

STUDY OF AFTER-SCHOOL CARE

PROGRAM QUALITY OBSERVATION

Deborah Lowe Vandell & Kim M. Pierce

The *Program Quality Observation (PQO)* comprises global qualitative ratings of after-school programs and time samples of children's activities and interactions in the programs. The qualitative ratings are designed to enable observers to characterize school-age program environments in terms of an overall perception of the quality of the care observed, and allow us to convey and standardize our perceptions of the elements which contribute to the overall effectiveness of the program being observed. The time samples document an individual child's experiences interacting with program staff and with peers, and the specific activities the child participates in while at the program.

The qualitative rating and time sample observations should not be conducted at the same time. Optimally, these components of the *PQO* are conducted on different days and by different observers.

QUALITATIVE RATINGS

The *PQO* qualitative ratings are made of the program environment and caregiver style, based on a minimum of 90 minutes of continuous observation. Program environment ratings, which include programming flexibility, appropriateness of activities, and chaos, are made of the program as a whole. Caregiver style ratings, which include positive and negative behavior management and positive and negative regard for children, are made separately for each caregiver observed.

Each of the qualitative ratings is made on a 4-point scale. A rating of 4 indicates that the environment or the caregiver's behavior is either very advantageous or very poor/inadequate, depending on the particular dimension being rated. The same is true of ratings of 1. Ratings of 2 or 3 fall between the two extremes. In assigning a rating, the observer should use a two-step process. The first step is to decide which side of the scale best characterizes the person or the environment. Once this decision is made, the rater must make a finer discrimination between ratings of 3 and 4, or 1 and 2. While the scale relies on the observer's general impression of the caregiving situation during the observation period, the presence or absence of the criteria defined for each numerical level on the scale must guide the observer's ratings.

Program Environment

Three aspects of the program environment are rated: programming flexibility, appropriateness and diversity of the available activities, and chaos. The flexibility and activities ratings are modifications of ratings used by Rosenthal & Vandell (1996). The chaos rating is a modification of one used in the NICHD Study of Early Child Care's Observational Record of the Caregiving Environment. These ratings are best suited for use in formal after-school programs.

Flexibility

- 4 = A flexible program structure is adaptable and responsive to individual wants, needs, talents, and moods. Rules are not strictly imposed regarding what is to occur in the program. Children are able to choose which activities they will participate in, and no child is forced to participate in any given activity; autonomy and independence are emphasized. Children can move about the premises fairly freely to the extent that supervision is possible. Additionally, group composition is varied and determined by children's self-selection among peers.
- 3 = Children have some say in choosing an activity, and may be allowed to devise their own activities within limits set by staff. Children are not forced to participate, but there may be some rules about what they must do or where they must be. Group composition may be determined by staff in limited ways (e.g., first graders must play with other first graders).
- 2 = Activities are prescribed by staff; children have no say in determining what activities will be available. There may be a few activities from which children can choose, but they are not allowed to devise their own activities. Group composition may be determined by staff.
- 1 = The caregiver determines the pace and sequence of the day, and what activities will be available to whom; children are not able to choose which activities they will participate in. Participation in whatever activities are planned is required. There is no accommodation for individual needs or wants. The caregiver determines the grouping of the children; children are not allowed to choose who they will play with.

Activities

- 4 = The activities available at the program are diverse and focus on all areas of development (physical, cognitive, social). The experiences and activities which are offered to the children are responsive to individual differences in abilities and interests, and they are neither too easy nor too difficult for the children's developmental level. There are opportunities for individual, small-group, and large-group activities. Examples of appropriate activities for school-aged children include sports, fine- and large-motor activities, arts and crafts, dance, music, computer games, board games, reading, and unstructured time for socializing with peers.
- 3 = In general, there are age-appropriate activities available, but there is not as wide a range as possible. All developmental areas may be covered, but there may be a limited number of activities in one or more areas. Some activities may not be appropriate to the children's development (i.e., too easy or too difficult).
- 2 = There may be a few different activities available which are age-appropriate, but there is little diversity in terms of developmental focus (e.g., several age-appropriate activities in the cognitive realm only). Many of the activities may be too easy or too difficult for the children.

- 1 = All of the available activities focus on one area of development, such as physical games, and they may be developmentally inappropriate. The activities may be too easy or too difficult for the children's developmental level (e.g., board games which are suited to preschoolers). Large-group activities may predominate. There are not enough different, varied activities to keep the children engaged or satisfied. There may be little or no unstructured time during which children can just "relax".

Chaos

- 4 = Chaos and disorganization are highly characteristic, persisting across multiple activities and settings. The children are out of control. They may be fighting with one another, yelling, or behaving inappropriately, jumping on furniture, ruining materials, or just generally running around. Activities do not seem organized; disorder is evident.
- 3 = There is chaos and disorganization in the environment, but it is not characteristic of many children or all activities. A group of children may exhibit the behaviors that merit a rating of 4, or some activities and transition times may be chaotic and disorganized such that the progress of or beginning of activities for some children is impeded.
- 2 = One or two children's behavior may be out of control, but in general, children's behavior is appropriate and reasonably controlled. Transitions and activities generally go smoothly, although there may be exceptions.
- 1 = No chaos or disorganization is observed in the environment. Children's behavior is appropriate, and activities and transitions proceed smoothly.

Caregiver Style

Four characteristics of caregiver style are quantified: positive and negative behavior management, and positive and negative regard for children. The positive and negative behavior management ratings are modifications of a single rating used in the Ecological Study of After-School Care conducted at the University of Wisconsin-Madison under the direction of Deborah Lowe Vandell. The positive and negative regard ratings are modifications of ratings used in the Observational Record of the Caregiving Environment by the NICHD Study of Early Child Care. These ratings can be used in both programs and in more informal, adult-supervised settings.

Positive Behavior Management Techniques

- 4 = Attention (e.g., smiles and encouragement) is given to children for cooperating, sharing, and working on activities. Praise is sincere, and bribes (such as stickers, food, or special activities) are not used to control behavior. Rationales and reasons are given for rules and expectations ("No talking in the halls, the little kids are sleeping"). In actual or potential conflict situations, the caregiver helps children to recognize the impact of their behavior on others; feelings are identified, social problem solving is facilitated, and children's expressions are reflected back to them. Negotiation,

- reasoning, and redirecting are used to help children find alternatives.
- 3 = The caregiver frequently but not always uses positive behavior management techniques. Opportunities to give positive attention to children are sometimes missed. Praise may sometimes be insincere, and bribes may occasionally be used. Children's behavior or activities may sometimes be restricted without an explanation for a rule being offered ("No talking in the halls"; "Don't touch the paints!"). The caregiver helps children develop perspective-taking skills sometimes, but not at other times, when resolving conflicts.
 - 2 = The caregiver uses positive behavior management techniques only occasionally. Some behavioral incidents are dealt with ineffectively or negatively, although not as ineffectively or negatively as merits a rating of 1.
 - 1 = The caregiver rarely uses positive behavior management techniques. Solutions to conflict are imposed, rather than negotiated with input from children; the primary objective is to control behavior rather than to help children develop social understanding and self-control. Compliance with caregiver directives is expected, without explanation. Behavior management is negative, ineffective, or nonexistent.

Negative Behavior Management Techniques

- 4 = Harsh discipline methods (shaming, yelling, hitting) are consistently used, and children are lectured at times. Punishment is used frequently.
- 3 = The caregiver frequently but not always uses negative behavior management techniques. Harsh discipline methods may be used sometimes, but not at other times. Children may be lectured about their behavior.
- 2 = The caregiver uses negative behavior management techniques only occasionally. Some behavioral incidents may be dealt with positively.
- 1 = The caregiver does not use negative behavior management techniques. Behavior management is either positive or nonexistent.

Positive Regard

- 4 = The caregiver is strongly positive toward the children in the program. Positive regard is demonstrated when the caregiver is warm, accepting, and encouraging of children; he/she seems to take pleasure in children. This may specifically include speaking to children in a warm tone of voice; using physical gestures to convey affection; smiling or laughing with children; enthusiasm about children; and praising children. Positive regard is evident when the caregiver listens, watches attentively, and looks into children's faces when speaking to them. The caregiver's interactions with children are reciprocal; the caregiver does not dominate. Children's verbalizations are acknowledged.

- 3 = The caregiver is typically positive towards the children in the program, but not as consistently as a 4 rating. Positive affect is usually displayed, but not always; some of the caregiver's interactions with children may have a neutral tone.
- 2 = The caregiver evidences infrequent or weak signals of positive regard. For example, there may be an occasional smile or occasional praise.
- 1 = The caregiver displays no evidence of positive regard for children. He/she does not appear to like working with children. The caregiver may be detached, have flat affect, or be consistently negative with children. Insensitive or harsh remarks may be heard, or a flat tone of voice and little eye contact may be observed. Most of the caregiver's interactions with children consist of verbal directions or instructions; little time is spent in informal or spontaneous conversation.

Negative Regard

- 4 = The caregiver is extremely negative toward children. Feelings of negative regard are expressed strongly and frequently. Negative regard may be evidenced by anger, disapproval, body tenseness and a strained facial expression, a negative voice, abruptness, harshness, or sarcasm. Insensitive or harsh remarks are typical.
- 3 = The caregiver regularly displays negative regard for children. There are multiple instances of low-intensity negative regard, or a few instances of higher-intensity negative regard.
- 2 = The caregiver displays minimal negative regard. There is some evidence of low-intensity negative regard, but it is not frequent.
- 1 = The caregiver does not display negative regard for children in either words or expressions. There is no evidence of anger, distrust, frustration, impatience, or general dislike. The caregiver may be expressionless or flat, or positive.

TIME SAMPLES

The time sample portion of the *PQO* involves recording the activities and interactions of an individual child at an after-school program. Nineteen activity categories are recorded, and a number of types of interactions: positive, neutral, and negative interactions with peers; and positive, neutral, and negative interactions with staff. Optionally, interactions with staff can be further coded as involving the target child only, a small group (2-4 children) that includes the target child, or a large group (5 or more children) that includes the target child.

Partial-interval time samples are conducted for 30 minutes in 60 observe-record intervals. In each interval, the observer watches the study child for 20 seconds, followed by 10 seconds of recording time. The timing is best accomplished with an audiotape or digitized audio player containing observe-record signals at the appropriate times. Using ear buds to listen to the audiotape, rather than headphones, will minimize interference with hearing what is going on in the program.

For each time sample interval, the child's specific activity is recorded with a code number. The child's interactions are recorded with checkmarks to indicate the type of interaction observed. Only activities and interactions that are seen during the observe portion of the interval should be recorded; do not include anything seen during the record portion. Following completion of the observation, the number of intervals for which each code is marked should be entered on the time sample form.

Scores from the time sample observation are adjusted frequencies. Since time sample observations may occasionally involve fewer than 60 intervals (because, for example, the target child leaves the program before the observation is completed), scores need to be adjusted for the number of intervals actually observed. Higher scores represent a larger number of intervals during which an activity or interaction was observed.

In the Study of After-School Care, the *PQO* time sample observation was conducted with study participants. If the time sample is used as part of a general program quality assessment or program self-assessment, target children should be selected for observation at random. In multi-age programs, the children should represent each age group (e.g., kindergarten to Grade 2, Grades 3-5, Grades 6-8). Child gender should be balanced; both boys and girls should be observed. Multiple children should be observed in order to get an overall snapshot of children's experiences in the program.

The *PQO* time sample procedure was adapted from similar procedures used in the Ecological Study of After-School Care conducted at the University of Wisconsin-Madison under the direction of Deborah Lowe Vandell, and by Rosenthal & Vandell (1996). The procedure is suitable for use in both formal programs and informal, adult-supervised care settings.

Activity Codes and Definitions

The time sample activity codes relate to what the child is doing during observation intervals. Code one of the 19 listed activities. If more than one activity occurs during an interval, code the one which occurred more predominantly or for a longer period of time. Often there is a start-up

phase for an activity, when instructions are being given or teams are being chosen. These periods will be coded as belonging to the activity that will be initiated (e.g., picking teams for basketball is coded as large motor).

- 1 **Large motor:** Indoor or outdoor physical activities. This category includes sports of all types (e.g., kickball, soccer, basketball), and individual large-motor or physical activity and games, such as using playground equipment.
- 2 **Fine motor:** Unstructured fine-motor activities such as block building, Legos, Tinker Toys, puzzles, etc.
- 3 **Arts/crafts:** Artistic or construction activities, such as marker art, clay modeling, painting, collages, carpentry, model planes, etc.
- 4 **Academic/homework:** Any activity specifically related to the child's regular academic work, such as supervised or individual homework time and tutoring in special areas.
- 5 **Cognitive activities:** Any activity which involves cognitive skills (except homework and tutoring), such as writing exercises, science experiments, mazes, story telling or reading, word games, crossword puzzles, newsletter creation, etc.
- 6 **Performing arts:** Drama, music, dance, or any other activity making use of elements of these, such as puppet shows, clowning classes, cheerleading, sing-alongs, video making, etc.
- 7 **Games:** Any game or activity having a prescribed set of rules or methods for playing, such as cards, checkers, bingo, or backgammon. Large-motor games and sports are excluded.
- 8 **TV/video/music:** Watching TV programs or videos, playing electronic games such as Nintendo or Sega, listening to a radio/Walkman.
- 9 **Fantasy play:** Role playing such as playing "school" or "house", Barbies and other dolls, toy soldiers, etc.
- 10 **Snack:** Having a snack, or helping prepare or serve snacks.
- 11 **Interactions:** Talking with others, either peers or caregivers. Code only when interaction is the primary activity; do not code when talking occurs in conjunction with another activity. Group discussions are included (e.g., what everyone did over the weekend).
- 12 **Clean up:** Cleaning up activity areas, putting away materials at the end of the day, etc.
- 13 **Transition:** The child is moving from one activity to another. For example, putting on ice or roller skates, moving from the games area to the gym, or waiting in line to go outside. Include behaviors such as putting one's coat away after the move (for example, if the child moves from one area of the program to another, and needs to

- take his/her things with, code packing up belongings in the old location and putting them away in the new location as Transition). **Note:** This does not include going between activities while trying to choose one to participate in; code that as 14, Other.
- 14 Other:** The child's activity cannot be coded in any of the above categories. For example, sleeping, being timed out for misbehavior, looking for something, digging in the dirt, etc.
- 15 Unoccupied:** The child is present but is not involved; examples include wandering aimlessly, or sitting and staring (thus appearing "tuned out").
- 16 Undetermined:** The activity is unknown. The child is not in view of the observer.
- 17 Group "lecture":** The child is part of a large group to whom the caregiver is "lecturing" ("We're not remembering the rules"), yelling, or scolding, or the caregiver is waiting for compliance with a directive ("We're going to sit here until you can be quiet"). The general tone likely is negative.
- 18 Computer:** Any computer activity, such as playing a game, working with educational software, or installing software.
- 19 Passive participation:** The child is not actively participating in an activity. For example, he/she may be watching other children play a game of cards or basketball, or listening to other children talk. Although not actively participating, neither is the child unoccupied.

Interaction Definitions

Interactions are coded as positive, neutral or negative, and as occurring with peers or adults. Both verbal and nonverbal interactions should be considered. Eye contact alone is not enough. Code all types of interactions which occur during an interval, during both the child's predominant activity and all secondary activities. If no interactions occur, code "None". Whenever interactions with adults occur, indicate the number of children involved in the interaction.

Positive: Talking, asking, or explaining something with clearly positive affect, either in terms of content ("You're doing a great job", "That's great") or intonation; touching positively (putting arm around shoulders, hugging); laughing; smiling (but not a very brief smile that does not clearly convey positive affect); etc.

Neutral: Display of neutral affect during interactions; any interaction which is not clearly positive or negative.

Negative: Arguing, use of an angry tone of voice, insulting, and any other form of verbal interaction which is clearly negative (e.g., child asks to join a group and is rebuffed, or asks a question and is ignored). Physical behaviors which indicate a negative interaction include hitting, kicking, pushing, crying, or any other type of aggressive or hostile behavior which is directed toward another individual.

Target child: The interaction involves the target child only.

Small group: 2-4 children, including the target child, were part of the interaction.

Large group: The interaction was directed at 5 or more children, including the target child.

Time Sample Code Clarifications

The time sample code clarifications detailed below are based on our experiences conducting observations of elementary school children in the Study of After-School Care.

Large motor: Includes participating in a game, even if just standing around waiting for a turn. Be careful not to automatically code this just because the child is outside. For example, the child may be hanging on the monkey bars, talking to a friend. This would be coded 11/Interactions, unless the child was actively involved in playing on the monkey bars. Jabbing at snow with a stick and dirt digging are coded as 14/Other.

Fine motor: It may sometimes be difficult to distinguish between fine motor and 9/Fantasy play. Children often construct a "spaceship" out of Legos, etc. Code the actual construction in this category; if the child then plays with the finished product as though it were a spaceship, code 9/Fantasy play.

Arts and crafts: Includes activities such as perusing books to find shapes for drawing, or waiting for the glue bottle or getting up for scissors while doing an arts/crafts activity.

Academic/homework: If, while doing homework, the child gets up to look at the clock and then goes back to the homework, code all of it here.

Cognitive activities: If the child is part of a large group being read to, code the child's activity here. In this case, the child is also having a positive interaction with an adult, large group of children. The child may sometimes look around the room, but likely is still listening to the story. Code 15/Unoccupied should be reserved for those cases when the child clearly is "zoned out".

Performing arts: This is more "formal" than fantasy play.

Games: This is not restricted to board games or games with formal rules. The children or caregiver may prescribe the rules while making up the game. Include the time during which instructions are being given for the game or the rules are being explained.

TV/video/music: Do not code listening to background music here, if there is another activity the child is doing.

Fantasy play: In some cases, you may have to stop the tape and listen to children to discern if they are indeed engaging in fantasy play (e.g., Defend House from the Space Alien vs. large motor).

Snack: Do not code here if the child is eating while doing something else (e.g., eating raisins while reading a book).

Interactions: This code is reserved for times that interacting with others is the focal activity. Distinguish between talking about an activity versus strictly engaging in social interactions. If the child is doing something else mindlessly while talking, such as peeling the bark off a stick, code the activity here. This code also includes talking on the phone. If the child is participating in "teasing" sorts of roughhousing, code it here (if more like tumbling or wrestling, code as 1/ Large motor).

Clean up: Self-explanatory.

Transition: This does NOT include, for example, going from structure to structure on the playground (this is probably 1/ Large motor), or walking from activity area to activity area while pondering one's choices (this is 14/ Other). If children are waiting in line and the teacher makes up a game while they are waiting, code as 7/ Games. Walking as a group to the playground would be coded here. Transition implies that children are waiting or preparing (as in putting on ice skates) to go somewhere else.

Other: Anything that can't be coded elsewhere, such as digging in the dirt, intently peeling the bark off a stick, sleeping, looking for something, trading baseball cards, etc.

Unoccupied: This implies that the child does not have a goal in mind (if walking around).

Undetermined: This code should be reserved for those times when the child leaves the program before the entire time sample is completed. If the child goes to the bathroom or is otherwise unobservable, stop the tape and wait until the child returns (or go looking for him/her, if necessary).

Group "lecture": This should NOT be used when the caregiver has assembled children for the purpose of giving instructions for a game, or to just talk in general.

Computer: Self-explanatory.

Passive participation: The child can be passively participating, such as watching other children play a game of soccer, and still have a BRIEF interaction during the interval. If an adult "takes over" an activity (e.g., computer) the child was actively participating in, and the child is now watching the adult, code here.

Interactions: "Interaction" implies inclusiveness--the child is part of an interaction, not just standing or sitting nearby (such as when other children are talking and the child is sitting next to them, perhaps listening). Eye contact alone is not enough; there must be some other indicator, such as a smile. If participating in a game, the child is interacting with peers just by virtue of playing a role in the game. Unless a clearly positive or negative affective tone is indicated, this is coded as a neutral interaction. Listening to a story (coded 5/ Cognitive activities) as part of a group of children does not necessarily imply an interaction with peers--the other children are not necessary for the child to listen to the story.

INTERVAL	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
ACTIVITY																				
INTERACTIONS																				
None																				
Positive with peers																				
Neutral with peers																				
Negative with peers																				
Positive with adults																				
Target child only																				
Small group (2-4)																				
Large group (5+)																				
Neutral with adults																				
Target child only																				
Small group (2-4)																				
Large group (5+)																				
Negative with adults																				
Target child only																				
Small group (2-4)																				
Large group (5+)																				

Activity:

- 1 _____ 10 _____ 19 _____
- 2 _____ 11 _____
- 3 _____ 12 _____
- 4 _____ 13 _____
- 5 _____ 14 _____
- 6 _____ 15 _____
- 7 _____ 16 _____
- 8 _____ 17 _____
- 9 _____ 18 _____

Interactions: None _____

- Positive with peers _____ Positive with adults _____
- Neutral with peers _____ Neutral with adults _____
- Negative with peers _____ Negative with adults _____

children in interactions with adults:

- Target child only Positive _____ Neutral _____ Negative _____
- Small group (2-4) Positive _____ Neutral _____ Negative _____
- Large group (5+) Positive _____ Neutral _____ Negative _____

Reference

Rosenthal, R., & Vandell, D. L. (1996). Quality of care at school-aged child care programs: Regulatable features, observed experiences, child perspectives, and parent perspectives. *Child Development, 67*, 2434-2445.