Kids in Taiwan: National Longitudinal Study of Child Development and Care (KIT): KIT-M36 at 48 months old

User Guide

I. Overview

Principal Investigator	Chien-Ju Chang
Execution Institution	Center for Educational Research and Evaluation & Department of Human Development and Family Studies, National Taiwan Normal University
Funding Agency	Ministry of Science and Technology
Span of Project Execution	2014-08-01~2020-12-31
Span of Investigation	2017-03-01~2018-05-31

II. Released File Description

1. User guide

userguide.docx	Including released file description, guideline for data validation and usage, guideline for citation and contact us etc.

2. Questionnaire

ques1.pdf	Questionnaire for parents or primary caregivers who provide care for the child for the majority of time
ques2.pdf	Questionnaire for relatives, friends, or domestic nannies who provide care for the child during the day
ques3.pdf	Questionnaire for nannies/caregivers/educarers at daycare centers or kindergartens

3. Datasets

data1.csv	Comma delimited dataset (parents or primary caregivers)
data1.sav	SPSS dataset (parents or primary caregivers)
data1.dta	STATA dataset (parents or primary caregivers)
data2.csv	Comma delimited dataset (relatives, friends, or domestic nannies)

data2.sav	SPSS dataset (relatives, friends, or domestic nannies)
data2.dta	STATA dataset (relatives, friends, or domestic nannies)
data3.csv	Comma delimited dataset (for nannies/caregivers/educarers at daycare centers or the kindergartens)
data3.sav	SPSS dataset (for nannies/caregivers/educarers at daycare centers or the kindergartens)
data3.dta	STATA dataset (for nannies/caregivers/educarers at daycare centers or the kindergartens)

4. Other

M36-M72 questionnaire domains_reliability&validity. pdf	Domains, reliability and validity of questionnaires
weighting.pdf	Weighting calculation
list_variables_by_wave.xlsx	Full list of variable information (variable names, variable labels, scale/domains) by wave

III. Guideline for data validation and usage

1. CSR has checked wild codes and out-of-range values, to validate and clean data. At each subsequent wave of data collection, the KIT project cross-checked response accuracy across waves. However, some inconsistent data could not be verified as the respondents could not be reached. Please be aware that these data have not been removed and are included in the datasets.

2. The column widths of variable label and value description in the STATA are limited to 80 and 40 bytes, respectively, so the STATA dataset shows only the first 80 bytes as variable label, and the first 40 bytes as value description. In case of cut-off contexts, please see questionnaire.

3. The questionnaires developed by KIT project cannot be used elsewhere for data collection without formal permission. If you intend to use items from our questionnaires, please contact the KIT team via phone (02)77493142 or email kidsintw@gmail.com.

4. Population and Sampling Principle:

   Two groups of children are followed, and their developmental condition and family and care information were collected by the Kids in Taiwan: National Longitudinal Study of Child Development and Care (KIT) project. Both samples are nationally representative. The sampling frame of KIT-M3 consists of children who live in Taiwan (excluding offshore islands) and were registered in the Household Registration System and whose birthday are between 2016/4/1 and 2017/6/30. The sampling frame of KIT-M36 consists of children who live in Taiwan (excluding offshore islands) and were registered in the Household Registration System and whose birthday are between 2013/4/1 and 2014/3/31. The stratified two-stage probability-proportional-to-size sampling method was used with county and individual as the primary and secondary sampling units respectively. Because the east region of Taiwan is less populated and the population located mostly in fewer populated areas, only individual level was used during the sampling process. Stratification was based on the system created by Center for Survey Research, Research Center for Humanities and Social Science, Academia Sinica and Project of Taiwan Social Change Survey in 2014. The original sample of KIT-M3 includes 13,692 children, and the original sample of KIT-M36 includes 4,260 children.

5. Sample

   The KIT project follows two national representative samples, KIT-M3 (birth cohort) and KIT-M36 (child cohort). KIT-M3 is interviewed at 3, 6, 12, 18, 24, 36, 48, 60, 72 months old, and every year at the elementary school level until Grade 6 (a total of 15 waves). KIT-M36 is interviewed at 36, 48, 60, 72 months old, and every year at the elementary school and junior high school levels until Grade 9 (a total of 13 waves). The data released is the 2nd wave (48 months old) of data collection for KIT-M36. As the goal of the project is to retain as many participants as possible, those who did not complete the interview in prior wave(s) were not excluded in subsequent wave(s).

6. Questionnaires

   The instruments that KIT project uses for data collection include parent questionnaire, relative-and-friend questionnaire, and educarer questionnaire. Researchers can combine the data from the parent questionnaire, the relative-and-friend questionnaire, and the educarer questionnaire by matching the variable, *release_id*.

(1) If the child is cared for by parents during the day, the parent questionnaire is administered and answered by the parent.

(2) If the child is cared for by a relative or a domestic nanny during the day and is cared for by parent(s) during the night or weekend, two questionnaires are administered, i.e., (1) parent questionnaire is answered by the parent, and (2) the relative-and-friend questionnaire is answered by the daytime caregiver.

(3) If the child goes to a nanny's home, a daycare center or a kindergarten, during the day and is cared for by parent(s) during the night or weekend, two questionnaires are administered, i.e., (1) parent questionnaire is answered by the parent, and (2) the educarer questionnaire is answered by the nanny or the caregiver at the daycare center or the kindergarten.

(4) If the child is cared for by a relative or a live-in nanny 24 hours a day for a prolonged period, parent questionnaire is administered and is answered by the relative or nanny.

(5) If the child goes to a nanny's home, a daycare center or a kindergarten during the day and is cared for by a relative or a live-in nanny during the night and most of the weekends for a prolonged period, two questionnaires are administered, i.e., (1) parent questionnaire is answered by the relative or live-in-nanny, and (2) the educarer questionnaire is answered by the daytime nanny or the caregiver at the daycare center or the kindergarten.

(6) Data collection for the KIT project is mixed-mode; respondents completed surveys via face-to-face interviews or online (with online responses coded as 99999 for *interviewer_id*).

7. Others

(1) In order to observe the accurate status of child development, the proposed interview should be executed 15 days before and after the child reaches 3 months old and 6 months old. For children over 1 year old, the proposed interview date is 30 days before and after the child's birthday. Sometimes it is difficult to schedule an interview in the proposed interview period. In the datasets, *int_months* provides the number of months (i.e., child's age in months) at the time of interview completion. Researchers may decide whether to keep data collected outside the proposed 30-day interview range.

(2) Researchers should pay attention to the variable, *relationship*, in parent questionnaire and the relative-and-friend questionnaire. The variable identifies the person who answers the questionnaire. Parent questionnaire may be answered by people other than parents, and the relative-and-friend questionnaire may be answered by a domestic nanny.

(3) The parent questionnaire asks if the child goes to a day care center or a kindergarten. Some respondents reported no on this question, but later the interviewer found that the child did go to a center or school. Therefore, an educarer questionnaire was still administered. Researchers may decide how to use inconsistent information across different questionnaires.

(4) Only one person should answer the parent questionnaire. However, there are few cases that apparently changed the respondents during the interview. These errors could be related to any event that occurred during the interview, such as attending to a crying baby of the first respondent, etc. For example, changing respondents would lead to inconsistency between variable *pfb13* and *fammar07*. Researchers may decide how to use the information based on research purposes.

(5) Before releasing the datasets, the project staff checked for any inconsistent information between different waves. Inconsistent answers were verified with the respondents via phone call and the answers were corrected. If the inconsistent answers were unable to verify, the original answers were retained in the file. Researchers should check the data when conducting cross-wave analysis, and prepare the data according to their own research purpose.

(6) Data labels for non-responses include 7777 ("refused to answer"), 8888 ("don't know), 9996 ("not applicable/question skipped"), 9999 ("missing").

(7) Social and emotional development: In *ques1* (parents or primary caregivers), there are four areas/scales that measure children's competence: cognition, language, social-emotional, and physical development. For cognition, language, and physical development, researchers can obtain a total (mean) score from each scale as an overall estimate of a child's competence. However, for social-emotional development, such an approach does not apply, as (1) social and emotional development are two separate sub-scales; and (2) the entire scale includes sub-domains besides social and emotional competence (such as temperament, secure attachment, withdrawal,

aggression, shyness, and shame). To obtain a score for social competence and another score for emotional competence separately, please refer to questionnaire items listed under these domains in the following two files: *M36-M72 questionnaire domains_reliability&validity* (PDF file) and *list_variables_by_wave* (xlsx file).

(8) Some notes about data1 (parents or primary caregivers):

  i. Variables not included in the prior wave of data collection but added to this wave (i.e., 48M) are *pfb050a*, *med0901*, *med0901a*, *city1*,*city2*:

  ii. *med0901*, *med0901*: These two questions asked whether the child had had otitis media (i.e., middle ear infection), and the number of times the child had caught such infection. Please refer to Question 10 on p. 46 of the parent questionnaire (under II. "Condition of the child after birth" in Part E. "Health Questionnaire").

  iii. *pfb050a* (Table 1), *city* 1, and *city* 2 (Table 2): These questions were added to the second wave of data collection (KIT-M36 at 48 months old), and the released parent questionnaire did not include them. Please see Table 1 and Table 2 below for these two questions, or refer to *data1.sav*.

Table 1

pfb050a:

Relationship between current daytime caregiver and child:
  □① father
  □② mother
  □③ paternal grandfather/grandmother
  □④ maternal grandfather/grandmother
  □⑤ friend
  □⑥ nanny (providing care at nanny's place)
  □⑦ nanny (providing care at child's place)
  □⑧ educarer at kindergarten/day care center
  □⑨ other

Table 2

city1, city2:

city1, *city2*:

Where in Taiwan has the child lived most of his/her life?

□① Taipei City   □② New Taipei City   □③ Keelung City

□④ Taoyuan City   □⑤ Hsinchu City   □⑥ Hsinchu County

□⑦ Miaoli County   □⑧ Taichung City   □⑨ Changhua County

□⑩ Nantou County   □⑪ Yunlin County   □⑫ Chiayi City

□⑬ Chiayi County   □⑭ Tainan City   □⑮ Kaohsiung City

□⑯ Pingtung County   □⑰ Yilan County   □⑱ Hualien County

□⑲ Taitung County

□⑳ Outlying islands of Taiwan (e.g., Penghu, Kinmen, Matsu, Lanyu, etc.)

□㉑ Other countries/Not in Taiwan (Please specify: _____)

iv. Variables included in the first wave of data collection but not in this dataset (i.e., 48M) are listed below (applicable only to *ques1*). These variables are not included as the responses to the questions were not expected to change over time: *prec01, prec02, prec03, prec04, prec0401, prec0401a, prec0402, prec0402a, prec0403, prec0403a, prec05, prec06, postn01, postn02, postn03, postn04, postn0501, postn0502, postn0503, postn0504, postn0505, postn0506, postn0507, postn0508, postn0509, postn0510, postn0510a, postn0511, postn0511a, postn0512, postn0513, postn06, postn06a, postn07, health01, health0101, health0102, health03, health0301, health030101, health030102, health030103, health030104, health030105, health030106, health030107, health030108, health030109, health030110, health030111, health0302, med0902, med0902a, vac01, growheigh01, groweight01, growy01, growm01, growd01, growheigh02, groweight02, growy02, growm02, growd02, growheigh03, groweight03, growy03, growm03, growd03, growheigh04, groweight04, growy04, growm04, growd04*.

IV. Guideline for citation

Citation, based upon the requirement of various journals, theses or dissertations, can be revised.

Chien-Ju Chang. (2024). Kids in Taiwan: National Longitudinal Study of Child Development and Care (KIT): KIT-M36 at 48 months old (D00187) [Data file]. Available from Survey Research Data Archive, Center for Survey Research, Research Center for Humanities and Social Sciences, Academia Sinica. https://doi.org/10.6141/TW-SRDA-D00187-2

IRB/REC

The KIT project was approved by the research ethics committee of National Taiwan University (No. 201408ES007) and by the research ethics committee of National Taiwan Normal University (No. 201707HS003).

V. Contact us

Survey Research Data Archive (SRDA), Center for Survey Research, Research Center for Humanities Social Sciences, Academia Sinica, Taipei, Taiwan

Email: srda@gate.sinica.edu.tw