
34	1	3	3	3	3	3	3
35	1	3	3	3	3	3	3
36	1	3	3	3	3	3	3
37	1	3	3	3	1	3	1
38	1	3	3	3	3	3	3
39	1	2	3	3	3	3	1
40	1	3	3	3	1	3	3
41	1	3	3	3	2	3	3
42	1	3	3	3	3	3	3
43	1	3	3	3	3	3	1
44	1	3	3	3	3	3	3
45	1	3	3	3	3	3	3
46	1	2	3	3	3	3	3
47	1	2	3	3	2	3	3
48	1	3	3	3	1	3	3
49	1	3	3	3	3	3	3
50	1	3	3	3	2	3	3
51	2	3	3	3	3	3	3
52	2	3	3	2	3	3	3
53	2	3	3	3	3	3	3
54	2	3	3	3	3	3	3
55	2	1	3	3	3	3	3
56	2	3	3	3	3	3	3



OS	GRADE	Racket Quickness	Racket Quickness (Circle)	Run of Balls	Balance the Ball	Wall Tennis	Tennis Court
57	2	3	3	3	3	3	3
58	2	3	3	2	3	3	1
59	2	1	3	3	3	3	3
60	2	3	3	3	3	3	3
61	2	3	3	3	3	3	1
62	2	1	3	3	3	3	3
63	2	3	3	3	3	3	3
64	2	3	3	3	3	3	1
65	2	3	3	2	3	3	3
66	2	3	3	3	3	3	3
67	2	3	3	3	3	3	3
68	2	1	3	3	3	3	3
69	2	3	3	3	3	3	3
70	2	3	3	3	3	3	3
71	2	3	3	2	3	3	3
72	2	3	3	3	3	3	3
73	2	3	3	2	3	3	1
74	2	3	3	3	3	3	3
75	2	1	3	3	3	3	3
76	2	3	1	3	1	2	1
77	2	3	1	3	2	1	1
78	2	3	3	3	3	1	3
79	2	3	3	3	3	3	3
80	2	3	3	3	2	3	3
81	2	3	3	3	2	1	3
82	2	3	1	3	1	2	1
83	2	3	3	3	3	1	3
84	2	3	1	3	2	3	1
85	2	3	3	3	1	3	3
86	2	3	1	3	3	2	1
87	2	3	3	3	2	1	3
88	2	3	3	3	3	3	1
89	2	3	1	3	3	2	3
90	2	3	3	3	2	3	3
91	2	3	1	3	1	1	3
92	2	3	1	3	3	1	3
93	2	3	3	3	2	1	1
94	2	3	3	3	3	3	1
95	2	3	3	3	1	3	3
96	2	3	3	3	2	1	1
97	2	3	1	3	2	2	3
98	2	3	3	3	3	1	1
99	2	3	1	3	2	3	3
100	2	3	3	3	3	3	3

Appendix B. Data Listing

Students Attitude Toward Tennis Activities

OBS	Grade	Gender	Racket Quickness	Racket Quickness (Circle)	Run of Balls	Balance the Ball	Wall Tennis	Tennis Court
1	First Grade	Boy	Like	Like	Like	Like	Like	Like
2	First Grade	Boy	Like	Do Not	Like	Do Not Like	Do Not Like	Like
3	First Grade	Boy	Like	Like	Like	Like	Like	Like
4	First Grade	Boy	Like	Like	Like	Like	Like	Like
5	First Grade	Boy	Like	Like	Like	Like	Like	Like
6	First Grade	Boy	Like	Like	Like	Like	Like	Like
7	First Grade	Boy	Like	Like	Like	Like	Like	Like
8	First Grade	Boy	Like	Like	Like	Do Not Like	Do Not Like	Like
9	First Grade	Boy	Like	Like	Like	Like	Like	Like
10	First Grade	Boy	Like	Do Not	Like	Like	Like	Like
11	First Grade	Boy	Like	Like	Like	Like	Like	Like
12	First Grade	Boy	Like	Do Not	Like	Like	Like	Like
13	First Grade	Boy	Like	Like	Like	Do Not Like	Do Not Like	Like
14	First Grade	Boy	Like	Like	Like	Like	Like	Like
15	First Grade	Boy	Like	Do Not	Like	Like	Like	Like
16	First Grade	Boy	Like	Like	Like	Like	Like	Like
17	First Grade	Boy	Like	Like	Like	Do Not Like	Like	Like
18	First Grade	Boy	Like	Like	Like	Like	Do Not Like	Like
19	First Grade	Boy	Like	Like	Like	Like	Like	Like
20	First Grade	Boy	Like	Like	Like	Like	Like	Like
21	First Grade	Boy	Like	Do Not	Like	Like	Like	Like
22	First Grade	Boy	Like	Like	Like	Do Not Like	Like	Like
23	First Grade	Boy	Like	Like	Like	Like	Like	Like
24	First Grade	Boy	Like	Like	Like	Do Not Like	Like	Like
25	First Grade	Boy	Like	Like	Like	Like	Do Not Like	Like
26	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Do Not Like
27	First Grade	Girl	Do Not	Like	Like	Like	Like	Like
28	First Grade	Girl	Like	Like	Like	Like	Like	Like
29	First Grade	Girl	Like	Like	Like	Like	Like	Like
30	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Like
31	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Like
32	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Do Not Like
33	First Grade	Girl	Do Not	Like	Like	Like	Like	Like
34	First Grade	Girl	Like	Like	Like	Like	Like	Like
35	First Grade	Girl	Like	Like	Like	Like	Like	Like
36	First Grade	Girl	Like	Like	Like	Like	Like	Like
37	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Do Not Like
38	First Grade	Girl	Like	Like	Like	Like	Like	Like
39	First Grade	Girl	Do Not	Like	Like	Like	Like	Do Not Like
40	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Like
41	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Like
42	First Grade	Girl	Like	Like	Like	Like	Like	Like
43	First Grade	Girl	Like	Like	Like	Like	Like	Do Not Like
44	First Grade	Girl	Like	Like	Like	Like	Like	Like
45	First Grade	Girl	Like	Like	Like	Like	Like	Like
46	First Grade	Girl	Do Not	Like	Like	Like	Like	Like
47	First Grade	Girl	Do Not	Like	Like	Do Not Like	Like	Like
48	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Like
49	First Grade	Girl	Like	Like	Like	Like	Like	Like
50	First Grade	Girl	Like	Like	Like	Do Not Like	Like	Like
51	Second	Boy	Like	Like	Like	Like	Like	Do Not Like
52	Second	Boy	Like	Like	Do Not	Like	Like	Like
53	Second	Boy	Like	Like	Like	Like	Like	Like
54	Second	Boy	Like	Like	Like	Like	Like	Like
55	Second	Boy	Do Not	Like	Like	Like	Like	Like



### CONSENT FORM

The ultimate goal of this inventory is to gather data from the children regarding attitude toward tennis activities in physical education classes. I need responses from the children, first and second grades, and to evaluate those responses.

The inventory has a total of six activities related to tennis, that require responses about each. Optional choices for response included are a happy face, a sad face, or a neutral face.

This study is in conjunction with Department of Physical Education at College of Basic Education – State of Kuwait. The research is conducted by Dr. Mubarak Reda. The information provided will be kept in confidence, no one else will have access.

Thank you for your participation in completing this inventory.

\_\_\_\_\_  
Dr. Mubarak Reda

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date