



RUMBLE'S QUEST

**A valid and reliable measure
of social and emotional
wellbeing for middle
childhood**

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Psychometric Study:

Sample: A study was conducted to confirm the validity, reliability, and factor structure of the measure.

Analyses were based on a sample of 3461 children enrolled at 11 primary schools. Many of these schools serve communities that encompass a broad and rich cultural diversity.

Participating schools were located in communities representing High (n = 810 students), Medium (n = 503 students) and Lower (n = 2148 students) socio-demographic bands according to the Australian Bureau of Statistics Socio Economic Index for Areas (SEIFA). SEIFA deciles for the statistical local areas where schools were located were 9-10 (high), 5 (medium) and 1-2 (low)

The children ranged in age from 5 to 12 years and were enrolled in Grades 1 to 7 (just under 500 children per grade level participated).

Validity Testing:

The measure exhibits excellent validity. Content validity was established by comparing children's responses on this interactive measure to their scores on three different paper-and-pencil measures that also relate to aspects of wellbeing. Significant correlations provide good evidence of convergent validity indicating the measure provides an accurate and meaningful measure of wellbeing.

	Self-perception Profile for Children (Harter, 1985)	Psychological Sense of School Membership (Goodenow, 1993)	Personal Wellbeing Index (Cummins and Lau, 2005)
Correlation	.520*	.595*	.488*
n	804	800	853

* Correlation is significant at the .001 level

Reliability Testing:

Test-retest correlation after one month was high and significant ($r = .82$) showing that children were consistent in the responses they made from one time to another.

Internal consistency: Cronbach's alpha (.92) indicates that a high level of consistency was also demonstrated in children's responses to different items tapping the same construct within the measure.

Factor Structure:

Factor analysis of children's responses to 55 items (using maximum likelihood methods and oblique rotation) revealed a strong general dimension with high internal consistency as well as the existence of four sub-factors:

- Attachment to school
- Self-regulation and prosocial behaviour
- Social and emotional confidence in regard to their capabilities, self-worth and peer relationships, and
- Supportive home relationships

Characteristics of the Distribution:

The total wellbeing score was found to vary across grade level ($F = 7.954, p = .000$), SES group ($F = 9.78, p = .000$) and gender ($F = 150.114, p = .000$). These results indicate that, in general, wellbeing score declines with increasing age, is greater among children attending schools located in higher socio-economic areas, and that girls report higher levels of wellbeing than boys.

Overall scores on the measure fall within a normal distribution. In the overall sample of 3461, a slight skew reflected the fact that there were more children from lower SES areas than higher than middle band areas in the study sample.

Conclusion:

The psychometric analyses demonstrate that Rumble's Quest is a valid and reliable measure that captures children's wellbeing in a general sense as well as assessing wellbeing in relation to specific social and emotional sub-domains.

