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# The Ten-Station Judo Ability Test: A Test of Physical and Skill Components

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## summary

The purpose of this article is to present a judo-specific ability test to be used by coaches who work with young judokas. The test is composed of 10 stations. In 5 of the stations the judoka performs physical ability exercises related to judo, and in the remaining stations the judoka performs judo-specific skills. This article provides the rationale for the test as well as specific instructions for each station.

Combat athletes, such as judokas, wrestlers, and boxers, are required not only to master the specific moves in their sport, but also to excel in a variety of physical abilities such as quickness, balance, and explosive power (3). During competition these athletes must alternately attack and defend while concealing their inten-

tions from their opponents. In addition, they need to make decisions under time pressure while facing aggressive opponents and decide which offensive maneuvers or defensive techniques to use (4).

Coaches who work with both novice and skilled combat athletes require relevant information that can aid them in predicting the chances of their athletes' future success. One of the more popular methods coaches use to gather this information is the administration of physical and skill tests at very early stages of talent development (1). Coaches in individual sports such as track and field, tennis, and swimming, as well as in team sports such as basketball, volleyball, and soccer, can find reliable information on a variety of tests related to the physical (2) and skill (5) components of these sports. Instructions, norms, specific emphases, and coaching tips for these tests can be found in texts on measurement and evaluation in physical education and sport (2).

Physical and skill tests suited to the early phases of talent identification and development in combat sports have not been widely reported in the literature. For example, in a recent book on how

to identify and develop outstanding athletes (1), physical and skill tests for the use of coaches are introduced in a variety of team and individual sports, but only general guidelines are provided for just 1 combat sport, namely wrestling. No information on testing protocols is available for other combat sports.

The purpose of this article is to present a judo-specific ability test to be used by coaches who work with young judokas (12–15 years of age). The test can be used with beginning as well as advanced young judokas. There are 3 advantages to our judo-specific test: (a) it consists of physical as well as skill components (5 stations each) all specifically related to judo, (b) it takes only a few minutes to complete, and (c) it is easy to administer and score.

A judo match lasts 5 minutes. Thus, the proposed test can provide the coaches with relevant information on how the young judokas perform the required skills in a period of time similar to that of actual combat. In addition to the description of the 10-station test, we provide coaches with some background information based on our experience using the test on young judokas.

## Judo-Specific Test: Stations, Rationale, Requirements, and Recommendations

The judo-specific test is composed of 10 stations, as can be seen in Table 1. The stations are performed consecutively in a specific order that alternates physical ability and skill components. In 5 of the stations (the odd-numbered stations) the judoka performs physical ability exercises related to judo. In the rest of the stations (the even-numbered stations) the judoka performs judo-specific skills. These include offensive maneuvers (stations 2, 6, and 10) and defensive techniques (stations 4 and 8). In all the stations except station 10 the judoka is instructed to perform a specific move. In station 10 the judoka can select and perform his or her preferred throws.

The rationale for the selection of the physical and skill activities performed in the 10-station judo-specific test is that they reflect the activities of judokas during combat. More specifically, the test is composed of tasks that reflect physical components such as speed and quickness (e.g., stations 1 and 5) and strength (e.g., stations 3, 7, and 9), as well as judo skills (all the even-numbered stations). The 10 components of the test are performed continuously without breaks, reflecting the continuous effort made by judokas during actual combat.

The rationale for the proposed order of the 10 stations in the test is also based on what is expected of judokas during actual combat. It is preferable that the judokas perform the offensive (stations 2, 6, and 10) and defensive (stations 4 and 8) skills after intense but short activity; thus, we asked them to begin the test with the 4 × 8-m shuttle run. We also alternate skill (e.g., station 2), strength (e.g., station 3), and speed and quickness (e.g., station 5) components to enable the judokas to perform a continuous effort in which both hand and leg muscles are occupied with intense

Station	Activity
1	4 × 8-m shuttle run.
2	Seionage throws alternatively to the right and to the left.
3	Rope climbing (height 3.3 m) using arms only.
4	10 escapes from Kesa-Gatama holds alternatively to the right and to the left.
5	10 side-to-side jumps over a bench (height 15 cm) with feet together.
6	Ouchigari throws alternatively to the right and to the left.
7	25 sit-ups performed while lying on a mat, with the backs of the lower legs resting on a bench. Hips and knees are at a 90° angle and hands are held behind the head. One sit-up is counted after the elbows touch the knees and the shoulders return to the mat.
8	Escapes from Yoko-Sheo-Gatama holds alternatively to the right and to the left.
9	20 push-ups performed with hands on the mat and feet on a bench. Hands are placed at shoulder width. One push-up is counted after the chest touches the mat and the elbows return to full extension.
10	8 individually selected throws alternatively to the right and to the left.

activities, as in actual combat. Our main objective is to assess the judokas' physical ability and skill level in challenging and stimulating combat-like settings.

There are 5 basic conditions of the judo-specific test: (a) the test is performed individually, (b) the judoka performs all judo throws and escapes with a partner of similar body mass and skill level, (c) total time is measured from the moment the judoka starts to act in station 1 (the shuttle run) until he or she completes the 8 preferred throws in station 10, (d) the coach ensures that the athlete is performing each technique properly, and (e) the total performance time is revealed to the judoka at the end of the test.

We find that it is beneficial to administer the 10-station test at the early phases of the judo training program. We provide coaches with 3 recommendations:

(a) The test should be administered every 5 to 6 months. (b) The coach should use the information obtained by the test to assess the progress of the young judoka during the training program. The progress of the judoka can be assessed by measuring the total time of the 10-station test, by measuring the performance time in each station, and by evaluating the quality of any judo skill performed in the skill stations. In addition, coaches can use the information obtained from the test to assess the contributions of the multifaceted training program to talent development. (c) The coach can increase the demands in each station of the test according to the progress of the judoka. For example, the number of performances in each station can be increased. However, if the coach decides to change the protocol of the test, he or she should be aware that new norms should be developed. In addition, it may be difficult to compare the results of the judoka that are obtained

from the new version of the test with the results obtained from a previous version.

On the basis of our experience with young male judokas (age range 12–15 years), we have determined the target time of the test to be 180 seconds (3 minutes). The target time can provide coaches only with “basic numbers” as to what to expect from their young judokas. This number cannot be used as norms; it is only an example of what we found in our training programs. Younger or older judokas, or less or more experienced ones, will probably achieve different times. Developing appropriate norms require more data, preferably longitudinal data.

In summary, the 10-station judo-specific test should aid coaches in obtaining relevant information on the judokas’ progress during the training program. After administering the test, coaches can collect the judokas’ scores, analyze them statistically, and assess what the numbers reveal. The more data that are collected while using the proposed test, the more will be understood about the usefulness of the test in various stages of talent development in judo. ♦

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