

<b>Paper Category:</b>	Diagnosis and Aetiology
<b>Paper Title:</b> (Arial Font; 14 Pt Size)	Validating the Mini Sarcopenia Risk Assessment Questionnaire (MSRA) for Sarcopenia Case-finding Amongst Community-Dwelling Older Adults
<b>Abstract Body:</b> (Arial Font; 12Pt Size)	<ul style="list-style-type: none"> <li>• Background</li> <li>• Objectives</li> <li>• Method</li> <li>• Results</li> <li>• Discussions and Conclusions</li> </ul>

(Maximum word limit - 300 words)

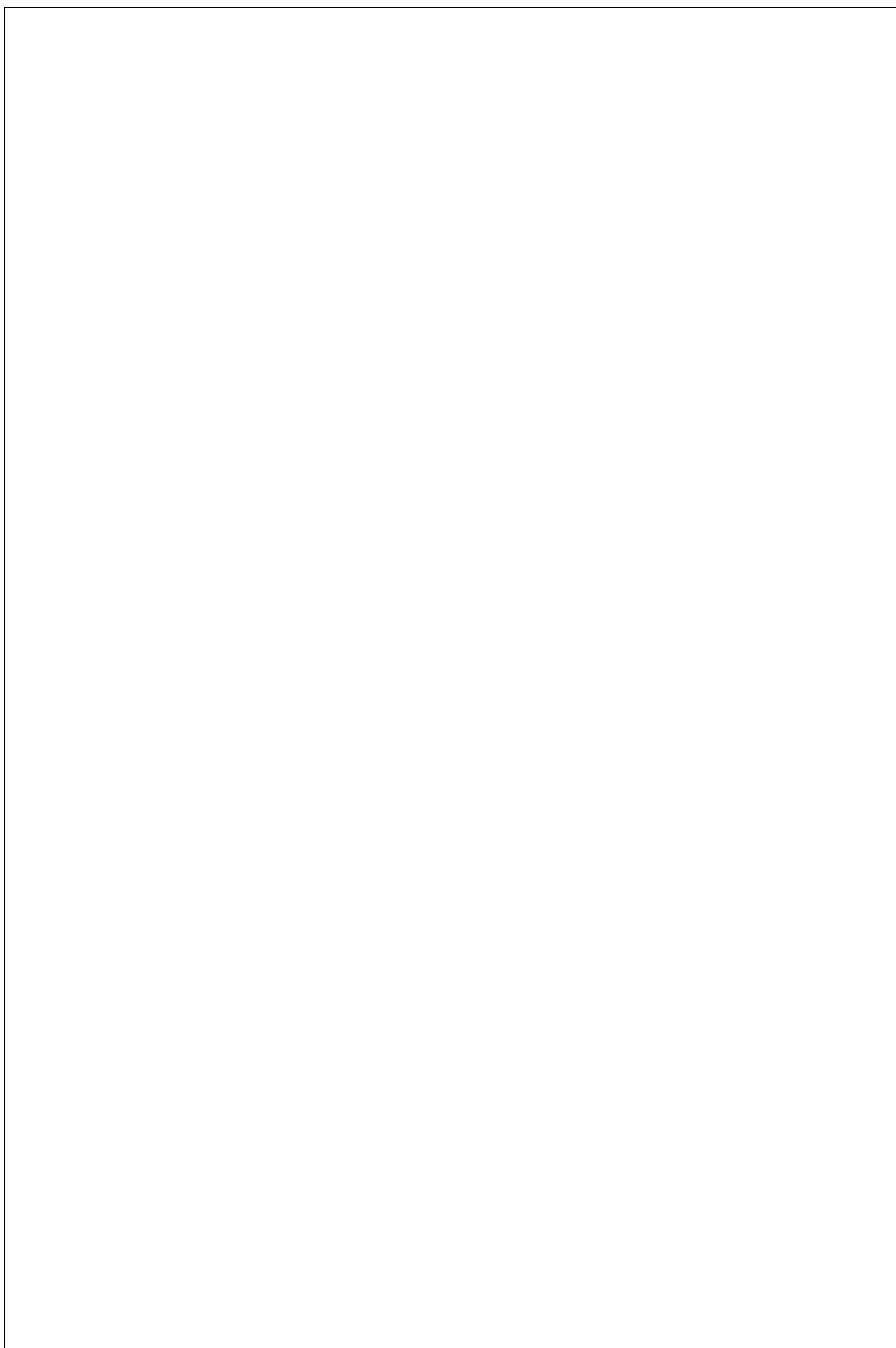
The AWGS 2019 consensus emphasizes case-finding for early identification of community-dwelling older adults at risk for sarcopenia, using calf circumference, SARC-F or SARC-CalF. The MSRA, a newer self-report questionnaire evaluating risk for sarcopenia, was recently evaluated to perform poorly in community-dwelling older adults in Singapore.

We aim to examine the construct, concurrent and predictive validity of MSRA in community-dwelling older adults in Singapore.

Using data from GeriLABS-2, a prospective cohort study of 230 community-dwelling older adults in Singapore, we assessed convergent validity of MSRA against nutrition (MNA, SNAQ), physical function (SPPB, gait speed) and muscle (ALM and hand grip strength (HGS)), and divergent validity against cognitive health (mcMMSE) and social frailty (SF-8), using Spearman Rank correlation coefficient. We analyzed concurrent validity between MSRA and frailty (modified Fried phenotype, FRAIL scale) using Kruskal-Wallis test. We evaluated predictive validity of MSRA for participation in activities (Frenchay Activities Index, IPAQ and Life Space Assessment) using regression analysis.

Both MSRA-5 and MSRA-7 demonstrated moderate correlation with MNA ( $r=0.345$ ;  $r=0.479$ ), poor and non-significant correlation with SPPB ( $r=0.129$ ;  $r=0.106$ ), gait speed ( $r=0.077$ ;  $r=0.100$ ), ALM ( $r=-0.033$ ;  $r=0.028$ ) and HGS ( $r=-0.009$ ;  $r=0.011$ ), indicating poor convergent validity; and poor but significant correlation with social frailty ( $r=-0.121$ ,  $r=-0.177$ ), indicating poor divergent validity. MSRA-5 and MSRA-7 scores were significantly different for participants identified as frail using modified Fried phenotype ( $p<0.05$ ), indicating concurrent validity. Adjusted for age, sex and BMI, there was no significant association between MSRA-5 and Frenchay Activity Index ( $\beta = 0.08$  (-0.06 – 0.21)), IPAQ ( $\beta = 50.99$  (-16.04 – 118.03)) or Life Space Assessment ( $\beta = 0.35$  (-0.15 – 0.84)). Results were similar for MSRA-7, indicating poor predictive validity.

MSRA-5 and MSRA-7 demonstrated poor validity of MSRA in case-finding of sarcopenia in community-dwelling older adults in Singapore. These results may highlight the limitations of the clinical utility of MSRA.



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