

Gait speed, balance and functional capacity in a sample of community-dwelling older adults

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INTRODUCTION

Falls in older people are an important public health concern since they are responsible for high number of hospitalizations, health complications, disability and death. Gait speed has been identified as a predictor of health state in elderly populations and it is related with falls and functional capacity.

The aim of this study was to identify the risk of falling in a sample of Portuguese older adults living in the community and to investigate the associations between gait speed, balance and functionality.

METHODS

This was a cross-sectional study. Assessment included gait speed (GS) with 4 meter walk test; balance with the Berg Balance Scale (BBS); functional capacity with the Composite Physical Function scale (CPF). Descriptive and correlational statistics were performed to analyze data.

RESULTS

46 community-dwelling older adults (32 women; 14 men) aged 77±9 years participated in our study. Mean value for GS was 1.17±0.37 m/s which is normal for this population. For BBS and CPF median was 52 and 19, respectively. BBS results revealed a risk of falling of 43% and functional capacity of our participants was at moderate levels. The study of correlations between variables also showed positive associations between GS and BBS (R=0.631; p=0.00) and between GS and CPF (R=0.605; p=0.00)

Table 1

Characteristics of participants

Variable	n=46 (32 women; 14 men)
Age (years)	77±9
Gait speed (m/s)	1.17±0.37
Berg Balance Scale (points)*	52
Composite Physical Function (points)*	19

Results in mean±standard deviation

*Median

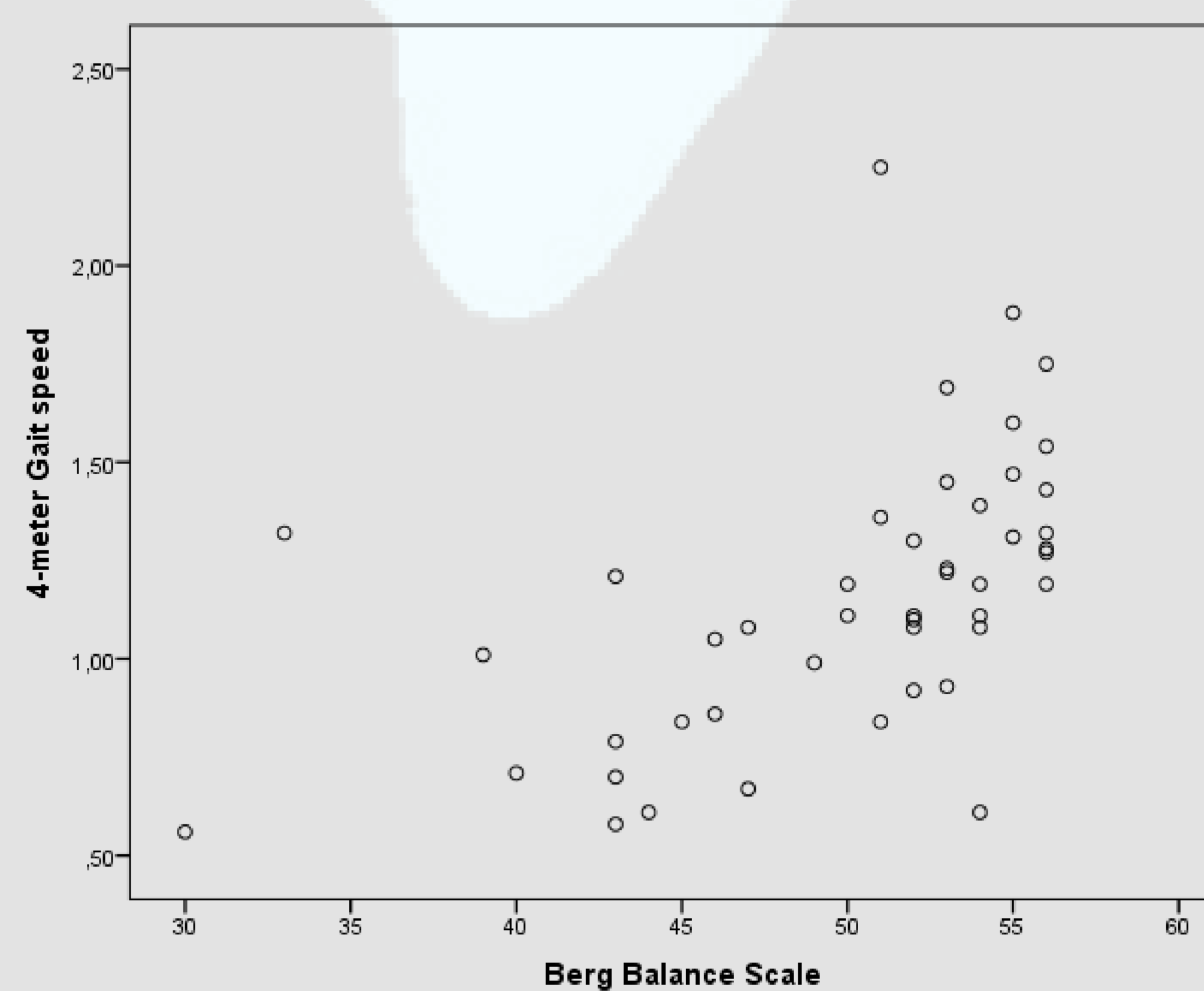


Figure 1
Correlation
between gait
speed and balance

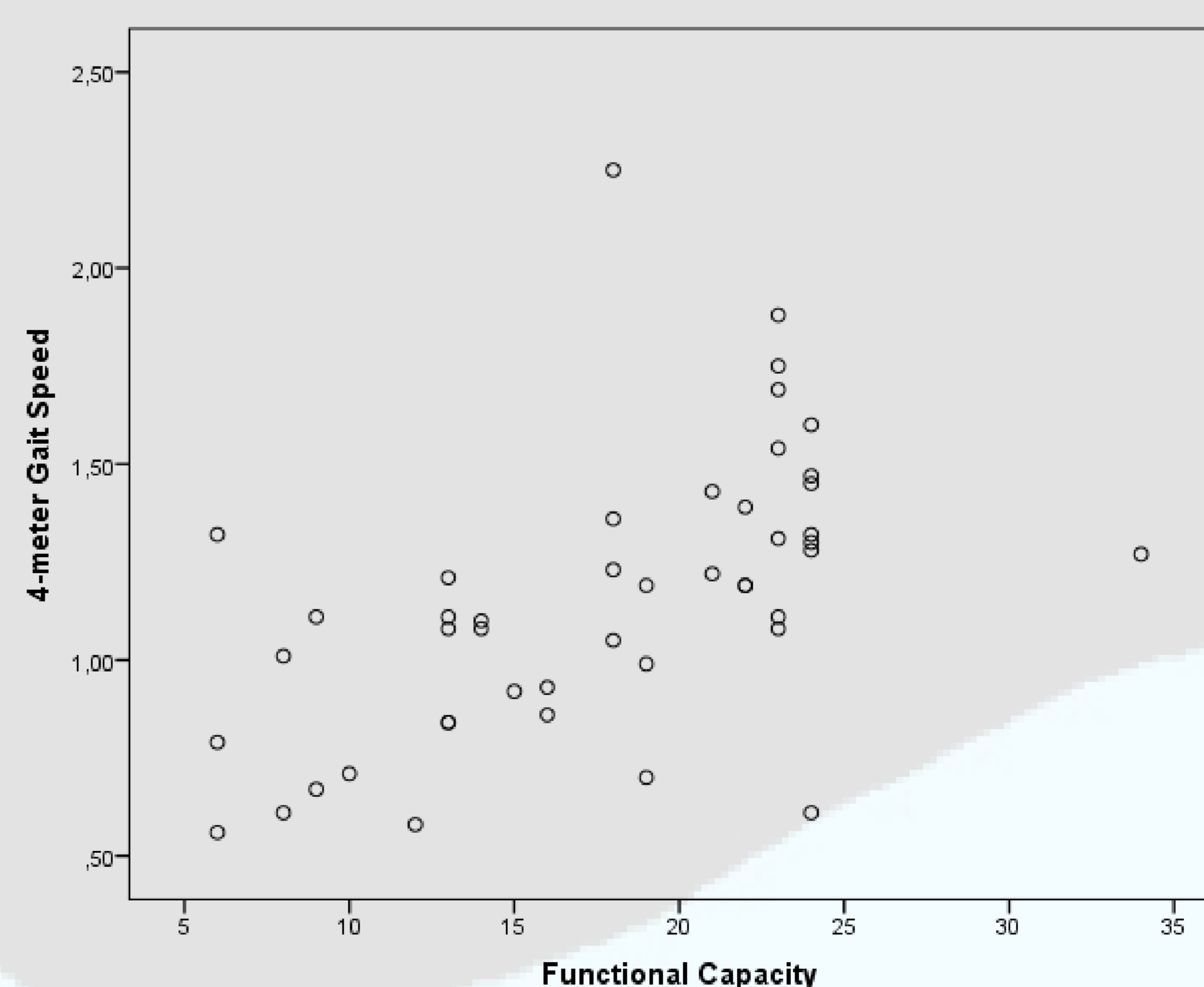


Figure 2
Correlation between
gait speed and
functional capacity

CONCLUSIONS

Positive associations between GS and balance and between GS and functional capacity highlight the role of GS in the assessment of fall risk and functional capacity since it is a simple and easy test to perform.

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