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EFFECT OF THE OVERLAPPING WAVES STRATEGY ON MOTOR SATISFACTION AND LEARNING TECHNICAL PERFORMANCE OF THE TRIPLE JUMP FOR FEMALE STUDENTS

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ABSTRACT

The importance of the research is evident in the use of a modern teaching strategy, which is the overlapping waves strategy, which keeps pace with developments in the field of teaching, making the student positive and active in the learning process, which helps them develop motor satisfaction and learn the technical performance of the effectiveness of the triple jump.

The research aims to identify the effect of using the overlapping waves strategy on motor satisfaction and learning the technical performance of the effectiveness of the triple jump for female students, as well as identifying the significant differences between the experimental and control groups in the results of the post-tests.

The research community was determined by the students of the second stage in the College of Physical Education and Sports Sciences - University of Karbala, who numbered (48), and the research sample was randomly selected from the original research community, by lottery method, with a number of (30) students, who were divided into two equal groups, with a value of (15) student for each group.

Among the most important conclusions reached by the researchers is the tiring strategy and the method prepared by the subject teacher, which had a positive effect on the motor satisfaction tests and learning the technical performance of the effectiveness of the triple jump for female students. The results also showed the superiority of the students of the experimental group (strategy of overlapping waves) over the students of the control group (the method prepared by the subject teacher) in the tests of motor satisfaction and learning the technical performance of the effectiveness of the triple jump for female students.

One of the most important recommendations reached by the researchers is to emphasize the use of the overlapping waves strategy in learning the rest of the athletics activities because of their good results. And conducting similar studies in other activities using the overlapping waves strategy for different age and school stages and for both sexes.

INTRODUCTION

The era in which we live now is characterized by tremendous and rapid progress and development in various fields of life, which has not been seen for a long time. The field of physical education has enjoyed a large share of this progress and has become a clear position in the culture of civilized societies, this progress in the level of performance of sports events and games came as a result of research, investigation, optimal investment of information and knowledge, and the use of modern methods and technologies, and their use in an optimal manner that fits with the students' capabilities and abilities to lead them to the best performance.

The teaching strategies used by the teacher are tantamount to organizing the educational situation and directing it in order to achieve the educational goals with the least possible time and effort, it is based on the cognitive aspects of the learner's learning and the way he thinks. This strategy focuses on mental processes and addressing them, as it makes the learner use a number of information, knowledge and thought processes, all of which come in one strand through which the learner can reach a number of solutions to the educational problems he faces, or

work on completing a cognitive picture needs some information to be complete.

The researchers believe that the interaction in the lesson and entering the atmosphere of the lecture to learn the technical performance of the effectiveness of the triple jump, which is one of the individual games, as this interaction results in the learner's reaching the motor satisfaction, which is the important psychological concepts for each learner. About himself, believing that the self-assessment of the educated individual is the key to the motivation for learning and success. As the kinetic satisfaction is the outcome of the emotional feelings that the individual feels about a specific activity and expresses the appropriate satisfaction of the needs and achievement of his goals for which he joins this activity.

The importance of the research lies in the use of a modern teaching strategy, which is the overlapping waves strategy, which keeps pace with developments in the field of teaching, making the student positive and active in the learning process, which helps them develop motor satisfaction and learn the technical performance of the effectiveness of the triple jump.

RESEARCH PROBLEM

By observing the researchers and their follow-up to the lessons and their interviews with experts and teachers in universities, they found that there is a weakness in the technical performance of the effectiveness of the triple jump for female students, which may be due to the lack of use of modern strategies appropriate to the ages of the students at this stage, as well as the lack of sufficient and complete time during the lessons scheduled for them during teaching. The effectiveness investigated, as well as the increase in the number of female students within the same academic division, and that the level of performance of this activity is not at the level of ambition, also, some teachers used the (traditional) command method that does not fit with modern developments in teaching, and according to modern trends and according to the reasons mentioned, the researchers chose the overlapping waves strategy in their belief in developing the educational process by developing the motor satisfaction of students and facilitating the process of acquiring and developing athletics activities in general and effectively. Triple jump in particular and master it to a better level

Research objectives:

- Identify the effect of using the interfering waves strategy on motor satisfaction and learning the technical performance the triple jump for female students.
- Identifying the significant differences between the experimental and control groups in the results of the post-tests.

Research hypothesis:

- There are significant statistically significant differences between the pre and post-test of the experimental and control groups in motor satisfaction and learning technical performance the triple jump for female students.
- There are significant statistically significant differences in the results of the post-test of the experimental and control groups in motor satisfaction and learning technical performance the triple jump for female students and in favor of the experimental group.

RESEARCH FIELDS:

The human field: Students of the second stage in the College of Physical Education and Sports Sciences / University of

Kerbala for the academic year (2021-2022).

Time field: from 4/11/2021 to 15/2/2022.

Spatial field: Track and field stadiums in the College of Physical Education and Sports Sciences / Kerbala University.

RESEARCH METHODOLOGY AND FIELD PROCEDURES:

Research Methodology

The nature of the problem is the basis on which the research method is chosen, so the researchers used the experimental method with two experimental and control groups due to its relevance to the nature and objectives of this study.

Community and sample research:

Community: The research community was determined by the second stage students in the College of Physical Education and Sports Sciences - University of Kerbala, who numbered (48) students.

The research sample: The research sample was randomly selected from the original research community, by lottery method, with a number of (30) students, they were divided into two equal groups, with (15) students for each group, and thus the percentage of the research sample is

(62.5%), which is an appropriate proportion to represent the population. The search is a true and honest representation. As shown in Table (1).

Table (1) Show the characterization of the sample:

N	Groups	Female students Number in each group	Each group used Teaching method
1	Experimental	15	Overlapping waves strategy
2	Control	15	The teaching strategy followed

The homogeneity of the sample and the equivalence of the two research groups:

Sample homogeneity: The researchers used the coefficient of variation law to establish homogeneity in the variables (Length, Mass) among the sample members, as shown in Table (2).

Table (2) shows the mean, standard deviation, and coefficient of variation in the study variables.

Variables	Unit of measure	Mean	Std. deviation	Variation coefficient *
Length	Cm	171.5	6.29	0.03
Mass	Kg	68.18	7.61	0.51

* All values of the coefficient of variation were less than 30%, which indicates the homogeneity of the sample in the above variables.

Equivalence of the two research groups:

For the purpose of determining the starting point, the researchers found parity between the two groups using the (t) test for

independent samples in the study variables, and Table (3) shows this.

Table (3) shows the equivalence of the two research groups in the research variables investigated.

Variables	Control group		Experimental group		T value		Sig type
	Mean	Std. deviation	Mean	Std. deviation	Calculated	Tabular	
Motor satisfaction	93.8	3.64	92.4	3.94	1.45	2.02	Non sig
Triple jump	3.42	0.44	3.50	0.40	0.31		Non sig

The tabular value (t) at the degree of freedom (28) and the level of significance (0.05) is (2.04).

By noting the calculated (t) values for the research variables, we find that they are less than the tabular (t) value of (2.04) at the degree of freedom (28) and the level of significance (0.05), which indicates that there are no significant differences and this means that the two groups are equivalent in the search variables.

Auxiliary tools and equipment:

Arab and foreign sources - observation - tests and measurement.

Auxiliary Tools

Measuring tape - medical scale - chalk - whistle - bork - two (2) manual stopwatches - scientific calculator.

TESTS USED IN THE RESEARCH:

Motor Satisfaction Scale Test: (Ahmed, Jawad and other, 2014, 7(4))

The researchers used the scale used by (Jawad and Kazem, 2014), which was originally prepared by (Allawi, Mohammed Hassan, 1998), where this scale was presented to a group of experts and specialists to judge the validity of the paragraphs and their suitability for the purpose for which they were developed. The scale obtained an agreement percentage of (91.82%), and this scale consists of (30) items, and in front of each clause there are (5) alternatives, which are (Applicable: to a very large degree, to a large degree, to a moderate degree, to a small degree, to a very little degree) and they are The degrees of their downward correction are (1,2,3,4,5) respectively, so

the maximum degree of the scale is (150) and the lowest degree is (30).

The researchers explained the test instructions to the students accurately and asked the sample members to answer the paragraphs of the scale, Appendix (1), objectively and accurately. He reminded the sample members that there is no right or wrong answer as far as expressing the true opinions of the scale. The questionnaire related to the scale was distributed to the sample members in the classrooms, and the researchers distributed the scale questionnaire along with preparing the supplies required for the sample members to answer the scale, explaining the instructions for the questionnaire and clarifying them, and making sure that the sample members understood the method of answering.

Determination the triple jump test:

After reviewing several sources for measuring artistic performance, the researchers did not find anything better than depicting the artistic performance of the students, and it was presented to a group of assessors as an accurate measure of the level of their technical performance for this event.

As the technical performance of the two research groups was photographed

(and they were given two attempts for each student) and they were presented to a group of assessors (*) with specialization in athletics to evaluate the technical performance of this activity under discussion.

Experimental Experiment:-

After completing the required procedures, and to identify the factors and obstacles that researchers may encounter when carrying out the main experiment, in order to obtain correct and accurate results according to the scientific methods followed, the researchers conducted the exploratory experiment on (11/11/2021), on a sample of (8) female students who were not from the research sample and from the community of origin. The researchers aimed from this exploratory experiment to:

- Identifying the difficulties that researchers face during the main experiment.
- Knowing the time allotted for conducting the tests.
- Ensure the safety of sports equipment.
- Knowing the requirements and times of educational units.
- Ensure the scientific bases of the tests used.

SCIENTIFIC BASIS TESTS:

Validity of the tests: A test is considered valid if it “measures what it was designed to measure, that is, it measures the function that it claims to measure and does not measure anything else instead of or in addition to it.” In extracting the validity of the tests, the researchers relied on the validity of the content by presenting the tests to a group of experts and specialists. (Al-Kandari and Ahmad, 1999, p. 154)

Reliability: To calculate the reliability coefficient, the test method is chosen and the test is re-applied. This name is given to the test if “the test is used repeatedly and gives the same results every time”. The tests were applied to a sample of (8) female students from outside the research sample, and these tests were repeated after (7) days of the first tests and on the same sample. (Melhem, Sami, (2000, p. 287)

Objectivity:- One of the important conditions that must be met in a good test is the condition of objectivity, by which we mean “there is no difference between the assessors in judging something or on a particular subject”(Bahi, Mustafa Hussein, 1999, p. 64). From the esteemed gentlemen, in addition to the presence of simple, clear and understandable tests and

far from personal judgments, so the tests are highly objective, as shown in Table (4)

Table (4) shows the reliability and objectivity coefficient of the tests under study.

N	Tests	Unit of measure	Stability coefficient	Objectivity coefficient
1	Motor satisfaction	Degree	0.96	0.93
2	Triple jump	Degree	0.95	0.89

Main experiment:**Pre-test :**

The pre-tests were conducted on Thursday, corresponding to 2/12/2021, on the arena and field stadiums in the College of Physical Education and Sports Sciences / University of Kerbala for the variables of motor satisfaction and the technical performance test for the effectiveness of the triple jump for female students and in the presence of the assistant work team.

The general framework for implementing the teaching strategy:

After the researchers determined all the requirements of the main experiment by defining the tests for the variables investigated, after conducting the exploratory experiment and using them in organizing work and preparing for the main experiment, and before conducting the pre-tests, the researchers gave one

introductory unit to each of the two research groups, the purpose of which is to give prior education to the students to identify On the nature of the effectiveness to be learned, as well as to achieve the goals that require researchers to build educational situations that the learners will go through during the implementation of the strategy and study the place of implementation and the tools used within the framework of the method in question, and based on this:

- The researchers prepared the educational units of the strategy for a period of (6) weeks, with one educational unit per week on Thursdays. Thus, the total of units reached (6) educational units, through the first educational unit on (Thursday) (9/12/2021) until (Thursday) on (13/1/2022), and benefiting from the sources, references and previous studies.
- For the experimental group that works with the (interfering waves) strategy, it goes through several steps:
 - 1- Introduction.
 - 2- Determining the topic treatments that include the elements of the topic and an educational scheme

prepared by the teacher in advance that is presented to the students.

- 3- Divide the students into cooperative groups.
- 4- Each group is given worksheets prepared by the teacher in advance that contain cognitive stimuli (parts) related to the main topic. (While these papers differ from one group to another, they are complementary to them or for various cases).
- 5- The discussion of each group in front of the other groups and the exchange of opinions to achieve the overlapping waves of knowledge / here the discussion takes place in theory and in practice (that is, the actual application of each group in front of the rest of the groups) and the information is written on the board and then the discussion takes place to deliver ideas, solutions and optimal performance.
- 6- The solutions or cases discussed and performed by all groups are applied.

As for the control group, it uses the educational units prepared by the subject teacher.

Post-test:

After completing the educational units, the post-tests were conducted on Thursday, 20/1/2022, under the same conditions in which the pre-examinations were conducted, and with the presence of the same auxiliary team.

Statistical means:

- Percentage.
- Mean.
- Std. Deviation.
- T test.

PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS**Presentation and analysis of the results of the pre and post tests for the control group in the tests of motor satisfaction and the triple jump:**

Table (5) shows the significance of the differences between the pre and post-tests of the control group in the motor satisfaction tests and the triple jump.

Variables	Pre-test		Post-test		T value		Sig type
	Mean	Std. deviation	Mean	Std. deviation	Calculate d	Tabular	
Motor satisfaction	92.4	3.94	94.5	3.53	3.51	2.14	Sig
Triple jump	3.50	0.40	5.71	0.41	14.89		Sig

* Tabular value (t) at the level of significance (0.05) and the degree of freedom (14) is (2.14)

Table (5) shows the arithmetic means, standard deviations, and the calculated (t) value between the pre and post-test in the tests under consideration for the control group. (2.14) with a degree of freedom (14) and below the level of significance (0.05), and this indicates a significant difference in favor of the post-test in all the variables under study.

Presentation and analysis of the results of the pre and post-tests of the experimental group in the tests of motor satisfaction and the triple jump:

Table (6) shows the significance of the differences between the pre and post-tests of the experimental group in the tests of motor satisfaction and the triple jump.

Variables	Pre-test		Post-test		T value		Sig type
	Mean	Std. deviation	Mean	Std. deviation	Calculate d	Tabular	
Motor satisfaction	93.8	3.64	99.5	3.63	8.22	2.14	Sig
Triple jump	3.42	0.44	7.28	0.39	21.45		Sig

* Tabular value (t) at the level of significance (0.05) and the degree of freedom (14) is (2.14)

Table (6) shows the arithmetic means, standard deviations, and the calculated (t) value between the pre and post-test in the tests under discussion for the experimental group. (2.14) with a degree of freedom (14) and below the level of significance (0.05), and this indicates a significant difference in favor of the post-test in all the variables under study.

Discussing the results of the pre and post tests for the experimental and control groups in the research variables:

It appeared through the presentation and analysis of the results in tables (5,6) that there are significant differences with statistical significance between the pre and post-tests of the two research groups (control and experimental) in the motor satisfaction tests and learning the technical performance of the triple jump and in favor of the post tests.

Control group: The researchers attribute that the results obtained in their post-tests are due to the application of the method used by the teacher through his lesson or the mechanism that he follows during the explanation, which is displayed during the educational lesson, as this method is seen by him as more appropriate for the female students in terms of their physical, skill and intellectual capabilities, as the results

obtained for the control group in the method followed by the subject teacher as a result of the students listening to the teacher and their eagerness to obtain sufficient knowledge about the effectiveness they want to learn helped this listening and paying attention to the teacher to learning and development in technical performance and the correct and good steps regarding the effectiveness investigated, in addition to the repetition of the exercises followed by the subject teacher, which led to obtaining the results of the post-tests in a convincing manner for the control group.

Experimental group: The researchers attribute that the difference and improvement in the results of the dimensional tests are due to the benefit of using the overlapping waves strategy and applying it in the good manner required to make this strategy, as the learner uses a set of processes that require thinking for the purpose of reaching a solution to educational problems and depends on an idea called ebb and flow in Overlapping cognitive waves where the learner is active in this strategy, through it, there is a link between the previously learned information and the new information, and through the questions that are asked at the beginning of the lesson, to know what the

students have of information, concepts and previous experiences that are related to the research activity that is learned in a new way. This is consistent with the nature of some other activities related to athletics, as they are interconnected and have somewhat similar kinetic paths, for example (the long jump that was taken previously in the first stage), as we find that there is a correlation and similarity between the performance of these two activities somewhat, starting with the approach run and the field Approach, boarding, and landing area. This requires coherence, kinetic sequence, and repetition of this skill in its aforementioned forms. This is what was taken care of by applying the strategy, especially with the exercises that aimed to motivate the students and encourage them to actively participate in the lesson, which leads to the stability of the information related to this event.

Through the steps in which the overlapping waves strategy is performed, as the presence of repetition, direct inspection and correction process for the

correct performance by giving the students the process of moving in learning from one step to another, as “one of the criteria of a good teaching method is that it is appropriate to the content of the curriculum, and it is linked with the objectives of education, and to move from easy to difficult, And the balance of the theoretical side and practical application”(Al-Rubaie and Amin, 2011, p. 55.), and that the outcome of the process of teaching and teaching students within the steps of the overlapping waves strategy makes the learner have a broader understanding and awareness of the students’ thinking process through the questions that are distributed to the groups that relate to the core of the lesson material by distributing them to The divided groups, because they contain the form of gradual waves for the students, and the transition through them from the easy wave to the difficult wave, makes the process of teaching for the learner to take root for a longer and more time.

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Presentation and analysis of the results of the post-tests for the experimental and control groups in the tests of motor satisfaction and the triple jump.

Table (7) Shows the significance of the differences between the post tests of the experimental and control groups in the tests of motor satisfaction and the triple jump.

Variables	Experimental		Control		T value		Sig type
	Mean	Std. deviation	Mean	Std. deviation	Calculate d	Tabular	
Motor satisfaction	99.5	3.63	94.5	3.53	6.11	2.04	Sig
Triple jump	7.28	0.39	5.71	0.41	7.47		Sig

*Table value (t) at significance level (0.05) and degree of freedom (28) is (2.04).

Table (7) shows the arithmetic means, standard deviations, and the calculated (t) value between the post-test in the tests under study for the experimental and control groups. The results showed that all the differences for the tests are significant and in favor of the experimental group because the calculated (t) value is greater than the tabular (t) value of (2.02) and with a degree of freedom (28) and below the level of significance (0.05), and this indicates the existence of a significant difference in favor of the experimental group in all variables are under investigation.

Discussing the results of the post-tests for the two experimental groups:

Through what was presented in Table (7), it becomes clear that there are significant differences in the post tests of the variables investigated and in favor of the experimental group. The researcher attributes that the experimental group's

superiority over the control group is due to the use of the overlapping waves strategy with its scheme that includes a diverse learning process, as this strategy is one of the new methods of the process of teaching skills and activities because of its various steps and for this reason that made it progress on types of methods and methods and teaching strategies used in the teaching process "strategies of value in addressing educational and life experiences, Hence the importance of learning and training the students on them, and in which the student plays a major role in using various methods to reach the solution by stimulating her thinking and imagination and training her to solve the problems she faces. It depends mainly on the student's feeling of the problem and then identifying it and working to find appropriate solutions according to her own thinking and opinions" (Al-Rubaie, Mahmoud Dawood, 2010, p. 95). The researchers

believe that the use of the method used in the control group by the teacher is not sufficient to give the students the opportunity and give them sufficient freedom during the implementation of the method used due to the specificity of the implementation mechanism. In order to obtain better learning and development in educational outcomes, but the method followed by the subject teacher does not reach the students to a level that enables them to obtain a huge amount of information related to the educational subject from knowing and linking previous ideas with modern ideas. As a result of their obtaining scientific knowledge of information and ideas in a negative way, that is, the role of the learner in it is a recipient and applied for performance only, and not to involve him in putting forward ideas or discussion. The students also receive positive knowledge in the experimental group and leave them the freedom to rely on themselves in their practice of the exercises and the method of correct performance and the steps that are required. It is necessary to learn it according to their abilities, physical and skill capabilities, to allow them to express their opinion on the way of performance, to acquire good information that is useful to them, to increase their self-confidence,

and to initiate a spirit of cooperation and assistance among their colleagues in understanding and consolidating the information through discussion among the students within the one cooperating groups among themselves, that "learning within small groups of students allows them to work together effectively and help each other to advance the level of each one of them, and achieve the common goal". In addition to that, the implementation of the main part of the educational unit related to the exercises that came at appropriate times and quality for the levels of the students and their ages in terms of repetitions and taking into account the gradation of the exercises from easy to difficult because the nature of performing this activity requires physical and mental readiness and high compatibility due to its difficulty and this is what was focused on in The exercises are sequenced in learning the steps of this activity and performing them with high concentration, in addition to diversifying the use of tools in learning and adding an element of suspense and excitement, and excitement, and that "the stage of learning skills and activities, whether with or without the ball, is one of the most difficult stages of teaching the kinetic aspects of the game for the novice or the novice. Its difficulty is due to the

lack of an element of competition during the education period, as well as to its lack of some interesting elements” (Abbas and Mahmoud, 2007, p. 52) , the foundations of the strategy are based on thinking and choosing the right decision, and this is what was adopted in the main part when applying the exercises, starting from the preparatory part and starting with the approach run for the approach to the rise and landing in the landing area, i.e. the use of gradation with difficulty by placing the exercises in a correct kinetic sequence according to the sequence this is what the researchers reported to apply the exercises in the correct form, due to the similarity of the kinetic paths in most cases (the long jump activity that was taken previously in the first stage). The researchers took into account the gradual performance of the exercises, taking into account the level of difficulty in the technical performance of this activity, and using tools that helped in accelerating the learning process, "Learning by means of devices and aids achieves the principle of speed in learning and keeping boredom away from the learner, as well as its role in remembering the learner to perform mathematical skills, strong inclination and desire to learn, and helping the learner to develop his

mathematical skills" (Karim, Afaf Abdel, 1990, p. 56).

And that this strategy divides the female students into groups, which generates interaction between their members and makes everyone active so that each individual plays his role in order to avoid embarrassment, and that the multiplicity of opinions leads to a higher level of knowledge of the students and thus increases their level of motor satisfaction.

CONCLUSIONS AND RECOMMENDATIONS:

Conclusions:

- 1- The strategy followed and the method prepared by the subject teacher had a positive effect on the motor satisfaction tests and learning the technical performance the triple jump for the female students.
- 2- The results showed the superiority of the students of the experimental group (strategy of overlapping waves) over the students of the control group (the method prepared by the subject teacher) in the tests of motor satisfaction and learning the technical performance the triple jump for the female students.

Recommendations:

- 1- Emphasis on the use of the overlapping waves strategy in learning the rest of the athletics activities because of their good results.
- 2- Take advantage of the cooperative groups method in the effort expended in the educational process
- 3- The necessity of paying attention to the various exercises, educational aids and tools appropriate to the type of activity.
- 4- Conducting similar studies in other activities and games using the overlapping waves strategy for different age and school stages and for both sexes.

REFERENCES

1. Ahmed, Jawad and other(2014): Movement satisfaction and its relationship to the accuracy of the performance of the skills of handling and shooting in handball, *Journal of Physical Education Sciences*, Volume (7), Number (4).
2. Al-Kandari and Ahmad, (1999) : Scientific Research Methods in Physical Education and Islamic Sciences, 2nd Edition, Kuwait, Al Falah Library for Publishing and Distribution.
3. Melhem, Sami, (2000): Research Methods in Education and Psychology, 1st Edition, Amman, Dar Al Masirah for Publishing and Distribution.
4. Bahi, Mustafa Hussein, (1999). Scientific and Practical Transactions between Theory and Practice, 1st Edition, Cairo, Al-Kitab Center for Publishing.
5. Al-Rubaie and Amin, (2011): Methods and style of Teaching Physical Education, Beirut, Dar Al-Kutub Al-Ilmiyya.
6. Al-Rubaie, Mahmoud Dawood, (2010): Contemporary Teaching Methods and Methods, 1st Edition, Amman, Modern Book World.
7. Abbas and Mahmoud, (2007): Applications of Attack in Handball - Learning Training, 1st Edition (Cairo, Al-Kitab Center for Publishing.
8. Karim, Afaf Abdel, (1990):Teaching for Learning in Physical Education and Sports, Mansha'at al-Maaref, Alexandria.

APPENDIX (1)

Motor satisfaction scale

N	Paragraphs	applicable Very big degree	applicable Big degree	applicable Medium degree	applicable Slightly	applicable very small degree
1	My colleagues think my mobility is good.					
2	I can learn motor skills easily.					
3	I have the ability to maintain my body balance while performing some activities.					
4	I can jump really high.					
5	I have the ability to run fast.					
6	I can do movements that require agility.					
7	My ability to learn good motor skills is good.					
8	I can keep my balance steady.					
9	I have the ability to move lightly and gracefully.					
10	I can throw the ball very long.					
11	I can keep my balance by standing on one foot for an appropriate amount of time.					
12	I can move quickly around certain obstacles or barriers.					
13	I am able to engage in some movement activities without fear of falling to the ground.					
14	I can bend and stretch my body easily.					
15	I can do physical movements better than most of my female colleagues.					
16	I can perform violent physical movements.					
17	I can run a long distance.					
18	I can participate in some physical activities that require a high level of motor skill.					
19	I can engage in physical activity for a long time without feeling tired.					
20	I am able to move my body efficiently in various directions.					
21	I have clear confidence in my motor abilities.					
22	I am very satisfied with my motor abilities.					
23	I can keep my balance while walking.					
24	I am able to move gracefully to the beat of the music.					
25	I can perform some graceful movements when I want to.					
26	I can estimate the distances between myself and other colleagues while on the move.					
27	I can relax my body whenever I want to.					
28	I can use both arms and legs simultaneously when required					
29	I can jump forward a reasonable distance.					
30	I can do continuous physical exertion for a long time.					