# OVERVIEW OF STUDY—TAJIK-GAHVORA

# MODIFICATIONS TO CODING MANUAL

LBK 6/21/2014 added notes on scripts & entering missing data, added section illustrative clips; EA 7/8/2014 added notes on id breastfeeding questions and motorbout pass; EA JZ SK EN 7/9/2014 added COND pass; LBK EA JZ SK EN 7/10/14 modified COND pass; LBK EA 7/18/2014 added OBJECT pass; notes on Multiple Video Files

LBK EA 7/21/2014 modified OBJECT pass

LBK Juliana Spogmay 10/9/2014 added new vars to PLACE

# NOTES FOR USING DATAVYU

Each Datavyu file corresponds to each video file. 01:06:59:351

## GENERAL NOTES

Column names should not have spaces, but may have periods (e.g., rel.momcode)

Argument names should start with a letter NEVER A NUMBER (e.g., 1steps is illegal!)

Name all arguments with unique names even across columns

## General Coding Notes

Every entered variable (demographic, interview, or behavioral needs an operational definition. See Codes below

In Datavyu, the time00:00:00:000 = hours:minutes:seconds:milliseconds

## NOTES ON VARIABLE TYPES

### Numeric variables

Duration (times onsets/offsets of activities: cradling, feeding, etc.)

SPSS represents missing numerics with a dot (but if you copy/paste dots into a numeric variable in SPSS, this will change the variable to a string).

### Date variables

Supposed to be onset dates, test date, birth date BUT these will be entered into SPSS as dates.

### String (alphanumeric) variables

Categorical arguments (gender, every yes/no code, demographics)

A string variable can take any form; it could look like a date or a number, but you define it as a string

Periods entered in Datavyu will be read as strings in SPSS

SPSS represents missing strings as blank

## CONTROLLER – DATA VIEWER CONTROLLER

On Controller, Add Data… [to link a movie]

CTRL + [to snap region]

CTRL – [to clear region]

+ [to go to onset of cell]

SHIFT + [to go to offset of cell]

To go to onset, press “+”

To go to the offset [shift +]

# VIDEO FILES

What to do if you have multiple video files for 1 subject (e.g., TJ123\_1; TJ123\_2; TJ123\_3):

In Datavyu, open Data Viewer Controller (Controller > Data Viewer Controller).

Click “Add Data” on controller and access subject’s folder on video drive/server (TAJIK Hard Drive or MotorVideo)

Open first video file (TJ123\_1). Move red marker to the end of the video file.

Click “Add Data” again and open second video file for the same subject (TJ123\_2). The second video should attach at the end of the first video file. If not, move file over. Move red marker to the end of this last video file.

Repeat above step for all subsequent video files. Scroll vertically and horizontally on controller if files are not in view.

Ensure that video files are attached one after another, in order and not overlapping.

Move red marker to the beginning of the first video file (TJ123\_1) and begin coding.

When movie moves onto the second video file (TJ123\_2), switch to watching the screen of second video file to code. Continue with all video files.

# SCRIPTS

## Print Scripts

When running print script, create temp folder on Desktop call it TajikExport

Select the files to export copy/paste into this folder

Open the PrintALL\_IDCondDiaryMotorPlaceSitObj script

In the Print Script, change the path to where the TajikExport is located (e.g., /Users/Lana/Desktop to ~/Desktop/TajikExport)

For the print script to work, **all** the column names must exist in **every** file even if they don’t have anything coded within them. You do not need to create dummy cells (unless specified in column codes below), the script will automatically print any missing data as <.>

If all of the column names do not exist in every file, you will get an error. Make sure the spreadsheets are consistent.

For printed the data to line up with the appropriate subject, all of the cells must be **nested within the ID cell**. To do so, set the onset of the ID cell to 00:00:00:000 and the offset to 30:00:00:000.

*WHAT THE SCRIPT DOES:* The script is going through and making sure all cells within a file exist nested within the ID cell in order to link them with a specific subject number. It then goes through and pulls all of the argument names for each column as defined in Datavyu (without you having to manually define them in the script). As ID and COND should always have at least one cell coded, the script looks at the remaining columns (DIARYRECODE, MOTORBOUT, PLACE, SITASSES, OBJECT) and scans them for onset times to determine whether there are any cells coded. It then matches the onset times with the unique cell in each column and reads the argument that has been coded. If there is no cell coded in a column, the script prints the information as missing. Finally, the script grabs the ordinal, onset, and offset times of cells in specific columns and prints the all of the information to ~/Dektop/Culture-Tajik-IDCondDiaryMotorPlaceSitObj.txt

Open the text file in Excel to look it over and check whether it printed all the data correctly. The number of rows printed per subject will equal to the number of coded cells (not including ID) in the spreadsheet for the subject.

## After Running Print Script (without errors)

Run SPSS syntax to import text file into SPSS

Immediately check that the number of subjects imported into SPSS from textfile matches the number of datavyu files in the TajikExport folder just exported

If the number does not match, need to find subjects whose data did not export to textfile and why.

Possible reasons, particular column not actually coded w/in subject’s datavyu file; onset/offset incorrect in some column so columns improperly binded

Fix, re-export, re-import into SPSS

## Common Errors

# TREATMENT OF MISSING DATA

## Difference between **missing data** and **no-never happened**

### Missing

Data are missing when you have no information or insufficient information to enter a date, a measurement, or a yes/no argument.

Examples of missing data: Mom has no idea when baby began walking; baby fussed and we were unable to measure leg length

If experimenter forgot to ask date (e.g., when baby started crawling) then data for crawl onset data is missing, enter <.>

Missing columns/arguments must be created/entered in datavyu files for tasks/conditions that are missing for particular subjects. For example, if S had no opportunity to demonstrate “motorbouts,” the column MOTORBOUT still must be created in that S’s datavyu file and the first argument “none” must be coded as “.” Onset/offset must be = to ID onset/offset.

Another example, if S’s timediary is incomplete, interview improperly conducted, S had atypical previous day so the diary is unusable, that S’s datavyu file must contain the column DIARYRECODE with all arguments coded as missing. The onset AND offset need to be = to ID onset (so that there is a duration of 0 seconds).

### No

Arguments are coded “no” or “0” when you have sufficient information to know what happened but the behavior in question never happened.

Examples of “no’s” or “0’s”: Mom was sure that baby never belly crawled (belly experience should = 0; code onset date for belly crawling as <01/01/1904>)

## How to code missing and “no”

In general, missing string data will be noted with a period <.>; this is true for categorical data that really are strings

Missing numeric data will also be coded as “.” By entering “.” The numeric variable will be imported as string in SPSS. In SPSS, recode variable into numeric and recode “.” into SYSMIS.

String variables can sometimes be “no”, meaning the answer is no or the baby never did the behavior in question; these will be noted with an “n”

# GOOGLE DRIVE

Username: [tajikgahvorastudy@gmail.com](mailto:tajikgahvorastudy@gmail.com)

Password: tajikgahvora

# ILLUSTRATIVE CLIPS & PICTURES

### Subject X, column ordinal

Comment about clip

### TJ126, Comment 2

Baby rolls. JZ 7/1/14

### TJ128, Motorbout 2

Happy baby walking really well. JZ EA 7/3/14

### TJ141, Entire Video

Model data collection (excluding long-sit positioning). JZ 7/16/14

### TJ115, Cond 1

Great long-sit clip. SK 7/16/14

### TJ149, Cond 1 & Entire Video

Great short-sit clip. JZ 7/16/14

### TJ114, Cond 2 & Entire Video

Great long-sit clip as well as a model data collection. JZ 7/16/14

### TJ022, Comment 2 time 27min:23sec

Baby is prepped for gahvora and massaged with baby oil. EA 7/17/14

### TJ044, Comment 1 time 21min:40sec

Baby is prepped for gahvora, massaged with baby powder, and exercised. JZ 7/17/14

### TJ119, Cond “g”

Good clip of placement into gahvora, all restrictive components used even head covered by swaddle; rocking; breastfeed in cradle; baby crying though. LBK 7/28/14

### TJ104, Cond “g”

Good clip of placement into gahvora; all restrictive components, S wearing hat, toy attached to handle for play, lots of blankets, breastfeed, no cry

### TJ126, Cond “m” 45 min

Baby log rolls

### TJ126, Cond “g” place in & take out

Baby changed for gahvora and placement, no crying.

When baby taken out of gahvora, stretched by arms & lightly shaken @ 57 min

### TJ122, Cond “g”

Good vid & pic of gahvora at 1 min & prep of gahvora before placement.

Vigorous rocking at end of video

### TJ118, Cond “g”

2hr 3 min rigorous rocking

### TJ140, Cond “g” at 1hr 11 min

In gahvora not sleeping, sib brings ball, mom brings bottle, curtain open, hands free

### TJ144, Cond “c” at 37:39

Mom teaching to open container by supporting S’s hands

### TJ078, bum shuffling 31:49

### TJ151, bum shuffling 1hr 10min

During “o” S didn’t demonstrate crawl/walk during ‘m’ and confirmed during “o” that S doesn’t crawl or walk, but can scoot.

### TJ175, mother uses baby powder before catheter 1hr 21min – also to armpits before binding 1hr 22min

### TJ203, mother massages knees before binding 1hr 43 min

### TJ158, S awake in gahvora at 2 min 20 sec, mother applies baby powder to infant before catheterization 2 min 10 sec

Obj engage, soc interact with sibs while in gahvora, awake

# POSSIBLE DATA CHECKS

Body measurements have to correlate with age

Outside temp has to correlate with test date

In syntax, write in average body dimension of US kids (Wgh Vest, Adolph2002, Bridges)

# CODES FOR EACH COLUMN

## **ID** <study> <region> <agegrp> <id> <sex> <tdate> <bdate> <mbdate> <marital> <numkids> <schooling> <mworktyp> <fworktyp> <othcaregiv>, <numppl>, <temp>, <intemp>, <awaketime> <typical> <breast> <startbreast> <solids> <startsolids> <agestartcradle> <agestopcradle> <weight> <height> <headcircum> <headfrontback> <headside> <return>

#### <onset/offset>

set every ID cell onset to 00:00:00:000 (hours : minutes : seconds : milliseconds). Every ID cell offset should be 30:00:00:000. This is to make sure all of the cells in the spreadsheet nest within the ID cell.

#### <study>

Code the name of the study

<gahvora>

#### <region>

Code from Personal Info page of pdf, but check the top right corner of heading of subsequent pages to make sure the circled answer is consistent.

Code the region where the data collection occurred.

<k> = Khatlon

<r> = Rasht

<d> = Dushanbe

<w> = New York

leave blank if DSD

#### <agegrp>

Code from Personal Info page of pdf, but check the heading of subsequent pages to make sure the circled answer is consistent.

Code the age group that the subject is in. Format should be digits only (8, 12).

Check against written answers for age, birthdate and test date to make sure this circled age group is correct.

<8> = 8 months

<12> = 12 months

<16> = 16 months

<20> = 20 months

<24> = 24 months

#### <id>

Code from Consent page of pdf, but check the left corner of heading of subsequent pages to make sure the written answer is consistent.

Code the subject number. Format should be digits only.

<8>= Subject 8

<99>= Subject 99

#### <sex>

Code from Personal Info page of pdf, but check the heading of subsequent pages to make sure the circled answer is consistent.

Code the sex of the subject.

<m> = male

<f> = female

#### <tdate>

Code from Consent page of pdf, but check the heading of subsequent pages to make sure the written answer is consistent.

Code the test date. Format: mm/dd/yyyy (e.g.,12/30/2009)

#### <bdate>

Code from Personal Info page of pdf, but check the heading of subsequent pages to make sure the written answer is consistent.

Code the birth date of the subject. Format: mm/dd/yyyy (e.g.,12/30/2009)

#### <mbdate>

Code from second section of Personal Info page of pdf.

Code the birth date of the subject’s mother. Format: mm/dd/yyyy (e.g.,12/30/2009)

#### <marital>

Code from second section of Personal Info page of pdf.

Code the marital status of the subject’s mother.

<s> = single

<m> = married

<w> = widowed

<d> = divorced

<p> = separated

If this question is not marked, code var as missing ‘.’

#### <numkids>

Code from second section of Personal Info page of pdf.

Code the number of children the mother has. Format should be digits only.

If E does not circle an answer because mother reports >5 children, E will write a number to the side; code this in digits.

<1> = 1 child

<2> = 2 children

<10> = 10 children

If this question is not marked, code var as missing ‘.’

#### <schooling>

Code from third section of Personal Info page of pdf.

Code the highest level of schooling of the mother.

<n> = no schooling

<p> = primary

<s> = secondary

<h> = higher

If this question is not marked, code var as missing ‘.’

#### <mworktyp>

Code from third section of Personal Info page of pdf (“Do you work outside of the home to earn money?”).

Code if the mother does work outside of the home to make money.

<n> = No outside work

<c> = Handicrafts

<h> = Harvesting (or farm)

<f> = Selling foods

<s> = Shopkeeper/street vendor

<m> = Servant/household worker

<w> = Salaried worker

<l> = Livestock

<t> = Teacher

<j> = Multiple jobs

<o> = Other

If this question is not marked, code var as missing ‘.’

#### <fworktyp>

Code from third section of Personal Info on page 2 of pdf.

Code if the father does work outside of the home to make money.

If there is a circled or written answer for “What is [baby]’s father’s occupation?” code what occupation.

If “Doesn’t work” is circled, code no.

<n> = Doesn’t work

<a> = Agricultural products

<h> = Harvesting (or farm)

<f> = Selling foods

<s> = Shopkeeper/street vendor

<m> = Servant/household worker

<w> = Salaried worker

<l> = Livestock

<c> = Construction

<d> = Driver

<r> = Russian migrant

<t> = Teacher

<j> = Multiple jobs

<k> = Military

<b> = businessman

<o> = Other

If father work type is circled as both construction and migrant, that means they do construction in Russia. Code as <r> for migrant.

If this question is not marked, code var as missing ‘.’

#### <othcaregiv>

Code from third section of Personal Info page of pdf.

Code who takes care of the subject when the mother is not home. If mother and another option are circled, code for the other option.

<m> = mother/respondent

<p> = husband/partner

<o> = older children

<r> = relatives

<f> = neighbors/friends

<a> = maid

<s> = nursery school

<t> = other

<x> = multiple options circled

#### <numppl>

Code from second section of Personal Info page of pdf.

Code how many people live in the household. Add the two numbers from the questions “How many adults live in household?” and “How many children live in household?” Format should be digits only (0, 4).

<2> = 2 people

<3> = 3 people

<4> = 4 people

<5> = 5 people

#### <temp>

Code from the bottom section of Personal Info page of pdf.

Code the temperature OUTDOORS. Format should be single digits and in degrees Celsius.

If not recorded by experimenter, use archives via [this link](http://www.accuweather.com/en/tj/dushanbe/313854/march-weather/313854) to find temperature of Dushanbe of the test date.

<15>= 15°C

#### <intemp>

Code from the bottom section of Personal Info page of pdf.

Code the temperature indoors. Format should be single digits and in degrees Celsius.

<8>= 8°C

#### <awaketime>

Code from the last page of the Time Diary of pdf.

Code the time that the mom reports the baby wakes up at the end of the interviewed 24-hour period. Time will be written out by E next to “\*Note awake time.”

Code in military time (if applicable) (e.g., <13:30> = 1:30pm)

<5:30> = 5:30am

<8:00> = 8:00am

#### <typical>

Code from the top section of the Time Diary page of the pdf.

Before the interview, E will ask mom If the previous 24-hour period is representative of a typical day for the baby. E will circle yes or no and usually give a reason if no.

<y> = yes

<n> = no

If mom answers “no,” comment this S in Datavyu and in CodingProgress. Highlight comment cell of CodingProgress YELLOW, with the reason mom gives to E; make sure to discuss with LBK if S should be excluded from dataset.

#### <breast>

Code from Follow-Up Questions of pdf. During time diary questions, E asks whether S is currently breastfed.

If during time diary mom doesn’t report breastfeeding, in follow-up questions E would ask, “you didn’t mention that \_\_ is breastfed, are you currently breastfeeding, when did you start.”

Code if the subject is currently breastfed, by seeing if subject’s current age falls between age range that mom reported baby starts and stops breastfeeding. (e.g., if baby is 8mo, and mom reports baby started breastfeeding at birth (0mo) and will stop breastfeeding at 12mo, code yes).

If above ages are not provided, look for “M” in Feed section of all five pages of TimeDiary. If “M” is seen, mom breastfed baby the previous 24 hours before interview, code yes. If “M” is not seen, baby might not have breastfed previous day, but may still breastfeed, code as missing.

<y> = yes

<n> = no

If Follow-up Questions are not marked, code var as missing ‘.’

#### <startbreast>

Code from Follow-Up Questions page of pdf. During time diary questions, E asks whether S is currently breastfed.

Code the age at which the baby started being breastfed.

Format should be digits only (0, 4). (e.g., <0> = at birth, <1> = 1 month)

If Follow-up Questions are not marked, code var as missing ‘.’

<y> = yes

<n> = no

#### <solids>

Code from Follow-Up Questions page of pdf. During time diary questions, E would know whether S is eating solid foods. During Follow-Up Questions, E would ask, “so I see \_\_ is eating solid foods” and ask when mom started to give solids.

If current age of baby is below age to start solids, code yes. This is the age baby started eating solids

If current age of baby is greater than age to start eating solids, code no. This is the age mom anticipates baby will start eating solids.

If no age is given, code no.

<y> = yes

<n> = no

If the questions was not asked, code as <.>

#### <startsolids>

Code from Follow-Up Questions of pdf. During time diary questions, E would know whether S is eating solid foods. During Follow-Up Questions, E would ask, “so I see \_\_ is eating solid foods” and ask when mom started to give solids.

Code the age (in months) at which S started to eat solids.

Code ‘.’ If **solids** (above) is <n> OR the question was asked improperly by E or there is an unreasonably young age written (after checking via email with E).

#### <agestartcradle>

Code from first section of Follow-Up Questions of pdf. During time diary questions, E would know whether S is using the gahvora. If mom reports that baby does use gahvora, during Follow-Up Questions, E would ask, “so I see \_\_ used the gahvora” and write a starting age or circle “Birth.” If mom reports that baby doesn’t use gahvora, during Follow-Up Questions, E would ask “So I see that you didn’t use the gahvora...Did you ever use the gahvora?” and write an age if yes.

Code the age at which the baby was first put in the gahvora. Format should digits only (e.g., <0> = at birth, <1> = 1 month).

If mom answers in “days” less than 1 month, code as <0>.

If information is missing, code <.>

If never used cradle, leave blank

#### <agestopcradle>

Code from first section of Follow-Up Questions on page 9 of pdf. During time diary questions, E would know whether S is using the gahvora. If mom reports that baby does use gahvora, during Follow-Up Questions, E would ask “When will you stop using the gahvora for \_\_\_?” and write an age that the mom reports.

Code the age at which the mother plans on stopping gahvora use.

Format should be digits only (0, 4). (e.g., <0> = at birth, <1> = 1 month)

If mom answers “when baby wants” then code as <99>. If mom answers with months and “till baby wants” code the number given.

If information is missing, code <.>

If never used cradle, leave blank

#### <weight>

Code from Body Measurements on page 13 of pdf.

Code the weight (kg) of infant.

If there are two measurements written, take average and code.

Format should include all decimals (don’t round)

(e.g., <9.6> = 9.6 kg).

#### <height>

Code from Body Measurements on page 13 of pdf.

Code the height (cm) of infant.

If there are two measurements written, take average and05 code.

Format should include all decimals (don’t round)

(e.g., <15.5> = 15.5 cm).

#### <headcircum>

Code from “HEAD” on Body Measurements on page 13 of pdf.

Code head circumference (cm) of infant.

If there are two measurements written, take average and code.

Format should include all decimals (don’t round)

(e.g., <44.6> = 44.6 cm).

#### <headfrontback>

Code from left ruler of Body Measurements on page 13 of pdf.

Code front-to-back distance of head (cm) of infant.

Determine by finding the distance between two marks on ruler on paperwork.

Format should include all decimals (don’t round)

(e.g., <13.4> = 13.4 cm).

#### <headside>

Code from right ruler of Body Measurements on page 13 of pdf.

Code side-to-side distance of head (cm) of infant.

Determine by finding the distance between two marks on ruler on paperwork.

Format should include all decimals (don’t round)

(e.g., <13.4> = 13.4 cm).

#### <return>

Code <y> if baby was visited previously. Otherwise leave blank.

## **COND** <task-f-b-m-u-p-c-a-g-o-i>

Check PDF checklist of tasks to see if any task was skipped by Experimenter. Read any relevant comments and keep in mind while watching entire video.

Skim through video to see if proper duration of naturalistic observation was recorded. Typically, E records “naturalistic observation” toward the end of the session. E will put away equipment, stay back, and focus camera on target infant at times capturing adults & other children whenever possible. If S was put down for a nap, naturalistic observation might have been cut short. Right now, we’ll <o> cells whenever E attempts to video-record naturalistic observation; we’ll go back and tag in-between tasks when S might have been captured on camera out of gahvora in spontaneous movement.

Always make sure that you are noting activity for the right infant, not a sibling or other child. If it is hard to tell which child is the target child, skim through video and find segment where infant is changed into pajama set and note characteristics of that child when re-watching video.

Watch each video in 8x-16x speed (shuttle forward five times and play) and tag following tasks, in order that you see them on video (not necessarily in the below order).

#### <task>

**<f> = floor sit**. Create separate cells for long sit task on the floor. Long-sit onset is when infant is in upright sitting position, two legs stretched out on ground, hands not touching ground or an object on the ground for support but hands can hold an object off the floor. Tag long-sit onset when E first places S on the floor in a sitting position. Tag long-sit offset when E (or mom) takes S out of the sitting position on the floor. If E does not intentionally put infant in long-sit position, check PDF of S to see if task was performed. If so, watch video to see if infant spontaneously sits in proper long-sit position and tag this as a <f> cell. If the infant is recorded in long-sit position for >10 seconds during another <task>, comment during that task that long-sit can be observed in that cell duration but do not make another <s> cell (to keep <task> cells in sequence). It is okay to have more than one <s> cell for long sit.

**<b> = bench short-sit**. Short-sit onset is when the infant either sits on the black stool or E or caregiver positions the infant on the black stool. Short-sit offset is when E or caregiver takes infant off black stool or infant moves off black stool. During short-sit, infant sits upright on stool with knees bent.

**<m> = gait measure for crawling/walking**. Create one cell for all motor skills on blue runner. Onset is when infant is when E or caregiver brings blue runner into camera view. Offset is when E or caregiver removes blue runner from camera view. Infant can crawl, walk, or display other motor skills on blue runner.

**<u> = “cube” object interaction**. Create separate cells for each toy (activity **cube** toy). Each toy is offered for minimum of 2 min, but E may let S play with the toy for longer. Tag onset of object when it’s first presented, S is in a sitting position on the floor (mom may be sitting next to or behind baby for support, E might be behind baby for support), E lets go of the object, and S is on-task oriented toward the object. If E takes object back and then repositions object in front of baby, code as explained above, onset from frame when E lets go of object (object positioned in front of baby and is available for exploration). Offset is when E removes that same toy from camera view. If the second object is introduced before the first object is removed from camera view, set the offset of the first object as the last frame when the infant makes hand contact with the first object. Then, set the onset of the second object interaction cell as the frame when baby makes first hand contact with the second object.

**<p> = “pyramid” object interaction**. Create separate cells for each toy (activity **pyramid** toy). Each toy is offered for minimum of 2 min, but E may let S play with the toy for longer. Tag onset of object when it’s first presented, S is in a sitting position on the floor (mom may be sitting next to or behind baby for support, E might be behind baby for support), E lets go of the object, and S is on-task oriented toward the object. If E takes object back and then repositions object in front of baby, code as explained above, onset from frame when E lets go of object (object positioned in front of baby and is available for exploration). Offset is when E removes that same toy from camera view. If the second object is introduced before the first object is removed from camera view, set the offset of the first object as the last frame when the infant makes hand contact with the first object. Then, set the onset of the second object interaction cell as the frame when baby makes first hand contact with the second object.

**<c> = containers.** Create one cell for infant interaction with all containers (screwtop and overcap). Onset is when E or caregiver brings first container into camera view. Offset is when E, caregiver, or infant removes last container from the camera view. Duration of cell should include infant’s interaction with both types of containers. E and/or caregiver should be in camera view (if only infant is in camera view playing with container, create new cell and tag as <o>).

**<a> = anthropometric measurements**. Create one cell for all measurements taken by E (infant and/or caregiver’s weight, height, head measurements). Onset is when E brings equipment for measurements (weight scale, wooden measuring board, measuring tape, calipers) into camera view for first measurement. Offset is when E removes equipment for last measurement out of camera view.

**<g> = infant placement in “gahvora**.” Create one cell for infant placement in cradle, preparation of infant and preparation of gahvora. Onset is when either E or caregiver brings gahvora into camera view or when E or caregiver begins preparing infant for placement. Offset is when caregiver leaves gahvora or infant is removed from gahvora, whichever occurs first. Preparation of infant can include removing clothes or diaper, massaging infant, and/or applying oil/lotion on infant. If these events do not occur sequentially, create new **<g>** cell for each event in order in which they occur.

**<o> = naturalistic observation**. Cell duration should be 30-60 continuous minutes of infant in spontaneous play. Onset is when E begins to handle camera herself (camera is no longer stationary on tripod). Offset is when any of above tasks begin or when E consents caregiver. Camera should follow infant. Infant can be in any position, doing any activity in any location except cradle. Infant can interact with anyone except E. If cell duration is <30 minutes, scan video for smaller segments of spontaneous play according to above criteria and create new <o> cells. Baby should NOT be in the gahvora during naturalistic duration; if mom puts baby in the gahvora again (even after the placement duration), make another <p> cell.

**<i> = diaryrecode-interview**. Onset/offset should be 06:00:00:000-30:00:00:000 corresponding to the start of the timediary (6 am yesterday) and end of timediary (6 am today). DIARYRECODE cells will be nested in COND. Create a new cell and set onset/offset manually. If diaryrecode is missing (decided not to code diary because S’s day was atypical), then create a new cell in diaryrecode column, make onset=offset (06:00:00:000-06:00:00:000). There should not be a cell in condition. In syntax/SPSS that S will be counted as having no diary done and correspond to the “missing diary” column in coding progress.

## **DIARYRECODE** <loc> <sleep\_yn> <awake\_yn> <swad\_yn> <unswad\_yn> <breast> <formula> <otherliq> <solid> <held> <pamper> <sink> <toilet> <cloth>

### If timediary is done improperly (< 24 hrs), coder has to create a dummy cell and code “.” in each of the arguments. Set onset/offset to 06:00:00:000 which is equal to COND. There will also be a dummy cell for “task”= ‘i’ in COND.

#### <onset>

Code from Time Diary on pages 3-7 of pdf.

00:00:00:000 (hours : minutes : seconds : milliseconds)

Set onset every time the **LOCATION** changes. For example, if S was asleep, swaddled and placed on the ground at 7:15 am, code onset as 07:15:00:000. If S then woke up at 7:30 am but was still swaddled and on the ground, set a new onset as 07:30:00:000.

Cells are running consecutively with offset of previous cell = to onset of next cell.

**NOTE:** Decided to recode DIARY pass into DIARYRECODE pass to get rid of repeating location bouts where infant state (awake/asleep) changes and/or infant swaddle (yes/no) changes. The reason: duration of “asleep” may not incorrect. If the baby is in the cradle and does not make noise, then the mom/caregiver would not necessarily know whether the baby has woken up or is still asleep. We are reporting time spent in the cradle during daylight hours vs. nighttime hours rather than asleep hours vs. awake hours. Within the DIARYRECODE column, we’ll still be able to report whether infants are asleep and awake in the cradle in terms of frequencies out of location bouts. Swaddle duration may also not be informative. When in the cradle, infants are always swaddled/bound (in the interview E does not differentiate swaddle vs. bound). On the ground, E asks mom whether infants are swaddled. Thus, we’ll be able to report in terms of frequencies how often babies are swaddled out of the cradle. LBK, Evelyn Abraham, Anna Tavdy 5/2014.

#### <offset>

Code from Time Diary pages of pdf.

00:00:00:000 (hours : minutes : seconds : milliseconds)

Set offset every time the location or status of sleep or swaddling changes. For example, if S was asleep, swaddled and placed on the ground at 7:15 am, and then woke up 30 minutes later at 7:45am, but remained swaddled and on the ground, code offset as 07:45:00:000.

So that we will be able to calculate duration of “floor/ground” by subtracting onset from offset & get 30 minutes of floor/ground time.

#### <loc>

Code from Time Diary pages of pdf.

Code the location that the subject is in for the duration of the cell.

E will write one of the following letters in the first column “Location” to represent the location the mom reports for a certain time period.

<c> = cradle/ bassinette

<a> = arms

<g> = ground/ floor

<e> = child-bed/ parent-bed

<r> = belted-chair/ stroller

#### <sleep\_yn>

Code from Time Diary pages of pdf.

Code if the infant was asleep during any part of the duration of the cell.

If paperwork says “X” in the second column “Sleep” for that time period, code yes.

If paperwork does not say “X” in the second column “Sleep” for that time period, code no.

<y> = yes

<n> = no

#### <awake\_yn>

Code from Time Diary of pdf.

Code if the infant was awake during any part of the duration of the cell.

If paperwork does not say “X” in the second column “Sleep” for that time period, code yes.

If paperwork says “X” in the second column “Sleep” for that time period, code no.

<y> = yes

<n> = no

\*NOTE: For every cell duration, <sleep\_yn> or <awake\_yn> must be coded yes. Both arguments cannot be coded no for a cell. Both arguments can be coded yes for a cell.

#### <swad\_yn>

Code from Time Diary pages of pdf.

Code if the infant was swaddled or bound during any part of the duration of the cell.

If paperwork says “W” in the second column “Sleep” for that time period, code yes.

If paperwork says “U” or does not say “W” in the second column “Sleep” for that time period, code no.

<y> = yes

<n> = no

If location of cell duration is cradle, then always code as yes.

#### <unswad\_yn>

Code from Time Diary pages of pdf.

Code if the infant was unswaddled during any part of the duration of the cell.

If paperwork says “U” or does not say “W” in the second column “Sleep” for that time period, code yes.

If paperwork says “W” in the second column “Sleep” for that time period, code no.

<y> = yes

<n> = no

If location is cell duration is cradle, then always code as no.

\*NOTE: For every cell duration, <swad\_yn> or <unswad\_yn> must be coded yes. Both arguments cannot be coded no for a cell. Both arguments can be coded yes for a cell.

#### <breast>

Code from Time Diary pages of pdf.

Code if the infant was breastfed during the duration of the cell.

If paperwork has written “M” in the third column “Feed” for that time period, code yes.

If E has not written “M” in the third column “Feed” for that time period, code no.

<y> = yes

<n> = no

#### <formula>

Code from Time Diary pages of pdf.

Code if the infant was given formula milk or animal milk (“cow milk”) during the duration of the cell.

If the paperwork says “B-milk” or “F-milk,” code yes. If the paperwork says just “B” or “F,” code no.

If the paperwork says “Malutka,” this is a type of Tajik formula, code yes.

<y> = yes

<n> = no

#### <otherliq>

Code from Time Diary pages of pdf.

Code if the infant was given a bottle during the duration of the cell.

If paperwork says just “B,” code yes. If the paperwork says “B-milk” or “F-milk,” code no.

If paperwork says “F” but liquids other than milk, such as tea, are written next to “F,” code <otherliq> as yes.

<y> = yes

<n> = no

#### <solid>

Code from Time Diary pages of pdf.

Code if the infant was given a solid food during the duration of the cell.

If the paperwork says “F” or name of a food or “soup,” code yes.

If the paperwork says “Malutka,” this is a Tajik liquid formula, code no.

If the paperwork says “F” but liquids other than milk, such as tea, are written next to “F,” code <solid> as no. If there are solids listed next to “F” along with the liquids, code both <solid> and <otherliq> as yes.

<y> = yes

<n> = no

#### <held>

Code from Time Diary pages of pdf.

Code if the infant was held for elimination during the duration of the cell.

If the paperwork says “H” in the fourth column “Elimination” code yes.

If the infant was held and the infant’s location was “g”, this means that the infant was squatting outside. Code yes.

If E comments that infant pee/poo in clothes, code yes (even if E writes “C” in this column referring to same comment).

If E comments that infant went pee/poo but doesn’t remember time and doesn’t specify elimination method, code yes.

<y> = yes

<n> = no

#### <pamper>

Code from Time Diary pages of pdf.

Code if the infant was had a disposable diaper change during the duration of the cell.

If the paperwork says “P” in the fourth column “Elimination” code yes.

<y> = yes

<n> = no

#### <sink>

Code from Time Diary pages of pdf.

Code if the infant was cleaned in the sink during the duration of the cell.

If the paperwork says “S” in the fourth column “Elimination” code yes.

If E writes “have bath” also code as yes.

<y> = yes

<n> = no

#### <toilet>

Code from Time Diary pages of pdf.

Code if the infant was placed on the toilet during the duration of the cell.

If the paperwork says “T” in the fourth column “Elimination” code yes.

<y> = yes

<n> = no

#### <cloth>

Code from Time Diary pages of pdf.

Code if the infant had a cloth diaper clean or change during the duration of the cell.

If the paperwork says “D” in the fourth column “Elimination” code yes.

If E comments that infant pee/poo in clothes, code no.

<y> = yes

<n> = no

## **motorBOUT** <none> <tripod> <sit> <belly> <bumshuf> <hk\_hf> <stand> <cruise> <walk>

### If S was never on camera, never out of gahvora in spontaneous activities, then there was no opportunity for S to demonstrate motor skills. Coder has to create a dummy cell and code “.” in each of the arguments. Set onset=offset at the start of the column, set onset=offset as 00:00:00:034. Make sure to scroll through the whole session to see if there was ever time that S was on tape to demonstrate motorbout.

#### <onset>

Watch entire video from start to finish, or watch video until you observe infant doing whatever motor behavior (tripod to walk), tag these behaviors consecutively as they happen on video.

NOTE: On Datavyu file, <stand> comes before <cruise> in terms of argument order in cells. However, cruising is a LOWER motor skill than standing. If you see infant cruising, continue watching video to see infant walking OR standing. Do not let order of arguments in Datavyu determine motor skill order. Use the following order of skills in coding manual to determine motor skill order.

NOTE: If S had no opportunity to demonstrate “motorbouts,” the column MOTORBOUT still must be created in that S’s datavyu file and the first argument “none” must be coded as **“.”** Onset/offset must be = to ID onset.

#### <none>

**<y> = yes**. If higher skills are not observed, code yes. Onset is the first frame of infant in a supine position for 30 seconds. Offset is the last frame of infant in the same position after 30 seconds.

If infant is never out of gahvora, never on tape or couldn’t demonstrate motor skills because never in spontaneous activity out of the cradle, code ‘.’

Code ONLY after watching full video, to check if one or more of the following higher skills is observed according to their respective criteria, on video.

#### <tripod>

**<y> = yes**. Baby is in sitting position with bum and legs touching floor, belly up off the floor with hands touching the floor, or legs/thighs, or other surface for support. Baby’s back/posture leaning over the hands for support. Head may be drooping.

Baby has to stay in position for **30 consecutive s**.

If the infant does not demonstrate tripod sitting, leave <tripod> blank.

#### <sit>

**<y> = yes.** Baby is in sitting position with belly off the floor, and bum and legs touching floor. Back/posture upright, perpendicular to thighs/legs/floor with head upright. Hands may not touch floor, people or any other surface for support. Hands have to be up off the floor, legs/thighs, or other surfaces.

Baby has to stay in position for **30 consecutive s**.

If the infant does not demonstrate sitting, leave <sit> blank.

Continue watching video to check if higher skill is observed.

#### <belly>

**<y> = yes.** Baby is in prone position with belly and/or chest touching the floor. Baby has to move for 5 consecutive scoots with less than 0.5 second in between. Count scoots from arm movements.

If the infant does not demonstrate tripod sitting, leave <belly> blank.

Continue watching video to check if higher skill is observed.

#### <bumshuf>

**<y> = yes.**

Baby is in sitting position with belly and torso off the floor. Baby has to move for 5 consecutive scoots with less than 0.5 s in between. Hands may be on the floor and used to support movement. Count scoots from bum movements.

If the infant does not demonstrate tripod sitting, leave <bumshuf> blank.

Continue watching video to check if higher skill is observed.

#### <hk\_hf>

**<y> = yes**. Crawling. Baby is in prone position with belly and torso off the floor.

Baby has to move for **10 consecutive steps** with less than 0.5 s in between on hands-knees or hands-feet. Count steps from knee/foot movements.

If the infant does not demonstrate tripod sitting, leave <hk\_hf> blank.

Continue watching video to check if higher skill is observed.

#### <cruise>

**<y> = yes.** Baby is in upright position with both feet touching floor. Hands may touch any wall, furniture, people (not holding mom’s hand) or other surface for support. Hands may not touch the floor. Baby has to move for **10 consecutive upright steps** with less than 0.5 s in between.

If the infant does not demonstrate tripod sitting, leave <cruise> blank.

Continue watching video to check if higher skill (walking OR standing) is observed.

#### <stand>

**<y> = yes.**

Baby is in upright position with both feet touching floor in a stationary posture. Baby has to stay in position for **10 consecutive s** without any support from wall, furniture, people or other surface. Hands may not touch the floor, wall, furniture, people or other surface for support. Other body parts may not lean on any surface for support.

If the infant does not demonstrate standing, leave <stand> blank.

Continue watching video to check if higher skill is observed.

#### <walk>

**<y> = yes.**

Baby is in upright standing position with both feet touching floor. Baby has to move for **10 consecutive steps** with less than 0.5 s in between. Hands may not touch the floor, wall, furniture, people or other surface for support. Other body parts may not lean on any surface for support.

If the infant does not demonstrate walking, leave <walk> blank.

\*NOTE: If infant is recorded walking early in the video, code yes and finish coding *motorbout* for this infant. It isn’t necessary to code the above “lower” motor skills.

## **PLACE** <csbkd> <clothes> <leg> <torso> <arm> <feed> <rock> <fuss> <resist> <bottom> <top> <opaquetop>

NOTE: We had talked about excluding babies where mom does not use the catheter when showing how she preps baby in the gahvora. It is possible that she’s not doing so because she’s only showing and not planning to leave her baby inside. Because we want to describe & quantify the typical way mothers prep babies for the gahvora, we might exclude those that are not using it in the demonstration (LBK, KEA, Loye, Meghna, Evelyn, Anna 9/19/2013). If there is no <c> component (catheterization) for a file with gahvora placement recorded, watch to see if a diaper can be seen on video. If seen, OK for <c> to be missing - include in dataset and export so that <c> duration will be recoded as ‘0’ in SPSS. If not seen, check TimeDiary PDF to see if child uses gahvora at all during testdate. If there is no cradle time recorded on TimeDiary, this was an experimenter error; E shouldn’t have asked mother to demonstrate gahvora placement. If there is cradle time recorded on TimeDiary, email E and ask about this S specifically – what is the alternative for elimination in the gahvora? Comment out and make executive decision with team to include or exclude from dataset. (LBK, Loye, Anna, Evelyn, Meghna 4/14/2014).

NOTE: Duration of the process will be the sum of durations of each of the following <csbkd> cells, NOT the duration of the <p> cell in the COND variable. This will give us a more accurate duration of the process because it will exclude ‘dead time’ (talking in between components, when mom walks away from the cradle and comes back, etc). (LBK, Loye, Evelyn 4/14/2014).

NOTE: code onset and offset first, code csbkd, then lock cell, replay and code other args of the cell. Order of csbkd does not necessarily have to be in the below order.

New vars added to define bouts: m-t-r (LBK, Juliana, Spogmay 10/9/2014). New var added to each bout, <resist>, this var together with <fuss> will determine whether Ss are distressed when put in gahvora.

#### <csbkd>

Code the event of the gahvora in process. Coding onsets & offsets of discrete events with dead time in between.

**<c> = catheter**. Onset is the frame when you first see mom’s hand first touch the catheter. Offset is the frame when mom’s hand stops touching the catheter or one frame before mom does next component if her hand is still touching the catheter.

**<s> = swaddle**. Onset is when first see mom’s hand first touch the sheet (right before she begins using the swaddle on the infant) that is laid underneath infant’s body and used to wrap infant’s limbs. Offset is the frame when mom’s hand stops touching the sheet after using the cloth (swaddle fabric) on the limb.

**<b> = bind**. Onset is when first see mom’s hand first touch the binding strap. Offset is the frame when mom’s hand stops touching the tie of the binding strap (if mom places binding strap over torso/arms before she completes tying the binding strap over legs—or vice versa—then code offset as the frame when mom’s hand stops touching the tie of the second binding strap).

**<k> = blanket**. Onset is when first see mom’s hand first touch a cloth laid over the infant’s body. Offset is the frame when mom’s hand stops touching the cloth after covering the body or one frame before mom does next component if her hand is still touching the blanket. If multiple blankets are used to cover infant’s body, create multiple <k> cells following above guidelines

**<d> = drape** (curtain). Onset is when first see mom’s hand first touch a curtain (cloth that is draped over the handle of the cradle). Offset is first frame when this same curtain no longer moves after it is placed and set. (modified LBK, Loye, Evelyn 4/14/2014)

Caretaker’s hand placement (even while rocking) drape does not count unless curtain itself is physically moved.

If a drape is used to hide mother/infant while breastfeeding and then removed after breastfeeding, do not code <d> but code <m> for breastfeeding and then <y> for <top>. If after breastfeeding the drape is then placed and left over the infant/gahvora, code <d> cell.

**<m> = breastfeeding.** Onset is when mom first leans in to baby’s head to breastfeed. Offset is when mom resumes her upright posture; mom’s torso is no longer near baby’s head/mouth. If a drape is covering the baby’s face and/or mother’s breast so that breastfeeding isn’t visible, code <y> if mother is leaning over gahvora and adjusting shirt as if to begin breastfeeding. Only code <y> for applicable variables in the cell, such as feed, fuss, & resist. (new code added LBK, Spogmay, Juliana 10/9/2014)

**<t> = bottle-feeding.** Onset is when mom brings bottle/cup to baby’s mouth for feeding or gives baby bottle/cup to self-feed (pacifiers do not count). Offset is when mom takes bottle from baby or baby finishes the contents of the bottle and removes it from the mouth. Only code <y> for other applicable variables in the cell, such as feed, fuss, & resist. (new code added LBK, Spogmay, Juliana 10/9/2014)

**<r> = rocking**. Onset is when you first see side-side movement of the cradle while mom’s hand/arm is on any part of the cradle (likely the handle at the top). Offset is when mother removes hand from gahvora and/or stops pushing gahvora or when gahvora stops moving, whichever occurs first. Code rocking only if cradle completes at least 2 cycles of side-side movements; and/or 4 movements of mom’s hand/arm. Code <r> as <y> all other variables as <n>. Only code <y> for other applicable variables in the cell, such as rock, fuss, & resist. Rocking bouts should be separated either when mom removes hand from cradle or when there is a pause of over 5 seconds. (new code added LBK, Spogmay, Juliana 10/9/2014)

#### <clothes>

<y> = yes. Any clothes are on any part of infant’s body (only socks doesn’t count).

<n> = no. Completely naked or just wearing socks.

#### <leg>

<y> = yes. During the cell, either the cloth of swaddle fabric or binding straps is placed on/over any part of the legs (one leg or both legs; hip to toes) so that it straightens, keeps in place or constrains movement of the legs during the cell’s timeframe. Cloth wraps around and covers the legs. We know the legs are constrained because of limited movement after the use of cloth. We know the legs are straightened because of close to horizontal contour (no bend in knees). Can only be <y> if <csbkd> is coded as <s> or <b>. This does not apply to blanket cloth <k> because its placement’s purpose is not to straighten.

<n> = no. Automatically coded if <csbkd> is <c> <k> or <d>.

#### <torso>

<y> = yes. During the cell, either the cloth of swaddle fabric or binding straps is deliberately placed on/over any part of the torso (neck to hip) so that it straightens, keeps in place or constrains movement of the torso. Cloth wraps around and covers the torso. We know the torso is constrained because of limited movement after the use of cloth. Can only be <y> if <csbkd> is coded as <s> or <b>. This does not apply to blanket cloth <k> because its placement’s purpose is not to straighten.

<n> = no. Automatically coded if <csbkd> is <c> <k> or <d>.

#### <arm>

<y> = yes. During the cell, either the cloth of swaddle fabric or binding straps is deliberately placed on/over any part of the legs (one arm or both arms; shoulder to wrist) so that it straightens, keeps in place or constrains movement of the arms. Cloth wraps around and covers the arms. We know the arms are constrained because of limited movement after the use of cloth. We know the arms are straightened because of close to horizontal contour (no bend in elbows) along the torso side (arms shouldn’t be hanging out of cradle). Can only be <y> if <csbkd> is coded as <s> or <b>. This does not apply to blanket cloth <k> because its placement’s purpose is not to straighten.

<n> = no. Automatically coded if <csbkd> is <c> <k> or <d>. Can be coded <n> even torso if <y>; watch for movement of arms.

#### <feed>

<y> = yes. Is something put in the baby’s mouth during this cell. Only include nutritive feeding (breast, solids, other liquids)

<n> = no.

#### <rock>

<y> = yes. Is the cradle rocked during the cell. Is the cradle moving side/side, back/forth by the caregiver over at least 2 cycles (at least 4 movements of the arm). Does the caregiver have to touch the gahvora for this to be coded <y>? Or can gahvora be rocking from an intentional rocking right before the onset of this cell?

<n> = no.

#### <fuss>

<y> = yes. Is the baby ever whimpering, crying during this cell. Fussing is when baby is making a distress vocalization **and** scrunching the face/mouth/eyes. Just vocalizing doesn’t count as fuss.

<n> = no.

#### <resist>

<y> = yes. Code if S is squirming, moving limbs, head out of the cradle, shifting position (from supine to upright/sit) in an attempt to get out of cradle or pushing/hitting mom’s hands away as mom attempts to place gahvora materials on the infant all with a negative facial expression (eyebrow scrunching, frowning, etc.) and vocalization (grunting, screeching, etc.).

<n> = no.

#### <bottom>

<y> = yes. Only code if <csbkd> is coded as <d>. Only code if the curtain covers everything BUT the baby’s face.

<n> = no. Automatically coded if <csbkd> is <c> <s> <b> or <k>.

#### <top>

<y> = yes. Only code if <csbkd> is coded as <d>. Code if the curtain covers the baby’s face or falls at the baby’s eyeline.

<n> = no. Automatically coded if <csbkd> is <c> <s> <b> or <k>.

If top is covered and then removed immediately, top should be coded as <n>.

If mom uses same curtain as bottom curtain to cover baby’s eyes (one large curtain is drawn over the entire cradle), code yes for <bottom> and <top> in the same cell.

#### <opaquetop>

<y> = yes. Is the covering over the face opaque. Only code if coder is NOT able to see the baby’s features (eyes, nose, mouth – not just an outline of the head) through the covering. This would most likely indicate that the baby also CANNOT see through the covering. EA MP 4/17/14. May not be reliable code LBK DM – only report as freq for drape and describe that often times drape is always opaque but varies in terms of when it is placed over the gahvora 11/25/14

<n> = no. Automatically coded if <top> is <n>.

## **SITASSESS** <sittype> <sitend>

NOTE: Code with “COND” pass showing; go to cells that at ‘f’ and ‘b’ for floor sit and bench sit.

NOTE: Should we code hands as yes/no or 0/1/2?

#### <onset>

Recode onset (if necessary). Onset of sit is first frame where S is positioned on the floor with legs out, E/mom lets go of S; see some space between hands and S’s body.

#### <offset>

To code offset of sit bout, watch for how sit ends/transitions and change in E/mom hands.

Sit bout ends if: S loses balance and falls (torso/head/face touches the floor or S needs rescue by E/mom). To code offset, identify the frame when S first starts to lose balance, press “Enter” to set offset. Because S will need to be repositioned in sitting, the next bout of sitting will not start right away, onset will need to be coded for the next sit bout. In this case, <sitend> will be coded as <f> for fall.

Sit bout ends if: S is grabbed by E/mom. To code offset, identify the first frame when E’s/mom’s hands first touch S (while S is in sitting), press “Enter” to set offset. Because S will be repositioned in sitting, the next bout of sitting may not start right away.

Sit bout ends if: S changes sitting position. Press “0” because it is a continuous change.

#### <sittype-i-s-t-n>

Code what type of sit/posture the infant is in.

Code <i> if S is sitting independently (without support from E/mom, furniture etc). Hands can be rested on leg/floor but posture should be upright not indicating support from hands.

Code <s> if S is in a supported sit with E/mom holding them upright/maintaining their posture.

Code <t> if S in in a tripod sit (without support from E/mom etc.). S must have at least one hand on leg/floor and have slanted posture indicating support from the hands. If hands are down but posture/back is straight, do not code as <t>.

Code <n> if S does not show any independent/tripod sitting ability – unable to sit. Code <n> for sitend as well. DM SC LBK 02/18/15

Code <.> if sit assessment is missing.

#### <sitend-e-i-f-n>

Code how the sitting bout ends.

Code <e> if E/mom touches S after sitting onset was determined and sitting bout began.

Code <i> if S transitions out of the sit bout into another posture (prone/crawling; standing) by controlling his posture as he transitions into another position (differentiate from fall).

Code <f> if S loses balance while in sitting position by leaning forward, backward, or sides and his body/torso/head/face touches the ground or E/mom’s hands/arms (E/mom rescues E after S starts to fall).

Code <n> if none of the above happened

Code <.> if camera moved and sit end was not captured on video.

## **OBJECT** <mouth> <bang> <twist> <push> <finger> <rotate> <lift> <look>

NOTE: Predictions: 12-mo will demonstrate more and more sophisticated object exploration skills than 8-mo. Beyond age, infants who are independent sitters will demonstrate more/more sophisticated obj explor skills. Cradle hrs will moderate the relation between sit skills and obj explor skills. If there are 8mo who have a higher skill than sitting coded in motorbout, assume they can sit too.

NOTE: Code with COND pass showing, may need to recode COND to get “clean” 2 min of engage with each obj. The set offset of COND at 2 min. Create cell in OBJECT for each COND object cell. Code behaviors with “Snap Region.” Recode offsets of OBJECT if S breaks contact with object for at least 1 sec.

POSSIBLE DVs: Accum obj engage duration; max bout duration; accum numb of bouts;

#### <onset>

Code the first frame the baby makes contact, with hand(s) with object. Infant will be positioned in sitting (with mom or E behind providing support). E will position toy in front of baby and let go. Onset from baby’s first contact with object.

#### <offset>

Code the last frame when baby is no longer touching the object with hand(s). Baby has to not be touching the object for at least 1 sec to be coded as offset. If less than 1 sec, the object bout continues, don’t code offset.

#### <objtype> This var is coded in “cond” pass.

There are 2 commercial toys used. Code which toys E offers.

**<p> = cone-shaped toy**

**<u> = cube-shaped toy**

#### <mouth>

Code **y/n** if baby ever contacted any part of the toy’s surface with her mouth (for exploration).

#### <bang>

Code **y/n** if the object is resting on the ground or baby is using 1 hand to support the object on the ground; using 1 or 2 hands (palm open or closed) baby makes contact with the object by raising and lowering hand in quick movements (< .5s in between). Baby can use finger(s) in quick successions (tapping) to count as banging.

NOTE: Has to be at least 2 quick contacts to count as bang, otherwise, S swipes at object.

NOTE: Hand movement should not cause object itself to move.

#### <twist>

Code **y/n** if baby uses hand(s) or finger(s) to perform a twist or spin motion on a part of the object. S uses finger(s) of one or both hands on the beads on the toy; using rotational motion of the finger(s) S moves the beads around the rod. Object or object part(s) may move without such hand movement (e.g., if S places hand on the rods of the object or move the entire object in some way), so code from hand movements, rather than object movements. This behavior must be completed while looking at the relevant part of the object/hand; this look need not last for 2 s.

#### <push>

Code **y/n** if baby uses hand(s) or finger(s) to perform pushing motion on bead(s) of the object. S uses finger(s) of one or both hands to move bead(s) along the rod on the toy. Do not code ‘y’ if S’s hands brushes against beads and makes them move “accidentally,” code from hand movements rather than object movements. To code “y” S must hold contact with bead with finger/hand throughout the entire path of the rod, tracing the path of bead along the rod with finger/hand (not just push the bead and then remove finger/hand while bead moves long the rod w/o S having contact with the bead). This behavior must be completed while looking at the relevant part of the object/hand; this look need not last for 2 s.

Full length of the straight path (beads don’t move over spiral & matches the motion of the beads on the cube) to change location of bead

#### <finger>

Code **y/n** if baby moves fingers/hands along any part of the object for at least 3 cm of the object’s surface (exploring the surface/texture). Movement of finger(s)/hand must not be in the context of doing some other action (lifting, pushing or twisting beads). Typically the object will be stationary on the ground or S will use 1 hand to support the object while using the 2nd hand to move finger/hand over the surface of the object.

NOTE: Just readjusting grasp (with thumb movement), tapping toy with 1 finger is NOT fingering.

NOTE: Hand movement should not cause any element of the object itself to move (otherwise code as push or twist).

#### <rotate>

Code **y/n** if baby using hand(s) to move the entire object to expose a novel side of toy (can lift off ground or can slide on ground). Rotation should be at least 90 deg (e.g., from upright to on its side) from how the object is positioned at start. Watch the wrists, forearm, and fingers for visible movements in helping to code rotation. The object must complete a complete rotation to count. Doesn’t count if the object is stopped mid-way.

NOTE: If the toy rotates after the infant drops it, that doesn’t count as a rotation.

#### <lift>

Code **y/n** if baby using hand(s) handles object so that the entire object is off the floor for at least .5 sec. A space is clearly seen between floor and object. Rolling the object onto part of the body (in this case, object may slightly come off the floor) does not count. Banging the object on the floor may not count if the duration of object being off the floor is < .5 s.

#### <look>

Code **y/n** if anytime during the object bout the infant make visual contact with the object for at least 2 seconds, continuously. Visual contact means that the baby’s head & gaze is oriented toward the object. This code will capture S looking at the object if S doesn’t exhibit twist/push actions which require looking while performing the action.

## **COMMENTS**

If any interesting behavior or practice is seen in the video, code the onset and offset in the comments column.

# POSSIBLE QUESTIONS?

Body measurements have to correlate with age

Outside temp has to correlate with test date

In syntax, write in average body dimension of US kids (Wgh Vest, Adolph2002, Bridges)

## Breastfeeding

### Do mothers breastfeed longer in the gahvora or out/in arms? – look at time breastfeeding in while bound in gahvora vs. time breastfeeding in arms

### Does breastfeeding calm them down? – examine fussiness pre/post breastfeeding