

# THE VALIDITY OF THE TACQOL-CHILD FORM; A QUALITY OF LIFE QUESTIONNAIRE FOR CHILDREN

G.H.W. Verrips, Netherlands

The aim of the current study was to assess the validity of the TACQOL-Child Form. The TACQOL-CF is a questionnaire for children, designed to assess young children's Health Related Quality of Life (HRQoL). Defining HRQoL as the affective evaluation of health status, the TACQOL assesses the presence of health status problems and the emotional response to such problems, if present. The TACQOL contains five 8-items health status scales: physical complaints (BODY), motoric functioning (MOTOR), autonomy (SELF), cognitive functioning (COGNITION) and social functioning (SOCIAL), and two scales assessing general mood (EMOPOS and EMONEG). The structure of the TACQOL-CF runs parallel to that of a parent form.

In order to evaluate validity, the TACQOL-CF was supplemented with another QoL-questionnaire, the Dutch version of the KINDL (Bullinger, 1994), and questions assessing -among others- general health, chronic diseases, illnesses during the last few weeks, and having been under medical treatment (GP, specialist, psychologist or physiotherapist, having been hospitalised and use of prescribed medicines).

Data were collected by means of a survey among 1680 children between 8 and 11 year. Twelve regional departments for Preventive Youth Health Care all over the Netherlands drew a sample of 140 children, 50% boys, equally divided over two age groups. Parents received the questionnaire by mail and were asked to let their children fill in the TACQOL-Child Form. After three weeks a single reminder was sent if necessary.

Analyses were done to answer three questions:

- 1: Can the scale structure of the TACQOL-Parent Form be replicated with the TACQOL-Child Form in a normal population? The analyses involved factor analyses and calculation of item-scale/item-rest correlations to assess the internal validity of the scales and calculation of Cronbach's alpha to assess internal consistency.
- 2: Are adverse health conditions correlated with lower HRQoL? This was assessed by means of variance analyses with the data concerning health condition and having been under medical treatment.
- 3: How does the TACQOL-CF relate to the Dutch KINDL? This was measured by calculation of the correlation between the TACQOL-CF and KINDL scales.

Data collection being not yet fully completed, the response rate by now is already 67%.

Factor analyses with VARIMAX-rotation replicated the scale structure of the TACQOL-PF, but only partially. Some items of the scales SELF and SOCIAL loaded higher on another factor than their own. The reliability of the scales was satisfying (0.65 for SOCIAL) to (0.79 for COGNIT): For most items (91%) the item-rest correlation was higher than correlations with other scales.

A multivariate analysis of variance showed no significant effects of either sex or age group.

A analysis of variance showed significant effects for general health, having any chronic disease, and having been under medical treatment. All differences were in the expected direction, but small. Minor illnesses during the last few weeks showed hardly any significant effects. Analyzing the effects of specific chronic diseases we found only effects for asthma, allergy and intestinal disturbances. For example asthma affects BODY, MOTOR and EMONEG. As for the medical treatment differential effects on different scales can be demonstrated. For example having undergone an operation gives a lower HRQoL on MOTOR and SELF only, while children visiting a psychologist also have a lower HRQoL on SOCIAL and EMONEG.

Correlations between the TACQOL-CF scales and comparable KINDL scales ranged between 0.41 and 0.61. Correlation between the overall QoL-score of the TACQOL-CF and the KINDL was 0.70.

The results confirm the external validity of the TACQOL-CF. However, the internal validity of the domain structure is not totally confirmed. Because the domain structure was based on the TACQOL-Parent Form, it should be asked if the same domain structure is fully applicable for children, or that some other domains are necessary.

These results could also be an indication that children's evaluations of their functioning is more diffuse, less consistent and possibly more heavily influenced by single experiences, whereas parents offer a more structured and generalised perception.