Project Jigifa – Integrated project to address nutrition, health and child development in Sikasso, Mali

DATA DICTIONARY

Filename(s): **Dataset_cogSRAparent_age3_MaliSIEF_2016_PUF.dta** (Stata, version 15)
Dataset_cogSRAparentbiomed_age3_MaliSIEF_2016_PUF.dta (Stata, version 15)

Data collection form(s): FINAL_3 years_cognitive_SIEF 2016_french_bambara_7 June_final for training.pdf
Form_Parent_MaliSIEF_2016_french.pdf
Form_Parent_MaliSIEF_2016_english.pdf
Form_Biomed_MaliSIEF_Sikasso_2016.pdf

Description of dataset(s):
Datasets combining data on the main cognitive trial outcomes measured in **children aged 3 years old** at the time of the cross-sectional endline surveys in June-July 2016, with information on household literacy environment, reported parent-children interactions and potential socio-economic confounders collected through caregiver surveys in May/June 2016.
- The **Dataset_cogSRAparent_age3_MaliSIEF_2016.dta** includes cognitive data for children living in 90 study villages – 60 villages with established ECD centres where a new parenting programme to promote cognitive stimulation, good nutrition and hygiene practices was introduced in Oct 2015, of which half were also randomised to receive a micronutrient intervention comprising daily micronutrient powders for 4 months of the year (30 MNP intervention villages, 30 ECD control villages) 2014-2016; as well as 30 villages without an ECD centre which received neither intervention (30 non-ECD comparison villages). Since 2014, children in all of the 90 villages also received seasonal malaria chemoprevention to reduce malaria during the months of peak transmission. This is the dataset used to evaluate the effect of the ECD and parenting programmes on cognitive outcomes.
- The **Dataset_cogSRAparentbiomed_age3_MaliSIEF_2016.dta** also contains data on biomedical outcomes recorded in the children who participated in the cognitive assessment. Note: Biomedical outcomes were only evaluated in the two randomised arms of the study; and were not evaluated in villages without an ECD centre (non-ECD comparison arm). This dataset thus comprises data from the 60 ECD villages that were randomised either to receive the micronutrient intervention or control – ie the two randomised arms (MNP intervention and ECD control) only. Micronutrient distributions in the 30 MNP intervention villages began in 2014, accompanied by supporting interventions which included parent informational sessions to encourage parenting practices supportive of good child nutrition, hygiene, child safety and early cognitive stimulation. In addition, in October 2015 a new parenting programme to promote cognitive stimulation, good

nutrition and hygiene practices was introduced in all ECD villages (MNP intervention and ECD control). This is the dataset used to evaluate the effect of the nutritional intervention (home supplementation with micronutrient powders, MNPs) on cognitive outcomes.

Study population and sampling:
Ninety villages supported by Save the Children in Sikasso Region, Southern Mali participated in the study; of which 60 villages had established Early Child Care Development (ECCD) centres. The 60 ECD villages were randomised either to the MNP intervention or control arm, and the 30 villages without ECCD centres formed a non-randomised comparison group. Supporting interventions which included parent informational sessions to encourage parenting practices supportive of good child nutrition, hygiene, child safety and early cognitive stimulation were held in all ECD villages (intervention and control).

The effect of the interventions was evaluated in two groups of children (aged 3 years and 5 years in 2016). A random sample was drawn from children resident in the village and recorded in the census undertaken at the start of the study in 2013 (ie sampled children will have been resident throughout the prior 3-year period of the intervention), with 20 children drawn from each eligible age band. These datasets contains data from the group of children aged 3 years in 2016, who were aged less than 1 year old at the time of the census in 2013.

Note:
- The variables listed below are those from the cognitive assessments for 3-year olds carried out in 2016. Please refer to the training manual for assessors (Evaluation cognitive pour les enfants de 3-4 ans) for details of the tests included in the cognitive battery for three-year olds.
- These datasets also include data items obtained from the parental interviews and biomedical surveys; details of these variables can be found the corresponding data dictionaries.

Data codes are 0= no, 1= yes, unless specified otherwise

Battery item and Activity name (French / *English*)	**Variable name**	**Description/ Other Notes**	**Data codes**
Information about child and assessment battery used	start_cog	Date and time cognitive assessment started (all tests in this dataset were carried out in 2016)	Text field
	cog2016_date	Date of cognitive assessment, eg 2016-06-01	Text field, YYYY-MM-DD format
	cog2016_datesurvey	Date of cognitive assessment, eg 01jun2016	Numeric daily date, integer
	interviewer_id_cog	Unique identifier of Cognitive Assessor	Numeric code (text field)
	childidsief	Unique identifier of child (same IDno was used in 2014 and 2016	Numeric code (text field)
	villagename	Village name where child resides Note: Cognitive assessments were carried out in 90 villages in 2016	Text field

	cerclename	District name (there were 2 districts: Sikasso and Yorosso)	Text field
	communename	Sub-district name (there were 22 sub-district names, as 2 sub-districts have the same name) - **Thus for analysis, use communeubsid instead**	Text field
	villageubsid	Village code (there are 90 unique values)	Numeric code
	cercleid	District code (2 unique values)	1= Sikasso 2= Yorosso
	communeubsid	Sub-district code (there are 23 unique values)	Numeric code
	ECDvillage	classifies the 90 villages according to whether there is an established early child care and development (ECCD) centre in village or not	0= non-ECD village 1= ECD village **Use this variable for analysis**
	trialarm	classifies 90 villages according to existence of established ECCD centre in village and intervention received	0= non-ECD comparison village 1= ECD control village 2= MNP intervention village **Use this variable for analysis**
	armblind	**Ignore** - use variable trialarm (which groups villages according to intervention received) for statistical analysis	R= X= Z=
	agegroup_cog	Age group of child in 2016	3= youngest cohort, aged 3-4y in 2016
	age_cogtest_months	Age in months at time of cognitive assessment in 2016	
	sex_cog	Sex of child	1= female 2= male
	lang_child_all	Language spoken by the child (Mother tongue) (can be used as indicator of ethnicity)	1= Bambara 2= Shenara 3= Mamara 4= French 5= Bobo 6= Bomu/Bore 7= Peulh/Fulani 8= Samogo 9= Sarakole

			10= Dogo/Dogono
	lang_assess_all	Language that was used to speak to the child during the cognitive assessment.	1= Bambara 2= Shenara 3= Mamara 4= French 5= Bobo 6= Bomu/Bore 7= Peulh/Fulani 8= Samogo 9= Sarakole 10= Dogo/Dogono
	Langassess_match	Records whether the language used to speak to child during the cognitive assessment was the same as their mother tongue. Note: For optimal test performance, the child should have been assessed in their mother tongue.	0= child was assessed in same language as their mother tongue 1= child was assessed using a different language to their mother tongue
	cogbattery_age	Age-specific test battery used to assess child Note: All children included in this dataset were assessed using the test battery for 3-year olds; but the dataset includes a small number of children aged 5 years. It is possible that this could either be an error in the age recorded, or that some children were tested using the wrong battery. If outliers in test values are seen for these children, they should be dropped from the dataset prior to analysis.	3= test battery for 3y olds 5= test battery for 5y olds
1. Jeu de Tam-Tam (brise-glace) *Playing the Drum (ice-breaker exercise)*	**item1_score_tam**	Ice-breaker exercise. Used to relax child, and to confirm that child could understand and repeat simple instructions	0= child did nothing 1= banged on drum (but wrong rhythm) 2= repeated rhythms correctly
2. Avancer-reculer *Walking a line*	item2_score_lavant	Marcher vers l'avant: *Walking forwards along a line*	0= child could not walk forwards 1= walked forwards – but did not follow line 2= walked forwards correctly along the line (at least 3 steps)

	item2_score_reculon	Marcher à reculons : *Walking backwards along a line*	0= child could not walk backwards 1= walked backwards – but did not follow line 2= walked backwards correctly along line (at least 3 steps)
	item2_marcher_score_tot	Total test score for "walking a line", calculated as the sum of the two test items above	Numeric, 0-4 (max 4) **Use this variable for analysis**
3. Sauter/Sautiller *Hopping*	item3_score_sauter	L'enfant peut sauter (au moins un pas) *Child could hop (at least one hop)*	0= No, could not hop at all 1= Yes, managed at least 1 hop
	item3_score_nombre	Number of times that child was able to hop on one foot (without putting the other foot back on the ground) -- Record up to a maximum of 10 hops	Numeric, 0-10 (max 10 hops recorded) **Use this variable for analysis**
4. Suivre les instructions et les différentes étapes *Follow the instructions and perform actions in correct order*	item4_pscorea	Child clapped (practice item)	All practice items scored as: 0= No 1= Yes
	item4_pscoreb	Child handed block to assessor (practice item)	
	item4_pscorec	Child hopped on one foot (practice item)	
	item4_saute_score	Hopped first (test item)	All test items scored as: 0= No 1= Yes
	item4_tape_score	Clapped second (test item)	
	item4_bloc_score	Handed block to assessor third (test item)	
	item4_score_tot_3yr	Total test score for "following instructions", calculated as the sum of the three test items above	Numeric, 0-3 (max 3) **Use this variable for analysis**
	Item4_review_battery	CHECKPOINT: If by this point it is clear that the child cannot understand or follow instructions, do not continue with any more of the tests (abandon battery)	0= abandon battery 1= continue battery
5. Tailles et Longueurs *Sizes and lengths*	item5_gr_cercle	Child correctly identified the largest circle	All test items scored as: 0= No 1= Yes
	item5_pt_cercle	Child correctly identified the smallest circle	
	item5_ps_long	Child correctly identified the longest pencil	
	item5_ps_court	Child correctly identified the shortest pencil	
	item5_score_tot	Total test score for "sizes and lengths", calculated as the sum of the four test items above	Numeric, 0-4 (max 4) **Use this variable for analysis**
6. Tracer un Cercle	item6_score_act	Tracing a circle accurately (following along the circular line)	0= child did nothing

Tracing a circle			1= made a mark on the paper (but did not make a circle) 2= traced the circle, but did not follow line 3= accurately traced the circle (ie did not leave the line more than two times)
	item6_score_prise	Grip of pencil	0= Immature grip 1= Mature grip, secure grip
	item6_score_persiste	Did the child show good persistence on the task? Examples of good persistence include - child tried for some time before stopping; child was not easily distracted; child did not want to stop activity.	0= No, little or no persistence on task 1= Yes, child showed good persistence
	item6_score_total	Total test score for "tracing a circle", calculated as the sum of the three variables above	Numeric, 0-5 (max 5) **Use this variable for analysis**
7. Recherche visuelle (moustiques et ballons) *Visual search (mosquitoes and balloons)*	visual_s_3_balloons_final	Number of footballs identified correctly	Numeric, 0-15 (max 15 footballs on sheet)
	visual_s_3_mosquito_final	Number of mosquitoes identified correctly	Numeric, 0-18 (max 18 mosquitoes)
	visual_s_3_errors_final	Number of non-target items that child also pointed to (errors of commission)	Numeric, 0-39 (max 111 other images shown on sheet)
	visualsearch_tot	Total number of all target items (footballs and mosquitoes) correctly identified by child	Numeric, 0-33 (max 33) **Use this variable for analysis**
8. Vocabulaire Expressif *Expressive vocabulary*	item8_nourriture	Total number of different food items named	Numeric, 0-12 (max 12 items recorded)
	item8_animaux	Total number of different animals named	Numeric, 0-12 (max 12 items recorded)
	expressvocabtot	Total number of different food items and animals named; sum of two test items	Numeric, 0-20 (max 24 items recorded) **Use this variable for analysis**
9. Test De Nomination Rapide D'images [animaux] *RAN (Rapid automatized naming)*	item9_review_RAN	CHECKPOINT: If after practising the RAN, it is clear that the child cannot recognise or name all the images, do not continue with the actual RAN test (abandon RAN)	0= abandon RAN 1= continue with RAN tests
	item9_remarques	After RAN completed, record whether the child showed good persistence on the RAN task?	0= No, little or no persistence on task 1= Yes, child showed good persistence on
	ran_3_test1_errors_final	RAN Test 1 – number of errors (wrong name, skipped)	Numeric, 0-15 (max 15 images on sheet)
	ran_3_test1_autocorrect_final	RAN Test 1 – number of autocorrections	Numeric, 0-15 (max 15 images on sheet)
	ran_3_test1_correct_final	RAN Test 1 – number of images named correctly	Numeric, 0-15 (max 15 images on sheet)
	ran1time	RAN Test 1 – time taken to complete test (in seconds)	Numeric, 0-180

	ran_3_test2_errors_final	RAN Test 2 – number of errors (wrong name, skipped)	Numeric, 0-15 (max 15 images on sheet)
	ran_3_test2_autocorrect_final	RAN Test 2 – number of autocorrections	Numeric, 0-15 (max 15 images on sheet)
	ran_3_test2_correct_final	RAN Test 2 – number of images named correctly	Numeric, 0-15 (max 15 images on sheet)
	ran2time	RAN Test 2 – time taken to complete test (in seconds)	Numeric, 0-177
	rantime_tot	Total time taken to complete both tests (in seconds); sum of time taken to complete RAN Tests 1 and 2.	Numeric, 0-335 **Use this variable for analysis**
	ranerrors_tot	Total number of errors (wrong name, skipped) during RAN; sum of errors made in RAN Tests 1 and 2	Numeric, 0-30
10. CLOTURE (observations) *Observations* Observations recorded by the assessor about the behaviour or state of the child during the test battery	item10a_ob1	L'enfant a parcouru le matériel de travail avec intérêt et curiosité *Child examined the test materials with interest and curiosity*	All observations scored as: 0= No 1= Yes
	item10a_ob2	L'enfant a compris les instructions rapidement *Child quickly understood the test instructions*	
	item10a_ob3	L'enfant était bien concentré tout au long des tests *Child paid close attention throughout all the tests*	
	item10a_ob4	L'enfant était heureux / bavard / aimait participer aux tests *Child was happy / talkative / enjoyed participating in the tests*	
	item10a_ob5	L'enfant était confiant et indépendant (n'a pas recherché mère/tutrice) *Child was confident and independent (did not look for mother/caregiver)*	
	item10a_ob6	L'enfant était timide tout au long des essais *Child was shy throughout all the tests*	
	item10a_ob7	L'enfant a refusé de parler *Child refused to speak*	
	item10a_ob8	L'enfant était en détresse / a pleuré tout au long des tests *Child was distressed / cried throughout the tests*	
	item10a_ob9	L'enfant a était facilement distrait pendant les tests *Child was easily distracted during the tests*	
	item10a_ob10	L'enfant était perturbateur et pas coopératif lors des tests *Child was disruptive and uncooperative during tests*	
	item10b_ob1	L'enfant était fatigué ou avait faim le jour de l'enquête *Child was tired or hungry on day of survey*	
	item10b_ob2	L'enfant était malade le jour de l'enquête	

		Child was sick on day of survey	
	item10b_ob4	L'enfant a complètement refusé à faire les tests *Child completely refused to participate in the tests*	
	item10b_ob5	Ont utilisé un traducteur pour faire les tests avec l'enfant *A translator was used to carry out the tests with the child*	
	item10b_ob6	Est-ce que l'enfant enregistré dans une CDPE (jardin d'enfants) ? *Is child currently enrolled in an ECD (pre-school) programme?*	
	item10b_ob3	L'enfant avait un handicap (par exemple ne pouvait pas entendre ou à parler) *Child has a handicap (for example, deaf or mute)*	
	item10b_ob6_handicap	Description of type of handicap	Text field
11. Autres Commentaires *Other comments*	item11_comments	Other observations about the child or test conditions (free text field)	Text field