

# THE VALIDITY OF THE DUTCH TACQUOL -PARENT FORM IN A NORMAL POPULATION.

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The aim of the study was to establish reference data for the TACQUOL - Parent Form in a normal population and to collect more evidence on its validity in such a population. The TACQUOL-Parent Form is a questionnaire for parents, designed to assess their Children's Health Related Quality of Life (HRQoL). Defining HRQoL as the affective evaluation of Health Status, the TACQUOL assesses the presence of health status problems and the emotional response to such problems, if present. The TACQUOL-PF contains five health status scales (BODY, MOTOR, SELF, COGNITION and SOCIAL) and two scales assessing general mood (EMOPOS and EMONEG). High scores on all scales but EMOPOS reflect a lower HRQoL. In order to evaluate validity, TACQUOL-PF was supplemented with questions assessing -among others- general health, minor illnesses during the last few weeks, chronic diseases and having been under medical treatment (consulting the GP, specialist, psychologist or physiotherapist, hospitalisation and using prescribed medicines).

Data were collected by means of a survey among (parents of) 2520 children, between 6 and 11 year. Twelve regional departments for Preventive Youth Health Care all over the Netherlands drew a sample of 210 children each, half of which were boys and equally divided over three consecutive age groups. Parents received the questionnaire by mail.

Analyses were done to answer three questions:

- 1 Can the scale structure of the TACQUOL-PF, originally established in a study among severely ill children, be replicated in a normal population? The analyses involved confirmatory 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 different reference tables for boys and girls and for different age groups necessary? The analyses involved multivariate variance analyses with the factors sex and age group and their interaction.
3. Are adverse health conditions indeed correlated with lower HRQoL? This was assessed by means of (multivariate) variance analyses with the data on health condition and having been under medical treatment.

Data collection being not yet fully completed, the response rate by now is already 72%. Non response is higher among parents of children in the age range of 8 to 11, probably because these parents were asked to let their children fill in a separate questionnaire. Response among parents from ethnic minorities is lower than their proportion in the general population. Both factor analyses with VARIMAX-rotation and item-scale/item-rest correlations replicated the scale structure almost perfectly, thereby supporting the internal validity of the TACQUOL-PF in a predominantly healthy population. Cronbach's alpha ranged from moderate (0.66 for SOCIAL) to high (0.84 for EMOPOS).

A multivariate analysis of variance showed significant multivariate main effects of both sex and age group. Bivariate sex effects were found with regard to BODY and COGNIT and SOCIAL. With regard to age group significant effects were found on MOTOR, COGNIT, SOCIAL, SELF and EMOPOS. The differences are small, covering only a minor part of the theoretical scale ranges.

A multivariate analysis of variance showed significant main effects of general health, having any chronic disease, having been ill in the last few weeks and having been under medical treatment. All differences were in the expected direction. For chronic diseases differential effects on different scales can be demonstrated, in relation with the type of disease. Again however, differences are rather small.

The results confirm the (moderate to good) internal consistency and the internal and external validity of the TACQUOL-PF. The small statistical effects of adverse health conditions, however, raise some questions. Are these small differences to be attributed to insufficient sensitivity of the TACQUOL-PF? Or are they real and should one conclude that these factors have only small effects on children's well being? Such questions can be answered only by developing an external standard which reflects relevant differences in well being and which should therefore be detected by instruments designed to measure HRQoL.