The 30-Second Walk Test (30sWT) Norms for Children

“How should I apply this information?”
Currently, pediatric physical therapy practice has a focus on functional outcomes and its objective documentation. Objectivity often means the use of standardized tests mostly in a non-natural environment, such as a laboratory and practice environment. Sophisticated measurements have been used in gait laboratories to document walking performance in children. Outside these facilities, walking performance has been assessed as a part of multidimensional motor skills or functional performance test or as a single-dimension test such as the 6-minute walk test. Although these latter tests examine the ability to walk, such as coordination or exercise capacity and endurance, therapists often want to know and judge a child’s ability to walk a given distance in a given time. Especially in school settings, children often are expected to change classrooms in a short period of time. For objectively judging this performance, we need a test that takes a short time to administer while not requiring extensive equipment or a gait laboratory. To interpret the results, we need norms for comfortable, self-selected walking in a natural school-based environment, preferably presented as a growth curve that makes interpretation of age-related performance quick, easy, and reliable. These data effectively facilitate pediatric physical therapists’ practice by providing an objective indicator of a child’s performance, and when tracked, data may be used to reflect maturational change over time.

“What should I be mindful about in applying this information?”
The current study expands the normal database for the 30sWT in a natural environment to include ages 5–17 years. Age, weight, and (right) leg length seem to be important determinants that could influence the total walking distance. These determinants should, therefore, be measured in the clinical setting before starting the 30sWT to detect possible differences among children of the same age. Other factors such as personality, attitude, and environment may account for other detectable variances as well. These factors were beyond the scope of this study but should be taken into account when interpreting test results. However, research examining the effects of environment, personality, temperament, and attitude on walking performance is nonexistent.

Differences in ethnicity could influence the outcome values of the 30sWT; therefore, the reference values given in the current study are only applicable to the described ethnic group. Furthermore, the authors suggest administering the test to 1 child at a time; group testing would influence the individual test scores.

Physical therapists or other clinicians can use these normal data as a reference to assist in identifying those children who may benefit from pediatric physical therapy services. Then differences in walking distance as a result of physical therapy intervention can be recorded. However, all facets of development and maturation should be taken into account before the efficacy of such an intervention could be determined. This 30sWT can serve as a direct outcome measure and, when used serially, can be used to monitor changes in the percentile of performance, an important step in the objective documentation of our clinical practice.

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