## 研究業績 英文表記

和文	
表題	地域在住高齢者における身体機能評価を用いた認知機能低下者抽出方法の検討
著者名	木室 ゆかり <sup>1</sup> , 古瀬 裕次郎 <sup>1</sup> , 畑本 陽一 <sup>2</sup> , 池永 昌弘 <sup>2,3</sup> , 田中 宏暁 <sup>2,3</sup> , 檜垣 靖樹 <sup>2,3</sup>
所属	1 福岡大学大学院スポーツ健康科学研究科 2 福岡大学基盤研究機関身体活動研究所 3 福岡大学スポーツ科学部
英文	
Title	Optimal cutoff values of TUG and Chair Stand for detecting risk of cognitive impairment in Japanese elderly adults
Author	Yukari Kimuro <sup>1</sup> , Yujiro Kose <sup>1</sup> , Yoichi Hatamoto <sup>2</sup> , Masahiro Ikenaga <sup>2,3</sup> , Hiroaki Tanaka <sup>2,3</sup> and Yasuki Higaki <sup>2,3</sup>
Affiliation	1 Graduate School of Sports and Health Science, Fukuoka University 2 Fukuoka University Institute for Physical Activity 3 Faculty of Sports and Health Science, Fukuoka University
Abstract	This study evaluates the pertinent cutoffs of Timed Up and Go (TUG) and Chair Stand (CS) tests for detecting cognitive impairment risk in Japanese elderly. Subjects were community dwelling adults aged 65 or older (N = 455, 129 men and 326 women). Cognitive function was examined using Urakami's test for Alzheimer's disease; physical function was examined by TUG and CS. The maximum score for cognitive function was 15; impairment was defined as 12 or less. Receiver operating characteristic (ROC) analyses were performed to find an appropriate cutoff of TUG and CS for cognitive impairment. Furthermore, the sensitivity and specificity of the combined use of these measures independently distinguishing between subjects with and without a risk for cognitive impairment were determined. Fifty-four subjects (12%) scored as impaired on Urakami's test. The optimal TUG cutoff for cognitive impairment was 6 seconds and 9 seconds for CS. The combined use of TUG and CS, based on a subject being positive on at least one measure, yielded sensitivity of 78% and specificity of 50%. Area under the ROC curve of TUG and CS were respectively 0.67 and 0.66. When divided into two groups according to the TUG cutoff value, the odds ratio of cognitive impairment in the slower group was 2.1 (95% confidence interval 1.25-3.37). For CS cutoff, the slower group odds ratio was 3.57 (95% confidence interval 2.20-5.81). For TUG and CS combined, the slower group odds ratio was 2.11 (95% confidence interval 1.03-4.34). TUG and CS are thus potent predictors for cognitive impairment among elderly adults.
keyword	Cognitive function, Physical function, Timed Up and Go, Chair Stand