INTRODUCTION: To evaluate outcomes in terms of prevention, treatment and rehabilitation in children, it is important to test Health Related Quality of Life (HRQoL). One of the most referenced theoretical models to measure HRQoL is the Wilson and Cleary model. It proposes a series of critical concepts along a causal pathway to measure the contributions to HRQoL. This model has been validated in the adult population, but not in pediatric populations. Our goal was to empirically test this model in children.

METHODS: The contributory factors to HRQoL (Kiddy-KINDL) that we included were symptom status (hospitalization/presence of chronic disease), functions (development status), individual behavior (behavior based on motor, cognitive and emotional development), and characteristics of the social environment (socioeconomic status and area of education). Structural equation modeling was used to assess the measurement structure of the model in 214 German children (3–5 years old) participating in a follow-up study that investigates pediatric health outcomes. Baseline data were used.

RESULTS: Model fit was $\chi^2 = 5.8$, df = 7, $P = 0.56$, SRMR = 0.01. The variance explained of HRQoL was 15%. HRQoL was affected by the area of education, and development status ($P < 0.05$). Development status was affected by the area of education, socioeconomic status and individual behavior ($P < 0.05$). In turn, symptoms did not affect HRQoL ($P < 0.05$).

CONCLUSIONS: The results between children’ and adults’ tests differed as expected. The goodness of fit of the model was acceptable, and the overall variance explained was good compared to previous studies. We attribute our finding to the indicators selected in both tests, which denote a conceptual gap between adult and children measures. However, there is a lot of variety in pediatric HRQoL measures, which represents a lack of a common definition of this construct. We recommend investing more time into theory development of pediatric HRQoL.