SOCIAL EVENTS CODING
Observer/Coding Training Manual

Instructions for Writing the Narrative Record

The Social Events Coding (SEC) system consists of a written, narrative description of social events as they unfold in naturalistic contexts. Social transactions between family members are recorded in detail, with special focus on selected events involving the target child.

Getting Started

It is useful to record the narrative on a writing tablet that has been marked off with a left margin of about two inches. At the top of the page record the date, the family code number, your name, and the name of the reliability observer, if any. Before beginning the narrative, record in the left margin codes for all who are present, any pertinent background information (e.g., a parent has been called away on business; the family arrived home late today; a child has been sick this week, etc.), and a description of the behavioral setting. Also record the time you begin the narrative. Write the narrative on the right and use the left margin for any interpretive comments or additional notes that may add clarity to the narrative. Here, too, is the appropriate place to add notes regarding any general impressions you may have about the observation and interactions. Try to note the time every 2-5 minutes and every time a family member is removed from the observational setting (e.g., as when the father is late getting home or the mother visits a neighbor).

Definition of the Social Event

The main focus of the home observations is the recording of the social-interactional event. An event is characterized as the smallest possible social-interactive episode having a meaningfulness for family members. An event has an identifiable beginning and end point and a discernible content or purpose that separates it from preceding and subsequent events. Each event of interest includes interpersonal encounters between the target child and one or more other individuals.

A necessary part of the description of the molar behavior (i.e., the event) is the observer's judgment of the goal of the participants during the interaction. Each event has a specific goal or purpose (e.g., to elicit child compliance, to provide an educational experience for a child, to play a game with a parent, to help the child feel good about his or her actions). In each event there is a continuity in the goal, or purpose, of the interaction. Thus, a change in the general purpose of the actors in the event is one cue for determining when there is a change from one event to another. A shift in events also may be indicated by other specific observable cues such as a change in participants, a change in affect, a change in the tempo of the activity or a change in the behavioral setting. These are sufficient but not necessary conditions for a shift from one social event to another. For example, the affective quality of an event may remain stable throughout the event or may become either more positive or more negative during the course of the event. In this case the change in affect would not signal a shift to another social event if the general purpose of the participants (e.g., eliciting child compliance) remained the same.

When an observer first visits a home, it is typical for the family's "unfolding" of events to take time, as does the observer's "getting into the flow" of events. That is, it may appear to the observer that there is just one continuous flow of behavior. The point is to be patient; the family soon will settle into their normal patterns of interaction, and the observer soon will be able to detect the natural breaks between events.

Events are not time bound and can differ in length. Thus, an event may consist of a very brief encounter between the target child and another person, or it may evolve into a prolonged interpersonal episode in which there are a number of exchanges between participants. The number of verbal or nonverbal exchanges, or turns, that occur in an event may be an indication of the intensity and the importance of the event in the life of the child.

The flow of some events is related to an observable circumstance that appears to be the apparent cause of the event. This precipitating circumstance, or antecedent, may be a specific behavioral cue (e.g., child misbehaves, parent controls to stop misbehavior; child is engaged in an activity, parent notices and comments on what the child is doing) or a need to elicit behavior from another (e.g., child needs help dressing and requests that parent help), and it may explain what motivates the participants toward their actions and comments during the interaction.

When doing home observations, write a detailed account of events as they unfold. We are interested in events that directly involve the target child and in any other family events that may affect the target child indirectly or give meaning to the events in the child's life. Write in enough detail that a second person reading the narrative would be able to understand the flow of activity and have the same impressions about the events that you would have after observing. Include as much of the conversation as possible, but verbal statements alone cannot convey the full intent or tone of the event. Thus, contextual details, such as voice ton, facial expression, and other nonverbal actions also are important. Try to acquire a "summary language" that facilitates including these kinds of important details and prevents getting bogged down in trivial details of the interaction (e.g., exact distance between participants). An economy of expression is essential; make every description count.

Consider the following narrative (M = mother, TC = target child):

M wanted TC to clean out the lego container. He didn't want to do it, but M got him to do it anyway.

From this description we have a general idea of the event, but much is left unclear. For example, we do not know the precipitating circumstances of the event, or why the mother wanted the child to do this task. Also, we have no idea of the length of this episode. Was it very brief, or was a lengthy discussion involved? In addition, there is no information that would give us any idea of the affective tone of the event. Finally, we do not know what the mother said or how she elicited the child's compliance.

Compare the following narrative to the one above:

M: "You need to take everything out of here that's not legos."

TC: “But it’s too hard. There’s so much to do.”
M: “TC, let’s do it anyway.”

From this narrative we again have a general idea of the event, and the record of the dialogue tells us that there was no lengthy discussion. But again, much is missing. For example we have no idea of the antecedent, the tone or affect of the participants, or the outcome. Other descriptors are needed.

The following description gives a more complete impression of the event:

M & TC are building a house together with Legos, but TC can’t find the pieces he needs because the lego box also contains pieces of other kinds of toys and some crinkled paper. TC sighs, frustrated. M (sympathetic) suggests, “You need to take everything out of there that’s not Legos.” TC (sounding overwhelmed), “But it’s too hard. There’s so much to do.” M smiles and says softly, “TC, let’s do it anyway.” Together they begin sorting through items in the Lego box.

Consider the much different impression conveyed by the following description.

M is watching TC build a house with Legos and notices that the Lego box is filled with pieces of crumpled paper and pieces of other kinds of toys. She begins sifting through the box, frowns, shakes her head, and interrupts his play abruptly: “You need to take everything out of here that’s no Legos.” TC whines: “But it’s too hard. There’s so much to do.” M shouts angrily, “TC, let’s do it anyway!” TC looks at M apprehensively and reluctantly begins to sort through the pieces.

The need for conveying the tone and meaning of the event by using appropriate descriptive detail should be evident from these examples. In other words, it is necessary to describe the “how” of things family members do. For example, summary terms such as “frustrated,” “overwhelmed,” “sympathetic,” “abruptly,” “angrily,” and “reluctantly” in the narratives above are descriptive of how the participants were acting and are helpful in conveying the meaning of two events with very different kinds of affect and purpose. These summary terms are “low-level inferences” that observers must make if others are to appreciate the meaning the event may have for the participants. Thus, when writing the narrative, be sure to include the antecedent or apparent cause of the event, the identity of all participants, as much of the dialogue as possible, the nonverbal actions of the participants, enough descriptors to convey the tone of the participants and the meaning of the interaction, and the outcome of the event, if any.

In the course of observation, however, the flow of activity may be so great that it becomes impossible to record in detail all events. Within the events, the interactions may be quite brief or insignificant, or they may be lengthy and take on more significance in the life of the child. Thus, some events are described in greater detail than other events (i.e., comprehensiveness of description of important events is stressed over briefer description of all events). Information from comprehensive narratives will be useful to coders who will classify each event according to certain event types.

Types of Events

Four types of events have been identified as foci for the SECS: control events, teaching events, reflective listening events, and social contact events.

Control events. Control refers to the attempts of one family member to influence or alter the behavior of another. Thus, any family member can be the initiator of a control event. Control attempts may refer to a family member's immediate behavior or to incidents that happened in the past with an implied intent to influence future behavior. Included in control events are attempts to stop or inhibit the behavior of another (inhibitory control) as well as attempts to involve or stimulate another toward desired behavior (instigatory control). Control may be manifested in both positive ways (e.g., giving simple instructions, encouraging, redirecting, reasoning) and negative ways (e.g., scolding, criticizing, yelling, whining, threatening, punishing physically, etc.).

These attempts may be direct and obvious, or covert and subtle; they may be successful or unsuccessful (i.e., the target of the control may or may not comply). Also, control episodes may be quite brief (e.g., parent instructs, child complies; or parent instructs, child ignores, parent doesn't follow through), or they may evolve into more lengthy interactions that contain elements of coerciveness or counter-control (as when two family members have different purposes or goals). Varying degrees of conflict may be involved.

It is important to remember that the underlying intent of the initiator of control events is to manipulate, modify, or influence the actions of another person. Thus, simple instructions (either isolated or embedded in other events) or simple requests for assistance are not coded as control events (e.g., at dinner, a brief, neutral request such as "Please pass the salt," would not be considered a control event). When writing the narrative, remember to include the antecedent of the control event, the initiator of control, the type of control used, the affective tone of the participants, an indication of the number of exchanges between the participants or of the amount of coerciveness, and the outcome.

Examples of events that would be coded as control (M = mother, TC = target child, F = father, B = brother):

1. (TC had gotten two suckers at the doctor's office earlier in the day.) She eats one of them after supper and is holding the second one in her hand. F tells her quietly "You need to put down that second sucker. We're just eating one today. OK?" TC shrugs her shoulders. F (more emphatically), "OK?" TC whines, "huh uh" (no), but puts the sucker down on the table anyway.

2. TC & B are sitting together in a chair watching TV when M comes in, notices what they're watching (a detective show) and heads straight for the television, saying (sounding curious) "What are you guys watching?" TC says sternly, "It just came on and don't turn it off!" M turns off TV anyway and TC whines, "No! We're watching it." M ignores this whining and reminds TC that she has to leave for a meeting soon and would love a hug. TC stops whining, runs over, and falls into M's arms.

3. At dinner, TC begins to play at the table, running the palm of his hand along the table top and making car noises. M gently takes his hand and puts it in his lap and whispers, "This is eating time." He keeps his hand in his lap and continues to eat.

4. M and TC are sitting on the living room floor with a bunch of toys scattered about. TC picks up a small figure and shows it to M. M asks "Where's his sword?" TC hangs his head and mumbles "It fell in the heating vent the other day." M, accusingly, "What were you doing playing over the heater?" TC shrugs his shoulders and M says angrily, "If you had been playing where you were supposed to, it wouldn't have happened!" TC gives no response but begins to play with another toy. M lets the subject drop. (Implied control of child's future behavior).

Examples of events that would not be coded as <u>control</u>:

1. M and TC were planning to fly a new kite. M says "First we have to string it." She shows TC how to string the kite, going through each step slowly. As M explains each step, TC listens and tries to guide the string. M gives him assistance and helps him make sure the string is secure. Finally M asks, "OK. If you'll hold your finger right on the string I'll finish tying this knot." TC holds the string tightly while M finishes tying the knot, then he smiles and says "Great! All ready for flying!" (Teaching)

2. TC is standing at the edge of the garden watching F plant some seedlings. F asks, "Do you ever talk about gardening at school?" TC says they are going to plant a garden on their playground. F (still planting) points to a spade on the ground by TC's feet and says "Hand me that spade, will you?" As TC hands F the spade, he continues the conversation, "We're going to plant beans and tomatoes and lettuce and some other stuff." F smiles and encourages, ""ell, I know you'll really be a big helper in <u>that</u> garden." (Social Contact)

<u>Teaching Events</u>. Teaching refers to protracted, didactic exchanges between a parent and child in which the parents' intent is to provide an educative experience for the child. In contrast to implied teaching qualities of certain control events, in which a child might learn about the appropriate expression of certain types of behavior, teaching events are more direct and more clearly educational in nature, as when a parent gives a child a lesson or demonstration. Teaching is to engage or instruct not to modify or change behavior. Teaching events may be elicited by the child's curiosity or may occur because of a belief by the parent that their role is to engage in teaching if their child is to develop properly. The content of teaching events may involve topics such as manners or interpersonal skills, morals or values, work skills or motor skills, "facts" or extended information, or pre-academic skills. Events in which there is a simple exchange of information or an attempt to control another person's behavior are not coded as teaching events.

Examples of events that should be coded as teaching:

1. At dinner, F asks TC if they saw some fish that day at the doctor's office in his aquarium. She nods, and F tells her about the different kinds of fish they have (naming and describing each kind) and about what they eat. They talk about which ones are big and which ones are little. TC says "They have a <u>really</u> big tank," and F says he bets it's "a hundred gallon talk."

TC asks, smiling, "How big is a hundred gallons?" F names several other things (bathtub, washing machine, kid's swimming pool) and talks about how many gallons they hold.

2. M suggests to TC "Why don't you tell daddy what you saw at school today?" TC hesitates and M helps out, "It rhymes with carrot and starts with the same letter as food." TC grins and exclaims, "Ferret!" F laughs and asks "was it soft – soft as a rabbit? Did it look like a muskrat? Like a mouse?" TC says it looks like a panda. F tells her about ways it's like a mouse or muskrat.

3. M and TC are looking at a book, when M points to a word and says (encouragingly) "Can you tell what this word is?" TC begins, slowly, to sound out the word, M helps, and smiles when he finally says it. She picks up the sentence and continues to read. She stops frequently to let TC fill in a word and help him sound it out, or to let TC fill in a repetitive phrase in the story.

Examples of events that should not be coded teaching:

1. TC is playing (quite roughly) in the living room with his new puppy. He accidentally rolls over on the puppy'' leg and the puppy lets out a series of loud yelps. M comes in from the kitchen (looking concerned) and says firmly, "I think you're playing too rough. You need to be gentle. Rough play hurts the puppy and animals and people are not for hurting." TC begins to pat the puppy very gently. (Control)

2. At dinner M points to a sweet potato and asks TC, "Do you know what this is called?" TC shakes his head. M says "sweet potato, sweet potato." TC does not respond. (Social Contact)

Reflective Listening Events. Reflective listening refers to a parent's contingent responsiveness to a child's verbal initiation or nonverbal cue. The event may include a parent's brief response or acknowledgment (e.g., child initiates, parent says, "That's great!"), a short exchange such as a simple answer to a child's question, or an extended conversation in which the parent appears to be letting the child lead the way by responding to or commenting on what the child is doing, what the child has said, or what the child might be feeling or thinking. Either the child's verbal initiation or the child's nonverbal behavior is a necessary antecedent to a listening event. The underlying intent or goal of the actors in the event appears to be to acknowledge the child's initiation, to acknowledge what the child is doing, or, in more protracted episodes, to help the child feel good about his or her actions, thoughts, or feelings. This is not to say that praise is a necessary component of listening events. Rather, the parents' responding to the child's statements or cues in a noncontrolling, nonteaching way is the important component. Thus, events in which the parent initiates and the child responds are not listening events. Also, events in which the parent merely asks the child for information, complies with a child's request to do something, or initiates or leads a conversation are not coded as listening events. Finally, listening events contain no aspects of control or teaching.

Examples of events that should be coded as listening:

1. M notices TC playing with a puzzle and says, "I see you're almost finished with your puzzle. You really worked hard." TC looks at her, smiles, and says proudly, "I did it all by myself." M laughs, "You sure did!" (response to nonverbal cue: playing with puzzle).

2. TC rummages through the desk looking for glue (for making a collage out of magazine pictures). He can't find it and calls to M, "M, where's that little bottle of glue?" M responds (in helpful tone), "I was using it last night. I left it on the kitchen counter." TC runs into the kitchen to get the glue.

3. TC is working hard to get the shoestring out of her shoe. When finished, she holds up the shoe and shoestring to show M and exclaims, "Hey, look! I got it out!" M, washing dishes, looks at her briefly, grins at her, says, "Good!," and then continues to wash dishes.

4. TC is drawing with crayons and colored markers at the kitchen table while M is cooking dinner. TC tells M, "I'm making this fire engine red." M goes over to the table, looks at his picture, and says "A red one?" TC continues to color, saying, "Yeah, some kids at school make yellow fire engines," (sounds like he's doubting himself about red one). M reassures him, "Well, some are red and some are yellow. I like your red one. When you're drawing you can make it any color you want!" TC stops coloring (thinking a minute) then grins and suggests "What about a green one?" M laughs, "A <u>green</u> one?" TC keeps grinning, "Yeah, then it would be hidden by all the trees and grass. No one could find it!" M smiles, "Oh, I see, a camouflage fire engine." TC doesn't respond but continues to draw, grinning to himself.

Examples of events with antecedents of child verbal initiation or child nonverbal behavior that should not be coded as listening:

1. TC is sitting on the living room floor working a puzzle, and M walks in, notices TC, and asks, "What did you do in school today?" TC keeps working the puzzle, doesn't look up, but says quietly, "Played." M (still curious), "Who did you play with?" TC (sounding disinterested), "A bunch of kids." He's still working the puzzle. M asks (still trying to get him into a conversation), "Did you build with blocks today?" After a moment, TC responds, "Yeah, this morning." (M is leading this conversation; initial question was not a response to what the child was doing). (Social Contact)

2. TC is drawing with crayons and colored markers at the kitchen table while M is cooking dinner. TC tells M, "I'm making this fire engine red." M, busy with dinner, does not respond. TC continues to draw. (Social Contact)

3. TC is drawing with crayons at the kitchen table while M is cooking dinner. Finishing his drawing, he sighs and says, "Finished! I made this fire engine red." M doesn't look over but tells him, "Don't forget to put everything away." TC begins to put the crayons back in the box. (Control)

<u>Social Contact Events</u>. Social contact refers to interpersonal exchanges which are nonmanipulative, nondidactic, and nonlistening. They may include simple requests for

information (e.g., "Do we have any more milk?", physical displays of affection, and mutual activities in which the intent of the event does not have elements of control, teaching or listening. Although some social contact events may be of relatively short duration, it is important to include contextual information in their description as well.

Examples of events that should be coded social contact:

1. M is searching in the refrigerator for leftovers for a hurried supper and asks TC, who is standing nearby, "Do you remember if we had any potatoes left over the other night?" TC responds, "Yeah, we did." They look in the refrigerator together and find the container with potatoes.

2. At dinner, younger B tells F something but F misunderstands and M & F can't figure out what he said. F asks TC if he could understand B. TC helps out, "He said he ate all his broccoli." F smiles and says, "Oh, he said he ate all his broccoli."

3. M and TC go into the den to turn on the television. M suggests, "I think Sesame Street is on," and turns on TV. TC doesn't respond but sits on floor, eyes glued to TV.

4. At dinner, everyone is eating, when F gets up to close the window. As he walks by TC's chair, he briefly touches and pats the top of TC's head. TC looks up, and smiles, and continues to eat.

Clarification procedures

The complexity of interpersonal exchanges in any given family can make it exceedingly difficult for even the most experienced observer to capture in written form the information necessary for the reliable coding of events. The observer must, on occasion, describe events in a skeletal fashion, and then later elaborate upon these "bare bones" so that the required details are available for coding. It is thus essential that the observer re-read and provide clarifications on the narratives within a period of a few hours after the end of the observations, while the details can still be recalled. This procedure allows for the addition of detail that was accidentally omitted and the clarification of events based on information obtained later in the course of the observation. Also, be sure to include in the left margin any interpretive comments regarding the intent of the participants in an event that would give clarity to the meaning of the event.

Marking off Events

After completing the clarification procedure, read back over the narrative and mark off the events, separating each event with brackets along the left margin. One technique that helps to facilitate this procedure is to leave a blank line between the obvious end of one event and beginning of another; start the new event on a new line. After you have marked off the events, the narrative is ready to be coded.

Summary

1. In homes, assume the role of a friendly but noninteractive visitor.

2. Write a detailed narrative of interpersonal exchanges involving the target child and other individuals. Control, teaching, listening, and social contact events have been identified as foci for the observations.

3. Within a few hours after completing the observation, elaborate on the narrative by filling in details and interpretive comments that may clarify the nature of the interactions for the coders.

4. Mark off events.

5. Turn the narrative in to be coded.

Instructions for Observing in Homes

The purpose of observing in homes is to obtain information about how family members normally interact during their day-to-day activities. We want family members to feel comfortable in the observer's presence and to behave as they usually would behave at home. Thus, observers should disturb family members and their routines as little as possible by assuming the role of a quiet but friendly visitor. Observers can help achieve this goal by following these rules:

1. Before leaving to do an observation, check to make sure you have plenty of paper and pencils or pens with you. Don't ask family members to supply you with these materials.

2. At the home, greet the family members and talk with them briefly. You can remind them that it's normal to be a little uncomfortable about being observed and ask them to tell you if you do anything that makes them uncomfortable. Mention that we are interested in how children spend their time at home (i.e., the observation is focused on child behavior). Then tell them you are going to begin working.

3. Position yourself so that you are as far away from the activities as possible while also ensuring that you can see and hear. Avoid standing in doorways or other traffic lanes. When you sit, do so without interfering with family's activities or with family member's choices about where they might sit. If you follow someone into another room, do so unobtrusively.

4. If children do try to get your attention or enlist your participation in an activity tell them you are working and can talk to them when you are finished. Do this only once and ignore their approaches afterward.

5. If parents talk to you while you're observing, acknowledge their comments with a brief smile and return to work immediately. Be polite, but don't get involved in conversations while you're observing. If someone offers you something to eat or drink, decline politely and tell them you can't have anything until your observation is over.

6. Don't assume responsibility for the care of children. If a parent leaves you in a supervisory position, tell him or her that you cannot take responsibility for children.

7. Remember that the information we obtain is confidential. Never write anyone's first or last names on any narrative records; use only codes for families and for individual family members. (Codes: M = mother, F = father, TC = target child, S = sister, B = brother, NA = adult neighbor, NC = child neighbor, GP = grandparent, R = other relative). Never make any statement to any one outside the research group that can identify a family by name or action. Refrain from talking specifically about any incidents you have observed and avoid expressing opinions about any family childrearing practices you might see. When you want to discuss your experience as an observer, it's best just to describe what you are doing and how you feel about it rather than to describe what you've seen in a particular family.

8. Before leaving, schedule the next observation. Tell them if you expect to bring a reliability observer with you. Give the family your phone number, get theirs, and call them if you have an emergency and have to cancel an observation.

Instructions for Coding the Narrative Record

After observers have sectioned off events, the narrative records are ready to be coded by another staff member. It is helpful to begin by reading through the events and classifying each according to the event types previously defined (i.e., control, teaching, listening, and social contact). Then you will need to code specific types of information about each event according to the definitions and coding manual that follow:

Participants – Participants are coded for each event. The participants in an event are those people who take a verbal or nonverbal part in the interaction. Bystanders are not participants. For example, if, at dinner, the mother tells the target child to try her broccoli, and the child complies, the participants in this event are the mother and target child even though the entire family is present at dinner.

Initiator – The initiator is coded for control, teaching, and social contact events. The initiator of control is the first in the event to display attempts to influence or alter another's behavior. Although the event also may include counter control attempts from the other person, these attempts are coded in other categories. The initiator is always the first to begin the control attempts. Control may be initiated by more than one person; that is, both mother and father may simultaneously initiate control or one parent may initiate control and the other parent may join in later in the event (e.g., code "mother, then father"). The initiator for teaching and social contact events is the person who begins the interaction.

Antecedent – Antecedents are coded for control and listening events. The antecedent of an event is the precipitating circumstance and has been defined previously (p. 2). For example, if mother walk into the living room and notices the target child sitting on the couch, listless and sighing, and comments by saying, "You look tired today, hone. Don't you feel okay today?" then the antecedent of mother's comment is the child's nonverbal behavior: sitting on couch and sighing.

Turns – Turns are coded for all events except teaching. This category refers to the number of exchanges that occur during the interaction. The number of exchanges may be indicative of the degree of involvement of the participants. There may be a very brief interaction (one exchange), a short exchange (two-three turns) or a more lengthy, protracted interaction (four or more turns). For control events, the number of turns may be an indication of the amount of counter control or coercion. For teaching and listening events, the quality of interaction may be indicated by the number of turns.

Conflict – Conflict is coded for control events. Conflict occurs during control events when a person fails to comply with another's control attempts or counters those control attempts with her/her own control attempts. Conflict refers to the intensity of negativity in the interaction; a highly conflictual event would be intensely negative in affect. Control events involve different degrees of conflict. They may involve no conflict at all; or they may be characterized as low in conflict (e.g., participants may bicker, argue, or show frustration with one another; or they may intentionally avoid and ignore one another). Finally, control events may be high in conflict (both participants are at odds; there appears to be a power bout, perhaps with high levels of yelling, continued arguing, aggression, tantruming, or physical punishment).

Instructions for Calculating Reliability

Reliability is assessed from these narrative records in two general ways. First, reliability on the narrative records themselves is determined by comparing two records of the same observation that have been recorded simultaneously and independently by two different observers. This type of reliability seldom is determined by investigators who use either written narratives or transcriptions from dictated narratives, but is essential if a complete evaluation of the SEC is to be made.

A coder determines event-by-event concordance by comparing the two narratives and judging whether an event described by observer 1 had the same general content (defined in terms of participants, setting, and thematic content) as an event described by observer 2. The "estimate of accuracy" (that is, events recorded by observer 1 also recorded by observer 2 divided by half the total number recorded by each) is used to calculate agreement. Next, the coder labels the events that are in agreement to determine if they are described in ways that characterize the same event type. The proportion of agreement (as well as Cohen's Kappa) for the categorization of event type is determined for each kind of event.

The second kind of reliability involves a comparison of codes determined by two different coders of a single narrative record. This type of comparison is more common and is essential for determining reliability for specific event descriptors. The proportion of agreement (and Kappa) is determined for event type and for other specific variables that have been derived.

Reliability across two narratives is determined for observations on one sixth of the families that are observed in their homes. Two observers visit the family for both observation visits and simultaneously and independently record the narrative. Reliability on the coding of a single narrative is determined for 15% of the total number of narratives recorded by primary observers.