Construction of Skill Test for Kicks in Taekwondo

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Abstract

The purpose of this study was to construct a skill test for kicks in taekwondo. For the purpose of the test construction sixty Taekwondo players age 12 to 19 years of Punjab district who participated in the 59th Punjab school Taekwondo championship 2013 held at Patiala from 18th Nov. to 22nd Nov. 2013 were selected to serve as subject for the study. The test-retest reliability coefficient was assessed for each test item and with complete battery collectively. The significant reliability coefficient ensured the preliminary form of the test. It was concluded that the newly developed skill test for kicks in taekwondo will meet the criterion of scientific authenticity i.e. the test was reliable, objective and valid.

KEYWORDS Taekwondo, Skill Test, Scientific Authenticity

INTRODUCTION

Skill perfection is needed in all types of indoor or outdoor games and taekwondo is no exception. Perfection based on certain skill and techniques. With the regular practice of skill and techniques a sports person become master over any kind of sports and game. The Mastery over the skill helps sports person to show their skill perfection during competition for the betterment of the game result. The purpose of the study was to construct a skill test for kicks in Taekwondo. According to AAHPER (1968) Sports skill tests have developed to measure the basic skills used in the playing of a specific sport because of the wide range of the skill. In most sports a selection of the most important skills is invariably necessary. The selection is usually based on jury technique or statistical analysis, and the skill items are collectively called a test battery. The skill test helps the students evaluate their performance in the fundamental skills of the game and to provide an incentive for improvement. The test also serves the purpose of helping the teachers to measure student’s performance and to evaluate their own teaching procedure and programs. Absence of standard measures result in a lot of confusion in an actual assessment of an individual at any stage of selection. The purpose of the study was to construct a skill test for kicks in Taekwondo.

METHODOLOGY

After the final selection of skill test items, all the (14) Initial items with their details description were distributed to more than 50 experts, who have the knowledge of Taekwondo and research work. The experts were requested to select the most appropriate skill test items for the study. Further they were also requested to suggest some more suitable test items if applicable. Despite it the Research Scholar
analyzed the 2013 world Taekwondo Championship competition Statistics which held at Puebla in Mexico from 15th July to 21st July 2013. The statistics of world taekwondo championship concluded that out of 2908 participants of 08 weight category in the male section, 1901 participants performed Dollyo chagi (Turning kick) to score 01 point, 109 participants performed the Dwit Chagi (Back kick) to score 2 point, 677 participants performed the Naeryo Chagi (Axe kick) to score 3 points while only 69 participants used the Bandae dollyo(Tornado or reverse turning kick) for 04 point and 152 participants performed the punch to get 01 point respectively. The research scholar also observed the favorite taekwondo kicks opinion poll of world taekwondo Federation which started from 2nd July to 4th Sep. 2013 on their website (www.worldtaekwondofederation.net). More than 865 people cast their vote on the given poll from all over the world. Through opinion poll people selected the most favorite Taekwondo kicks, The Hook Kicks (Huryeo Chagi), The Roundhouse kicks (Dolyo Chagi), The Back kicks (Dwi Chagi), The Sidekicks (Yeop Chagi) and the Axe kicks (Naeryo Chagi). On the basis of above mention reports and the suggestion of the experts (05) test items were short listed and selected as the final Taekwondo skill test items.

In the preparatory stage fundamental skill of Taekwondo were identified and integrated to form the test. The method, devise and approach for construction as well as assessment of each of the skill were formulated and enhanced. Each of the formulated skill can be called as Test-Items. Bearing in mind the finding of a variety of expert in the area of Taekwondo and physical education and sports and on the basis of researcher professional experience, a number of analyzed and suggested Taekwondo game like test items was modified and then included in the Taekwondo skill Test items which ensured the preface value of content validity of the test. Sixty (N=60) school level male taekwondo players age ranging from 12 to 19 years during 59th Punjab school games Taekwondo championship 2013 were tested first time by administering the newly constructed Taekwondo skill test Battery. After the gap of 2 days to check the reliability the test was re-administered for second time. The test-retest reliability coefficient was assessed for each test item and with complete battery collectively. The significant reliability coefficient ensured the preliminary form of the test.

The officials of the teams comprising coaches and managers were consulted at personal level to conduct the test of Taekwondo Players and a rapport was established with them for the testing programme. All the officials and in charge of the teams were made fully conversant with the study. Tentative times were finalized with them. The researcher approached each player after giving proper and timely information before the test was conducted. Before administering the test, the subjects were briefed about the purpose of the study and details of the test were explained to them. The subjects were given a demonstration of the test by a trained helper. They were also given sufficient number of trials to enable them to become absolutely familiar with the test. To ensure uniform testing conditions, the subjects were tested in the evening sessions after warming-up during practice sessions. The duration of test administration was set in a manner so that fatigue may not occur. Though no special technique was used to motivate the subjects, the subjects were
very co-operative throughout the test. The purpose of the test was to measure the kicks ability of a Taekwondo player’s through Taekwondo skill test based on the leading Taekwondo kicks.

The Taekwondo players were tested with the standardized Taekwondo Federation of India approved equipments comprising safety guard and practice equipments for the punches and kicks. After the demonstration of five skill comprising Middle Punch ,Dollyo Chagi (Turning kick) , Dwit Chagi (Back kick) ,Naeryo Chagi (Axe kick Bandae Dollyo (Reverse turning kick or Tornado kick) on the practice equipments comprising kick and punching pad.

Each and every taekwondo player had to perform 10 punches with right and left hand(5 punches with right and 5 with left hand ) , (9)Dolly chagi (5 with best leg and 4 with other leg), (9) Dwit chagi (5 with best leg and 4 with other leg) (9)Nareo chagi or axe kick (5 with best leg and 4 with other leg) , (9)Bandae Dollyo chagi or Tornado Kick (5 with best leg and 4 with other leg) during the test.

**SCORING :-** Every right hit on target by punches score- 1 point, Dollyo- 1 point, Dwit Chagi -2 points ,Nareo Chagi -3 points and Bandae Dollyo -4 point based on taekwondo fighting scoring system . On the basis of achieved raw score by the each taekwondo players after the performance of 5 skills were calculated for further analysis.

**OBSERVATIONS AND DISCUSSION**

The Test and retest method was employed to compute the reliability of the test items.60 subjects were tested on two different days with an interval of one day in between. The tests on both days were conducted by the researcher himself. The reliability coefficient of test-retest has been computed with the help of Pearson Correlation Coefficient method presented in the table.

**RELIABILITY OF THE TAEKWONDO SKILL TEST**

<table>
<thead>
<tr>
<th>SR.NO</th>
<th>TEST OF ITEMS</th>
<th>“R”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Middle Punch Test</td>
<td>0.47</td>
</tr>
<tr>
<td>2.</td>
<td>Dollyo Chagi (Turning Kick)Test</td>
<td>0.53</td>
</tr>
<tr>
<td>3.</td>
<td>Dwit Chagi (Back Kick)Test</td>
<td>0.71</td>
</tr>
<tr>
<td>4.</td>
<td>Naeryo Chagi (Axe Kick)Test</td>
<td>0.67</td>
</tr>
<tr>
<td>5.</td>
<td>Bandae Dollyo (Tornado Kick)Test</td>
<td>0.20</td>
</tr>
</tbody>
</table>

The result of reliability as presented in the table indicate that the reliability coefficient of the items comprising Middle Punch Test, Dollyo Chagi (Turning Kick) Test, Dwit Chagi (Back Kick) Test, Naeryo Chagi (Axe Kick) Test, and Bandae Dollyo (Tornado Kick) Test in the newly formed test for 12 to 19 years age group were 0.47, 0.53, 0.71, 0.67, and 0.20 respectively. The reliability coefficients for all the selected age group were statistically significant. Thus test re-test reliability coefficients indicate that the taekwondo skill test has got its preliminary form for the selected male taekwondo players.
The result presented in the table revealed that all the dimension of preliminary form of the taekwondo skill test have significant reliability coefficients (p<0.05) so this scale got its primary form.

**RELIABILITY OF THE TAEKWONDO SKILL TEST BATTERY**

<table>
<thead>
<tr>
<th>SR.NO.</th>
<th>BATTERY</th>
<th>“R”</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taekwondo skill test</td>
<td>0.50</td>
</tr>
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</table>

**OBJECTIVITY OF THE TAEKWONDO SKILL TEST BATTERY**

The data was obtained as a result of administration of the each test items separately and judged by two experts who noted the performance of the taekwondo players independently and correlated in order to obtain the coefficient of the correlation and objectivity which has been presented in the under given table

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Middle Punch Test</td>
<td>0.28</td>
</tr>
<tr>
<td>2.</td>
<td>Dollyo Chagi (Turning Kick) Test</td>
<td>0.43</td>
</tr>
<tr>
<td>3.</td>
<td>Dwit Chagi (Back Kick) Test</td>
<td>0.58</td>
</tr>
<tr>
<td>4.</td>
<td>Naeryo Chagi (Axe Kick) Test</td>
<td>0.56</td>
</tr>
<tr>
<td>5.</td>
<td>Bandae Dollyo (Tornado Kick) Test</td>
<td>0.22</td>
</tr>
</tbody>
</table>

**OBJECTIVITY OF THE TAEKWONDO SKILL TEST BATTERY**

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</tr>
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<tbody>
<tr>
<td>1</td>
<td>Taekwondo skill test</td>
<td>0.47</td>
</tr>
</tbody>
</table>

It may be observed that from the table that the objectivity of “R” value ranged from 0.22 to 0.58 and is significant at 0.05 level of confidence. These findings confirm that the analysis of taekwondo skill test is highly specific one and is a most valid tool to measure the skill test.

Analysis of data on Taekwondo skill test indicated that the constructed test in Taekwondo was found to be reliable. The findings of the study further reveal that the test of Middle Punch Test, Dollyo Chagi (Turning Kick) Test, Dwit Chagi (Back Kick) Test, Naeryo Chagi (Axe Kick) Test, and Bandae Dollyo (Tornado Kick) Test in Taekwondo was found to be objective. The significant values showed that the directions for administration of the test were specific and clear for performance as well as evaluation.

**CONCLUSION**: In the present study, the following conclusions were drawn The newly developed Skill Test tests in Taekwondo meet the criterion of scientific authenticity i.e. the test was reliable, objective and valid.
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