

Italian Validation of the Scientific Reasoning Scale (SRS): Classical test theory and Item Response Theory

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Scientific reasoning (SR) is a crucial aspect in daily life, influencing individuals' ability to pose scientific questions, collect data, critically evaluate information, and draw informed conclusions. There are few tools for measuring SR, tailored to specific age groups or countries, which limits the comparability of results due to the unique characteristics of these tools. The Scientific Reasoning Scale (SRS), validated in the US and Turkey, measures an individual's ability to evaluate scientific evidence. To facilitate generalization across diverse populations, it is important to validate this scale in different cultural contexts.

This study aims to validate the SRS in the Italian context on a sample of 600 Italian adults aged 18 and over. A questionnaire was administered via Qualtrics. This validation process, following the approach of the unified view of validity, aims to establish the scale's validity across various sources of evidence: factorial structure, generalizability, convergent validity, criterion validity, known-group evidence, reliability. To achieve this, two measurement models will be applied as complementary approaches: Classical Test Theory and Item Response Theory. This choice is motivated by the idea that these models can be applied jointly to obtain different and triangular information, as suggested by Bean and Bowen (2021), and to provide more differentiated validity evidence, as suggested by the contemporary view of validity. The results will allow verification of the adequacy of the adaptation of this instrument and potentially fill the existing gap in the assessment of SR skills in the Italian context.

If you're submitting a poster, would you be interested in giving a blitz talk?

If you're submitting a symposium talk, what's the symposium title?

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