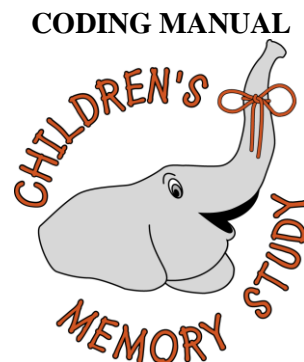


Mother-Child Reminiscing Structural/Functional Coding System



Developmental Pathways to Skilled Remembering

Coding system adapted from: Haden (1998) and Reese, Haden & Fivush (1993)

Procedures:

Using the CLAN module in the CHILDES program, the mother-child conversations will be transcribed verbatim from audiotapes. Children's behaviors will be transcribed from the videotapes. The use of the video is particularly important for subsequent coding to enable us to code very young children's comments accurately through an examination of what was going on nonverbally when they occurred. For example, an 18 mo old child may say "mmm" while actively attending to her mother's talk. Alternatively, a child may say "mmm" while offering to her mother a toy that is irrelevant to the conversation. Although exactly the same in "structure," they have different functions. In the first example, the child's verbalization functions as a placeholder; the child is taking a conversational turn in a way that suggests interest. In the second instance, the child's utterance is off-topic, and does not indicate interest or attention to the conversation.

Prior to coding, parsing by utterance will be reviewed within the transcript, so that it will be possible to calculate Mean Length of Utterance accurately from these transcripts. In addition, the beginning and end of each event will be marked using the CLAN notation @BG: Event # and @EG: Event #. In this way, it will be possible to determine the frequency of each code by event.

Reliability:

Pairs of raters will independently code 25% of the transcripts at each age point for each site. Given 30 transcripts per age and site, raters will code 5 transcripts to establish an initial inter-rater reliability (reliability 1) averaging > 85%, with no single reliability estimate < 80% (percent agreement and kappa coefficient). The primary coder will code 3 additional transcripts (reliability 2), and then to check coder drift, for every 2-3 transcripts scored independently by a secondary coder, 1 of these "reliability 2" transcripts will also be scored. Reliability will be computed for each secondary coder in relation to the primary coder.

Coding System:**Maternal coding categories (\$MOT)**

1. **:GMQ - General Memory Questions** - "Open-ended" questions asking the child to provide memory information about an event. Classified as either:
 - a. **:ELAB - Elaborations** - Memory questions that ask for new (e.g., not previously mentioned) memory information about an event.
 - b. **:REP - Repetitions** - Memory questions that repeat the same content or gist of information requested or provided in a previous statement or question.

Examples.

"What did we do at the zoo?"
"Do you remember what we did at the zoo?"
"Tell me about going to the circus."
"Do you remember anything else about the circus?"
"Do you remember doing anything special?"
"Do you remember who was with us at the circus?"
"Tell me what was your favorite thing to do there?"
"What else was fun about it?"
"What was the funniest thing about seeing Grandmaw Atkinson?"
"What did we do when we got to the mountains?"
"Do you remember any of the animals' names?"
"What kind of animals did we see?"
"Do you remember what kinds of animals we saw?"
"Who went with us?"
"How did that make you feel?"
"What did we eat for lunch?"
"Who was the bus driver?"
"What was the name of that little song?"
"What did I put it on top of?"
"What color was that hat?"
"We rode on the what?"
"Why did we have to do that?"

Note that question continuations are coded as:

MOT: *Remember what have we done recently?* -- GMQ:ELAB

MOT: *me and you and daddy and Zachary?* -- GMQ:ELAB GMQ:ELAB

2. **:YNQ - Yes-No Questions** - Questions that ask the child to confirm or deny a piece of memory information provided by the mother. Note that tag questions ("That was fun, wasn't it?") and forced choice questions (e.g., "Were there lots of people there, or not so many?") are coded as yes-no questions. Includes questions asked with the phrasing "Do you remember X", that can be answered simply with a yes or no response. Classified as either:
 - a. **:ELAB - Elaborations** - Yes-No questions that ask the child to confirm or deny a new piece of memory information provided by the mother.
 - b. **:REP - Repetitions** - Yes-No questions that ask the child to confirm or deny the same information (exact content or gist) as given in a previous comment.

Examples. “Do you like dancing?”
 “Was it hot or cold outside?”
 “Were you wearing a hat?”
 “You were going to give mommy her card, weren’t you?”
 “Were you happy?”
 “Were you asleep or awake when you were riding on the mountains?” --
 YNQ:ELAB YNQ:ELAB (C: awake. MREP)
 “Did you get tired or not when you were hiking?” -- YNQ:ELAB
 YNQ:ELAB (C: I was tired. MREP)
 “Did we have anything to eat?”
 “Did we see something that had a big long trunk?”
 “You don’t remember holding granddaddy’s hand?”
 “You were at a house, do you remember?”
 “You were cold, remember?”
 “Remember your kindergarten registration?”

3. **:RM** – Remember Prompt – Request that the child says more but does not contain content (e.g., “What else?”
 “Do you remember anything else?” “Tell me about it.”)

MOT: *What was your favorite thing about going?* -- GMQ:ELAB
 CHI: Nothing. -- PL
 MOT: *hmm?* – RM

MOT: What did we do at the park?
 CHI: Swing.
 MOT: *What else?*- RM

4. **:ST** - Statements - Any declarative comment made by mother that provides information about the event. Unlike questions, statements do not “demand” a response from the child. Classified as either:

- a. **:ELAB** - Elaborations - Statements that provide the child with new information about the event.
 b. **:REP** - Repetitions - Statements that repeat (exact content or gist) information previously mentioned about the event. Oftentimes, Statement Repetitions are used to summarize what has already been recalled about the event.

Examples. “It was about a month ago that we went.”
 “You dressed up so pretty when we went there.”
 “I like that.”
 “Those books in there looked kinda neat.”

5. **:FILL** – Fill-In-The-Blank – Statements that allow the child to complete the sentence (e.g., M: Who was there? -- MQ:ELAB Grandma _____? -- FILL)

6. **:EV** - Evaluations - Comments that in some way confirm or deny information provided by the child.

- a. **:CON** - Confirmations - Yes, uhhuh, yeah, right.
 b. **:NEG** - Negations - No, uhuh, nope.

Examples. CHI: I was asleep on the mountains.
MOT: “*Yes, you were asleep on the mountains.*” -- EV:CON

CHI: We went hiking.
MOT: *mmhm we went hiking* -- EV:CON

CHI: We didn’t have one to take.
MOT: *no we didn’t.* EV:CON

7. **:PL - Placeholders** - Mother takes a conversational turn that is memory related, but provides no memory information (“That’s all.” “I don’t know.” “I can’t remember.”). Only code a placeholder if it is the only applicable code in a turn.

8. **:CL - Clarifications** - Mother asks explicitly for acoustical clarification. This code does not apply to mother’s request for semantic (meaning based) clarification.

Examples. CHI: I was happy.
MOT: “*what did you say?*” -- CL
CHI: I was happy. -- CL
MOT: you were happy – EV:CON

CHI: We went hiking.
MOT: *I can’t hear you.* -- CL

But: CHI: We went hiking.
MOT: we went hiking. – EV:CON
MOT: *talk a little louder please.* -- OFF (not an explicit acoustical clarification of the child’s memory response)

MOT: Where did we go? -- GMQ:ELAB

CHI: hiking. -- MELAB

MOT: *We went where?* -- GMQ:REP (not explicit acoustical clarification)

CHI: hiking! -- MREP

9. **:MM - Metamemory Talk** -- Mother remarks about the process of remembering, or the child’s memory performance.

Examples. “I hadn’t remembered that.” -- MM
“*I can’t remember that.*” -- MM (but, “I can’t remember” -- PL).
“*I forgot about that.*” -- MM (but, “I forget” -- PL)
“*I remember that too.*”

But: “I remember when we went to the mountains.” -- ST:ELAB

10. **:ASS - Associative Talk** - Statements or questions that are not about the particular event under discussion, but is related to the one under discussion in one of the following ways:

Event - Talk concerning another past event that is in some way comparable to the event under discussion (e.g., “We saw fireworks a different night, didn’t we?”).

General Knowledge - Comments about facts about the world related to the event under discussion (e.g., “Ponies are baby horses.”). Also includes talk about the present state of an object or thing that was part of the past event (e.g., “Where is my big seashell now?” “This is the hat I got.”).

Fantasy - Talk concerning the event under discussion, but that is fantasy rather than factual. Must be fantasy related to event under discussion, or else it is off topic.

Future - Comments concerning the future occurrence of the particular event in question.

11. **:OFF** - Off - Within the event conversation, instances when the event is not the topic of discussion. In contrast to associative talk, off talk is not related at all to the event being discussed. Note that OFF is the default in bouts of off-topic when you are trying to decide between OFF and Unclassifiable.
12. **:UN** – Unclassifiable – Include confirmations of a placeholder, an utterance that includes only the XX or XXX symbols and can’t be determined by the context, or an utterance that can not otherwise be classified into one of the above categories. If anything else in the turn can be classified into one of the other categories, do not code unclassifiable portions of the turn.

Child Coding Categories (\$CHI)

1. **:MELAB - Memory Elaborations** – Children either more the conversations to a new aspect of the event or provide new information about the event being discussed.

Examples. “We gobbled ice cream.” MELAB
 “Jerry and Tony were there.” -- MELAB MELAB
 “We ate and drank.” MELAB MELAB

2. **:MREP - Memory Repetitions** - Child repeat information that was provided initially either by the child or the mother regarding the event without adding any new information
3. **:EV - Evaluations** - Comments that in some way confirm or deny information provided by the mother.
 - a. **:CON - Confirmations** - Yes, uhuh, yeah, right.
 - b. **:NEG - Negations** - No, uhuh, nope.
4. **:MQ - Memory Questions** - Children’s genuine “open-ended” memory questions, asking the mother to provide information (if yes-no question, code as MELAB or MREP).
5. **:PL - Placeholders** - Child takes a conversational turn that is memory related, but provides no memory information (“I don’t remember.” “I don’t know.”). Only code a placeholder if it is the only applicable code in a turn. For example:

M: Who was there? GMQ-ELAB
 C: I don’t know.
 C: Marvin. – MELAB (do not code “I don’t know.” As a placeholder because the child went on to provide memory information within the turn.)

M: Tell me all about the circus? GMQ-ELAB
 C: *I don’t remember.* PL
 M: Were there elephants there? YN-ELAB
6. **:CL - Clarifications** - Requests or responses to requests for acoustical clarification. This code does not apply to request for semantic (meaning based) clarification.
7. **:MM - Metamemory Talk** - Child remarks about the process of remembering, or the child’s memory performance.
8. **:ASS - Associative Talk** - Statements or questions that are not about the particular event under discussion, but are related to the one under discussion in one of the following ways:

Event - Talk concerning another past event that is in some way comparable to the event under discussion.

General Knowledge - Comments about facts about the world related to the event under discussion (e.g., “Ponies are baby horses.”). Also includes talk about the present state of an object or thing that was part of the past event (e.g., “Where is my big seashell now?” “This is the hat I got.”)

Fantasy - Talk concerning the event under discussion, but that is fantasy rather than factual. Must be fantasy related to event under discussion, or else it is off topic.

Future - Comments concerning the future occurrence of the particular event in question.

9. **:OFF** - Off - Within the event conversation, instances when the event is not the topic of discussion. In contrast to associative talk, off talk is not related at all to the event being discussed. Note that OFF is the default in bouts of off topic when you are trying to decide between OFF and Unclassifiable.
10. **:NR** - No Response - Child provides no response, as indicated by a "0" on the transcript. Note that if the child has a "0" but provides a nonverbal response (head nod, shake), then the "yes" or "no" is coded for the child, rather than a No Response.
11. **:UN** - Unclassifiable - Include confirmations of a placeholder, an utterance that includes only the XX or XXX symbols and can't be determined by the context, or an utterance that can not otherwise be classified into one of the above categories. If anything else in the turn can be classified into one of the other categories, do not code unclassifiable portions of the turn.