

# The German Communication Attitude Test for Preschool and Kindergarten Children Who Stutter (KiddyCAT-G): Reliability and First Reference Data

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## Abstract

**Objective:** To investigate reliability and describe reference data of the KiddyCAT-G, an authorized German adaptation of the 'Communication Attitude Test for preschool and kindergarten children who stutter'.

**Method:** Children (3.0-5.11 yrs)

High test-retest reliability was successfully established for the Dutch KiddyCAT with a group of CWS ( $r=0.90$ ,  $n=34$ ) and CWNS ( $r=0.67$ ,  $n=42$ ) [24]. Slovenian version also a high test-retest reliability for a group of CWS ( $r=0.953$ ,  $n=49$ ) and a group of CWNS ( $r=0.985$ ,  $n=75$ ) [21]. In addition, the KiddyCAT has repeatedly shown to CWS from CWNS based on their communication attitude [9,16,19,21,23,25].

In order to use the KiddyCAT with German CWS, an authorized translation and adaptation into German (KiddyCAT-G) was developed by the author, which was by a professional translation company. Following this, back translation took place between the author and one of the test authors in order to ensure that the items captured the intended content, but were also culturally appropriate.

It is important that translated assessments, like the German KiddyCAT-G, have established psychometric properties before being adopted into widespread use [26]. Referring to previous data on reliability of the KiddyCAT and its translations, we expected comparable for its German adaptation. our aim was to determine the KiddyCAT-G's internal consistency and test-retest reliability. A second aim was to provide German reference data

All children in both groups were administered the KiddyCAT-G in a quiet room in the kindergarten/preschool (CWNS group) or clinical setting (CWS) by either the author; an individually trained (~3 h) research assistant or the CWS's SLP who was familiarized with the test administration. To assess test-retest reliability, 15 CWNS and 20 CWS were administered the KiddyCAT-G a second time one week later. On average, 7.21 days (SD=0.69) elapsed between time points 1 and 2.

#### Data analysis

Raw KiddyCAT-G scores were calculated and entered into IBM SPSS 24.0 for Windows (IBM Corp., 2016) to run analyses. Data from the total sample of participants were evaluated for the purpose of determining internal consistency and discriminatory ability of the KiddyCAT. To test for internal consistency, Cronbach's alpha were calculated and the guidelines from George and Mallery [28], where used: >0.90=excellent, 0.70<

A score of two or more standard deviations above the mean of CWNS is considered to be atypical according to the original KiddyCAT test manual [16]. a KiddyCAT-G score of 5 or higher has to be interpreted as indicating a communication attitude that is more typical for a CWS (Table 2). In the group of CWS, 33.3%

Similar to what was observed in previous studies [15,17,21,23], the KiddyCAT-G scores were not significantly different by gender for either group of CWS and CWNS.

and 15 SLPs in the Western part of Germany and Switzerland. It is a convenience sample and, therefore, might not be representative of the overall population.

### Conflict of Interest Statement

third, fourth and last author do not report any relationships with other people or organizations that could inappropriately influence the content and writing of this paper: authors alone are responsible for the content and writing of the paper: the authors report no conflict of interest for this study. second author has no relationship to the content of the paper. As author of the test which data are presented, she has a relationship to the content of the presentation.

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