Observational System for Recording Physical Activity in Children-Home

(*OSRAC-H*)

OSRAC-H Training Manual for Observers

The *OSRAC-H* Coding System was initially developed in 2005. It is a revision of the Observational System for Recording Physical Activity in Children- Preschool (OSRAC-P) that was developed by William H. Brown, M. João Almeida, Karin A. Pfeiffer, and Kerry L. McIver during 2002 at the University of South Carolina. Kerry L. McIver, William H. Brown and Carrie Zier made modifications to the OSRAC-P and developed the *OSRAC-H* during the spring and summer of 2005, while funded by the National Institutes of Health (NIH), National Institute of Child Health and Human Development (NICHD, Grant #R01 HD43125-01). Jon Tapp developed the Interval Manager System (*INTMAN*) for the Dell Axim X5 handheld computers.

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I. INTRODUCTION

The **O**bservational **S**ystem for **R**ecording **P**hysical **A**ctivity in **C**hildren- **H**ome (**OSRAC-H**) is a direct observational system designed to collect information about children's physical activity at home (e.g., inside the house and immediate surroundings, i.e. yard, driveway, street) and the behavioral (e.g., prompts for physical activity) and contextual circumstances (e.g., location of physical activity, immediate educational/play context, group composition) of their physical activity in those environments. The *OSRAC-H* is known as a <u>focal child</u> system because a single child serves as the focus of the observation and all decisions about categories to be coded are made in reference to that focal child. The *OSRAC-H* consists of three types of coding categories: (a) those that give information about the focal child's physical activity level or intensity and type, (b) those that give information about the focal child's physical environment (e.g., location: indoor or outdoor, immediate activity context, TV use) and (c) those that give information about the social environment relative to the focal child (i.e., group composition, activity initiator, prompts, and engagement).

The *OSRAC-H* system incorporates a momentary time sample procedure for collecting observational information. Using this procedure, observers watch a child for a five-second observation interval and then, during the next 25 seconds, record one code for each of the eight variables. Five-second observation intervals are repeated every 25 seconds across a 30 minute period of time to create an individual session for each focal child. Observational data are collected on Dell Axim handheld computers and later downloaded into a database. The data obtained from the *OSRAC-H* can provide systematic information about children's physical activity and the contextual and behavioral circumstances of their physical activity. In addition, the temporal relationships among physical activity and physical and social circumstances can be systematically recorded and analyzed.

<u>Observer Training for The *OSRAC-H*</u>

The *OSRAC-H* Training Manual has been designed to prepare observers to become consistent in collecting observational data for the eight different types of observational categories with accompanying codes for each category. Training is arranged systematically to move observers from initial memorization of categories and codes to reliable use of the observational system for collecting information about children and their preschool environments. Observer training will be performed in a sequence that parallels the dimensions of the *OSRAC-P* coding system. That is, first observers will memorize the two categories for physical activity (i.e., physical activity level, physical activity type). Then observers will memorize four categories for activity context (i.e., location, indoor activity context, outdoor activity context, TV use). Finally, the observers will memorize four social categories (i.e., initiator of activity, group composition, prompts for physical activity, and engagement). To demonstrate initial acquisition of the eight categories and their accompanying codes, observers will take quizzes to assess their content knowledge. Before any *in situ* observer training (i.e., actually using *OSRAC-H* in home settings), a criterion of 100% accuracy across two days should be obtained for the eight categories and their accompanying codes on definition quizzes. This process will assist us in ensuring that observers understand the categories and codes and their definitions. After this training criterion is achieved on the definition quizzes for the categories and accompanying codes, *in situ* observer training for the codes will begin.

During *in situ* observer training (i.e., practice coding in homes) to establish satisfactory observer agreement, a criterion of 90% interobserver agreement (IOA) should be obtained for each category. After *in situ OSRAC-H* Training, to assist in maintaining satisfactory interobserver

agreement and to obtain a sufficient number of interobserver agreement measures across observations and children, about one of every twelve observations for each focal child should be observed and recorded by two observers concurrently and independently (i.e., 10-16% of all total observations). After observations, point-by-point interobserver agreement scores should be determined by calculating the total number of agreements divided by number of agreements plus number of disagreements multiplied by 100 (i.e., agreements/agreements + disagreements X 100) for each of the observational categories and codes. We propose a process with several training phases for systematic observer training. The observer training includes initial orientation, code memorization, quizzes, and frequent *in situ* training sessions in field settings. We strongly recommend the proposed systematic training process but the process may need to be adapted for local research site circumstances. Orientation, code memorization, and *in situ* practice are all essential elements for high-quality observer and interobserver agreement and accuracy training and must be conducted on a regular schedule (cf. Hartmann & Wood, 1990).

Contents of The OSRAC-H Manual

The *OSRAC-H* Manual begins with an I. INTRODUCTION. In the next section, entitled II. CODES AND CODE NAMES, we provide the observational codes and their respective names arranged by physical activity and contextual and behavioral categories. For example, the first category is Physical Activity Level and it has five possible options (i.e., stationary/motionless, stationary with movement of limbs or trunk, slow/easy movement, moderate movement, fast movement). In the next section, entitled III. CODE DEFINITIONS, we delineate the operational definitions and examples for the eight categories and their respective codes. In the next section, entitled IV. QUIZZES, we provide sample forms of quizzes for each category, which can be copied for taking tests to assess the memorization of observational codes for each category and respective codes.

<mark>General Rules Applying to Observing</mark>

- The five-second observational window that occurs every 30 seconds should start at the very beginning of the word "observe" or the initial auditory cue and last until the very beginning of the word "record" or the terminal auditory cue.
- After recording the highest level of physical activity exhibited, all subsequent categories and codes used during the five-second observational window should be recorded based on the information associated with the coded physical activity level.
- Observers should attempt to locate themselves within 10 to 15 feet of the focal child so that they can see the child, peers, and adults in the immediate group, any physical activity, and hear any directions or interactions among children and adults.
- Observers should attempt not to look directly at the focal child after coding the eight categories. On the other hand, the observers should discretely reorient themselves to the focal child to observe any category changes during the next interval.
- Children should not be followed into enclosed restrooms and the Self-Help Code should be recorded for the Indoor Activity Context. The Can't Tell code should be used for Physical Activity Level, Physical Activity Type, and Group Composition. It can be assumed that no prompts for physical activity occur during self-help activities. If you can determine the Initiator of the Activity and the Location then you should employ the appropriate code. The Outdoor Activity Context Category should be coded NA (not applicable) if the children are inside the home.
- If observers believe that they have missed or miss-scored a particular code during an interval they should immediately record the interval number and the changes that are needed for that interval on the Observation Comments/Notes Data Sheet provided for anecdotal notes during observations. They should also consult with the Measurement Coordinator that day about any problems that arise during observations before any codes are changed. This may happen during initial observer training but it should occur infrequently as you become more facile with the *OSRAC-H* and the Dell Axim unit. After observer training is completed these types of difficulties and subsequent changes should be performed rarely and only after consultation with the measurement coordinator.

II.   OBSERVATIONAL CODES AND CODE NAMES

The nine observational categories with their accompanying codes are delineated below. For each observational category described below, the first column represents the information that appears on the screen of the Dell Axim unit. Sometimes, the viewable screen cuts off the entire code label in the Dell Axim unit. The second column represents the full name of the category.

A. PHYSICAL ACTIVITY LEVEL CATEGORY

Code	Code Names
1-Stationary	Stationary/motionless
2-Limbs	Stationary with movement of limbs or trunk
3-Slow-Easy	Slow/easy movement
4-Moderate	Moderate movement
5-Fast	Fast movement
Can't Tell	Cannot tell

B. PHYSICAL ACTIVITY TYPE CATEGORY

Code	Code Names
Climb	Climbing, hanging
Crawl	Crawling
Dance	Dancing, expressive movement
Jump/Skip	Jumping, skipping, hopping, galloping
Lie Down	Lying down
Pull/Push	Pulling or pushing an object or child
R & T	Rough and tumble play, wrestling, tumbling
Ride	Cycling, skateboarding, roller skating, scooter
Rock	Rocking on a teeter totter or rocking horse
Roll	Rolling
Run	Running
Sit/Squat	Sitting, squatting, kneeling
Stand	Standing
Swim	Swimming or playing in a pool
Swing	Swinging on a swing
Throw	Throwing, kicking, catching
Walk	Walking, marching
Other	Other – record a note of the physical activity type for the interval on the observer form
Can't Tell	Cannot tell

C. LOCATION CATEGORY

Code	Code Names
Inside	Inside the home
Outside	Outside the home
Transition	Transition between inside and outside areas
Can't Tell	Cannot tell

D. INDOOR ACTIVITY CONTEXT CATEGORY

Code	Code Names
Computer	Computer use for education or entertainment
Educational	Educational play including books, writing, manipulatives, large blocks, science and math
Game	Formal game (inside)
GrossMotor	Gross motor activities including balls/objects or riding toys in the house
Household Chores	Performing household chores
Music	Dancing to, playing or listening to music
Parent Arranged	Adult arranged gross motor physical activity
Pets	Playing with or tending to family pets, inside
Rough/Tumble	Rough housing or wrestling, playing action-style games indoor
SelfCare	Self care
Snacks	Snacks, meals, and food
Sociodramatic	Sociodramatic play and pretend activities
Time Out	Time out
Transition	Transition between rooms and activities within the house
TV/Videos	Watching TV or movies from DVDs or videos
Video Games	Playing handheld or other video games (Playstation, Xbox, Gameboy)
Other	Other – record note of the indoor activity context for the interval on the observer form
N/A	Not Applicable-child outdoors or in transition
Can't Tell	Cannot tell

E. OUTDOOR ACTIVITY CONTEXT CATEGORY

Code	Code Names
Ball	Ball or object play
Fixed	Fixed equipment
Game	Formal game (outside)
Open Space	Open space or non-designated area
Outdoor Chores	Performing outdoor chores
Parent Arranged	Adult arranged gross motor physical activity
Pets	Playing with or tending to family pets, outside
Pool	Swimming pool
Portable	Portable equipment
Rough/Tumble	Rough housing or wrestling, playing action-style games outside
Sandbox	Sandbox, designated digging area
Self Care	Self care
Snacks	Snacks, meals, and food
SocioProps	Sociodramatic play props
Time out	Time out
Video Game	Playing handheld or other video games outside (Gameboy, PS)
Wheel	Riding or using push toys with wheels
Other	Other – record note of the outdoor activity context for the interval on the observer form
N/A	Not Applicable-child indoors or in transition
Can't Tell	Cannot tell

F. INITIATOR OF ACTIVITY CATEGORY

Code	Code Names
Adult	Adult-initiated activity
Child	Child- or peer-initiated activity
Can't Tell	Cannot tell who initiated

G. GROUP COMPOSITION CATEGORY

Code	Code Names
Solitary	Solitary/alone
1-1 Adult	One-to-one with adult
1-1 Peer	One-to-one with peer
Group Adult	Group with adult
Group Child	Group with other children
Can't Tell	Cannot tell

H. PROMPT FOR PHYSICAL ACTIVITY CATEGORY

Code	Code Names
None	No teacher prompts
AP-I	Parent or other adult prompt to focal child to increase or maintain physical activity
AP-D	Parent or other adult prompt to focal child to stop or decrease physical activity
PP-I	Peer prompt to focal child to increase or maintain physical activity
PP-D	Peer prompt to focal child to stop or decrease physical activity
Can't Tell	Cannot tell

I. ADULT AND PEER ENGAGEMENT CATEGORY

Code	Code Names
None	No adult or peer engagement
Adult	Adult(s) engaged in activity with focal child
Peer	Peer(s) engaged in activity with focal child
A+P	Adult(s) and peer(s) engaged in activity with focal child
Can't Tell	Cannot tell

J. TV USE

Code	Code Names
Off	TV is off
On	TV is on
N/A	There is no TV in the room or the child is outside

K. REACTIVITY

Code	Code Names
No	Child is not reactive to observers
Yes	Child is reactive to observers
Can't Tell	Cannot tell if the child is reactive (can't see child)

III.   CODE DEFINITIONS

NOTE TO OBSERVERS: After recording the highest level of physical activity within a five-second observational interval, all subsequent codes for the other nine categories in that interval are coded based on the highest level of physical activity level observed and recorded (i.e., any code selected should correspond to the focal child's highest physical activity level for the observational interval). For example, if you see a child run, walk, and sit during a five-second observational interval, then the activity type (e.g., run, walk, sit) should be coded based on the highest level of physical activity level observed. In this example, run should be coded for Physical Activity Type. For the purpose of the home observation system, a peer is defined as any child or adolescent under the age of 18. Peers can include friends, siblings, and other relatives. An adult is defined as any person over the age of 18.

A.   PHYSICAL ACTIVITY LEVEL CATEGORY AND CODES

The Physical Activity Level Codes represent five different levels of the intensity for the focal child's physical activity. **The intensity level of physical activity is based on several considerations. Intensity may depend on (a) the speed or vigorousness of child movement ranging from slow easy to moderate to fast movements, (b) whether the movement is assisted by others, (c) whether the child movement is repeated within the observational interval, and (d) if there is any weight being moved, held, or translocated.** If multiple body parts are involved in the movement, the intensity is usually higher. Stationary activities represent a resting state or involve extremely limited or confined movement. Limb physical activity involves non-vigorous arm, leg, and trunk movements but no actual translocation from one place to another (i.e., remember "three-step rule" where both feet have to move to another spot for walking to be coded). Any activity normally classified as limbs, slow easy, or moderate can be "upgraded" to the next intensity code, if it is performed more vigorously or if the activity requires more effort (carrying a heavy object, pushing a swing). Can't tell is coded *only* if you cannot see the focal child or you really cannot determine a particular code within a category. Remember, the physical activity level is defined by what the focal child is doing during the five-second-observation interval.

Code	Code Names	Definition
1-Stationary	**Stationary/motionless (Level 1)**	*Stationary/motionless (resting state/motionless with head, finger, hand, or foot, or writing and drawing movement <u>only</u> and no major limb movement or two major joint movements)* • Sleeping, lying, standing, sitting, squatting, or kneeling • Riding passively in a wagon

Code	Code Names	Definition
2-Limbs	**Stationary with movement of limbs or trunk (Level 2)**	*Stationary with easy movement of limb(s) or trunk (arm, trunk, or leg movements without moving the entire body from one place to another)* • Standing up, sitting down, bending and squatting, or kneeling down with limb or trunk movement • Holding an moderately heavy object while unsupported • Going down a slide • Hanging or partially hanging off of something, leaning on a pole, fence, or wall (includes a partial climb - one leg up and arms holding on) • Swinging passively (being pushed by another) • Bending, digging in the sand, twisting • Throwing ball or object without translocating • Leaning on arms while sitting down • Resting head on arms on a tabletop

3-Slow-Easy	**Slow/easy movement (Level 3)**	*Translocation (moving body from one location to another at a slow and easy pace)*
		
		• Walking
		  • Taking three distinct steps alternating feet and translocating; slow and easy marching in place or translocating
		• Jump/Skip
		  • One repetition of a jump, skip, hop, roll;
		• Riding
		  • Slow and easy cycling, skateboarding, roller skating, scooter
		• Slow and easy crawling on a flat surface
		• Swinging without assistance from others or kicking legs
		• Slow and easy tumbling/wrestling
		
		Add-on rule example:
		Going down a slide (2) + pushing self (1) = 3

Code	Code Names	Definition

4-Moderate	**Moderate movement (Level 4)**	*Translocation (moving body from one location to another at a moderate pace)*
		
		• Walking
		   • Walking at a brisk or rapid pace
		   • Walking up stairs or a hill
		   • Two repetitions of moderate (not slow, but not fast) skipping, hopping, jumping, leaping, kicking, or galloping
		• Riding
		   • Two repetitions of cycling at a moderate pace
		• Climbing
		   • Climbing on monkey bars, jungle gym, fence
		   • Climbing backwards up a slide or an incline (or stairs) with arm usage
		   • Climbing over and under bars
		   • Hanging from bar with legs swinging
		• Tumbling
		   • Two repetitions of a forward or backward roll
		   • Fighting or wrestling at a moderate pace
		
		Add-on rule:
		Swinging (3) + leg kicking = 4

5-Fast	**Fast movement (Level 5)**	*Translocation (moving body from one location to another at a fast or very fast pace)*
		
		• Running
		• Walking stairs or incline fast or with vigorous arm movement
		• Three repetitions or more of fast skipping, hopping, jumping, leaping, kicking, or galloping
		• Riding
		   • Three repetitions or more of fast cycling, skateboarding, roller skating, scooter
		• Three repetitions or more jumping jacks or jumping rope
		• Three repetitions or more of tumbling
		• Vigorous fighting or wrestling
		• Climbing
		   • Translocating across bars with hands while hanging
		
		Add-on rule:
		Walking (3) + holding a very heavy object like another person (2) = 5

Can't Tell	Cannot Tell	• Cannot Tell

Coding Rules

- Many motor activities other than running, such as riding and jumping can be classified as slow-easy, moderate, or fast; it depends on the intensity of child movements ranging from slow/easy to moderate to fast/vigorous and how often the movement is repeated.
    - Example: One single jump is considered slow-easy movement. Two jumps in a row with pauses in between are considered moderate movement. Three or more jumps in a row with minimal pause in between are considered fast movement.
- If the focal child is swinging on a swing on her stomach, the activity level is coded as 3-Slow-Easy, unless she is running in circles or performing a higher activity level of some sort.
- If the focal child takes ONE step and does not translocate, it is considered category 2-Limbs.
- For a movement to be considered 2-Limbs, the focal child needs to visibly bend a major joint or limb or perform a movement involving 2 joints (NOT including wrist, ankle, fingers, and toes) or the child clearly reaches for and perhaps grasps an object. For example, foot tapping does not count as limb movement, but bringing a cup up to the mouth for a drink is considered limb movement.
- The 90° angle rule: The joint must be at or above 90° for it to be considered limb movement, i.e. scratching one's nose while the elbow is at sides, would be considered a 1-Stationary. Scratching one's nose with the elbow up and parallel to the ground constitutes a 2-Limbs coding.
- If the focal child is being supported by another object (wall, table) or limb (leaning on arms), 2-Limbs should be coded. If the object on which they are leaning were to be removed and the child would fall, then 2-Limbs should be coded. Smaller movement at the elbow or knee should also be coded as 2-Limbs, when the movement is repetitive (occurs more than twice). If the child is having to stabilize themselves while squatting (feet flat, knees bent), 2-Limbs should be coded due to the shifting of the center of gravity.
- Activity levels for coding throw should be similar to coding activity levels for jump. Where intensity level 1 = 1 jump and level 2 = two jumps, multiple consecutive throwing actions during an interval should also be coded in an increasing level. For example, if the focal child throws, catches, and kicks a ball with little or no pause between these actions, activity level = 5 and activity type = throw because three throwing actions were performed consecutively.

B.   PHYSICAL ACTIVITY TYPE CATEGORY AND CODES

The Physical Activity Type Codes represent what type of activity the focal child is performing at the highest physical activity level recorded. They literally correspond to exactly what the child was doing during the most intense physical activity for the five-second-observation interval. For example, if a child is sitting on a tricycle and not moving, the observer should code the Sit/Squat Code for the Physical Activity Category because that is the exact behavior in which the child is engaged. However, the observer should code the Wheel Code for the Outdoor/Gym Educational/Play Context Category. This type of systematic coding will allow us to determine that the focal child was sitting on the tricycle but not moving. *Thus, physical activity type is different from activity context.* Physical activity type reflects the focal child's actual behavior, while activity context represents the environment circumstances that are associated with the child's physical activity.

Code	Code Names and Definition
Climb	• **Climbing, hanging**
Crawl	• **Crawling**
Dance	• **Dancing, expressive movement**
Jump/Skip	• **Jumping, skipping, hopping, galloping**
Lie Down	• **Lying down**
Pull/Push	• **Pulling or pushing an object or child**
R & T	• **Rough and tumble play, wrestling, tumbling**
Riding	• **Cycling, skateboarding, roller skating, scooter**
Rocking	• **Rocking on a teeter totter or on a horse**
Roll	• **Rolling**
Run	• **Running**
Sit/Squat	• **Sitting, squatting, kneeling**
Stand	• **Standing**
Swim	• **Swimming or playing in a pool or other water play**
Swing	• **Swinging on a swing**
Throw	• **Throwing, kicking, catching**
Walk	• **Walking, marching**
Other	• **Other than options listed**
Can't Tell	• **Cannot tell**

Coding Rules

- *A focal child may perform more than one physical activity type during the five-second observational interval, however, the physical activity type must coincide with the highest activity level recorded for the observational interval*
- *If the focal child performs two physical activity types that are within the same physical activity level, code the <u>last</u> physical activity type performed in the interval.* For example, if a child sits for the first two seconds and stands for the last three seconds of a five-second-observation interval, the observer should code the Physical Activity Level Category as 2-Limbs. The Physical Activity Type should be recorded as the Stand Code given that standing was the last physical activity type performed in the interval.
- *Hanging or swinging from a bar is recorded as Climb Code but swinging on an actual swing is recorded as Swing Code.* Further, if the focal child has her stomach on a swing and is running around pushing the swing, the Physical Activity Level is coded as 5-Fast and the Physical Activity Type is recorded as the Swing Code.

- **Ride** is coded as an activity type only when wheels of the riding object are in motion or when the focal child is attempting, with noticeable effort, to pedal or move the riding object. If the child is merely sitting on the object and no effort to ride the object, physical activity type should be coded as sit/squat.
- Similar to the ride code, **swing** is coded as an activity type when the swing is in a swinging/pendulum motion. If the swing is merely moving as a function of a child climbing on to it or there is residual movement from a former bout of swinging, coding is based more on the actual activity of the focal child (sit, stand, etc.)
- The action of **pushing a swing** is coded as <u>pull/push</u> for physical activity type, and <u>fixed</u> for outdoor context. Determination of the appropriate activity level is based upon the weight/type of the swing, the number of children on the swing, and the type of movement done by the focal child to aid the push (walk/pivot, run, etc.)
- **Climb** is coded as an activity type when the child is climbing OR hanging, dependent upon their apparent weight distribution. If the focal child is grasping an object with an upper body limb(s) and is clearly bearing their weight on that limb(s), physical activity type should be coded as <u>climb</u>, because climbing and hanging are included in this category. If a child is merely holding onto an object but their weight remains in the lower body, the physical activity type should be coded as <u>stand</u>. Specifically, a "partial climb" (defined in the OSRAC-P manual as having one leg up and arms holding onto an object) should be coded as, <u>2- limbs</u> for physical activity level and <u>stand</u> for physical activity type.
- **Sit** should be coded when the child's knees are bent past 90 degrees. If the child is bending his or her knees and leaning over, stand should be coded. Both of these situations should be coded as 2-Limbs for the activity type since the child's center of gravity has shifted and they have to stabilize themselves.

- **C. LOCATION CATEGORY AND CODES**

Location represents the global physical location of the focal child. The observer should record one of three possible location codes (a) inside of the building, (b) outside of the building, or (c) transition; when the focal child is clearly moving between the inside and outside of the building.

NOTE TO OBSERVERS: If the focal child is clearly moving between the indoor and outdoor location or two different settings within a building, then observers should record Transition for the Location Category and NA should be recorded for Indoor Activity Context and Outdoor Activity Categories.

Code	Code Name	Definition
Inside	**Inside the home**	• *Being inside the house*
Outside	**Outside the home**	• *Being outside the house*
Transition	**Transition between inside and outside**	• *Moving between the inside and outside of the house*
Can't Tell	**Cannot tell**	• *Cannot tell*

D. INDOOR ACTIVITY CONTEXT CATEGORY AND CODES

The Indoor Activity Context Codes represent contextual information about the immediate location of the focal child within the indoor physical contexts of the home. Typically, the Indoor Activity Context Codes should be determined by what the child is doing, rather than the location of the child within the home. Also, observers should remember that the Indoor Activity Context coded should be directly related to when the highest level of physical activity takes place.

Homes are typically separated into rooms that are designated for certain activities such as watching TV, eating a meal, and cooking. However, unlike the preschool setting any activity could take place in any given room. Therefore, in home observations, indoor activity context should be coded based on what the child is doing. It is unreasonable to code based on the location of the child since there are no rules regarding room usage that are generalizable. Questions about indoor activity contexts and room usage should be addressed before the first observation during an "environmental scan" of the home with brief parent or other adult consultation when needed.

If a focal child is simply moving around the house and is not involved with materials for a distinct activity, then the Indoor Activity Context should be coded as <u>Transition</u>.

Sixteen indoor activity codes along with Other, NA, and Can't Tell codes may be coded and are described below.

1. <u>Computer</u> –Computer should be coded when the focal child is involved in any activity on a personal computer. This includes games, preacademic work, or watching videos on a computer. Computer should also be coded if the focal child is sitting at the computer with another child or an adult (does not have to be the person manipulating the computer use).

2. <u>Educational</u> – Educational activities should be coded when the focal child is engaged in a pre-reading or pre-writing and preacademic activities including art, books, science activities and manipulatives (puzzles, large blocks).

3. <u>Games </u>– Games should be coded when the focal child is engaged in a formal game with set rules. Games can include board games, made-up games that the child or parent directs, ball games such as ping-pong or soccer, and group 'contests' such as 'who can do x for the longest'.

4. <u>Gross Motor</u> – Gross motor activity should be coded when the focal child is engaged in large motor physical activities such as running or jumping or gymnastics. Also, note that the Gross Motor Indoor Activity Context Code is different from Adult Arranged and Lead Gross Motor Physical Activity Code. The Adult Arranged and Lead Gross Motor Physical Activity Code requires an adult to arrange the gross motor activity area and to lead and directly supervise the gross motor activities.

5. <u>Housework/Chores</u> – Housework and chores should be coded when the focal child is involved in any housework that has been directed by an adult. This can include, but is not limited to, cleaning their room, picking up toys, setting the table for dinner, etc. Housework is usually an adult-directed activity but may not be explicitly stated during the observation period.

6. <u>Music</u> – Music should be coded when the focal child is engaged in music activities, including listening to, dancing to, and playing music. If the child is listening to music while doing

another activity, that activity should be coded, i.e. coloring while listening to music should be coded as *educational* for the indoor activity context.

7. Parent-arranged – Adult arranged and led gross motor physical activity should be code only when an adult arranges or transforms space, materials, or an activity for the purpose of gross motor activities. In addition, formal gross motor activity with the focal child has to be led or supervised by an adult with (e.g., obstacle course, bean bag race) or without equipment (e.g., exercising, gymnastics without apparatus).

8. Pets –Pets should be coded when the focal child is playing with a family pet, or taking care of the pet (feeding, brushing, and cleaning up after). The presence of the pet with the child does not constitute the code; the child must be engaged with the pet in order for pets to be coded.

9. Rough/Tumble - Rough/Tumble should be coded when the focal child is involved in rough housing or wrestling, or playing action-style games indoors (imitating TV shows), or involved in other rough and tumble games.

10. Self Care – Self care should be coded when the focal child is engaged in self care activities such as taking care of personal needs (e.g., washing hands, using the bathroom, changing clothes, tying shoes).

11. Snacks – Snacks, meals, and food activities should be coded when the focal child is participating in an activity that involves the preparation of and the eating of real food. Snacks should be coded when children are cooking and preparing foodstuffs, and eating or have food accessible. Snacks may occur in various locations.

12. Sociodramatic – Sociodramatic play and pretend centers should be coded when the focal child is engaged in sociodramatic and pretend play. Common sociodramatic props might include pretend materials such as dress up clothes, kitchen utensils (for use in play kitchens), doctors' kits, cash registers, telephones, dollhouses, puppets, stuffed animals, and toy cars, .

13. Time Out – Time out should be coded when the child is placed in a separate area as a punishment for disciplinary reasons. Regardless of where the child is or what he/she is doing, if they are in "time-out", it should be coded. Activity level and type should match the child's behavior. If it is not clear whether or not a child is in time-out, the observer should ask the appropriate adult.

14. Transitions – Transition should be coded when the focal child is clearly not performing one of the Indoor Activity Contexts and is moving from one activity to another. Hence, the focal child is not involved in another indoor activity context. Transitions begin when the focal child clearly is not involved with or using materials for a distinct activity. A focal child transition ends when he/she becomes involved with materials for a distinct preschool activity. Hence, wandering around is considered transition.

15. TV/Video – TV and videos should be coded when the focal child is watching TV or a video on the TV. If the child is involved in another activity and the TV is on in the room where the child is, the activity the child is performing should be coded. To capture that the TV was on, the TV category should be coded as "On."

16. Video Games **–** Video games should be coded when the focal child is engaged with a handheld or video game system (Game-boy, Playstation, X-box, etc.). Video game should also be coded if the child is watching other peers or adults play a video game.

17. Other -- Other is recorded if the child is somehow participating in an activity not otherwise designated above. If other is recorded, the observer should make a note indicating what the child is doing.

18. N/A – NA is coded when the focal child is located in the Transition or Outdoors Location.

19. Can't Tell **–** Can't tell is coded when the focal child is participating in activities that you cannot see. ***If you code Can't Tell, see your coordinator after the observation to discuss the event.*** These codes are recorded ONLY if the focal child was indoors during the observation interval. If the focal child was outdoors or in transition, N/A is recorded for not applicable.

Code	Code Name	Definition
Computer	**Computer use for games or education**	• ***Engaging in an activity that involves computer use such as playing computer games, using the internet for entertainment or educational purposes, or watching a video on a computer***
Educational	**Educational activities**	• ***Engaging in educational activities that are considered preacademic or academic*** o ***Includes pre-writing, writing, reading, math, science, and other school related work*** • ***Engaged in an art project or activity such as coloring, painting, drawing, or working on an art project for school*** • ***Engaged in manipulative or large block play, including playing with puzzles, board games, or building blocks***
Games	**Formal games**	• ***Engaging in formal games such as board games, made-up games with rules, and ball games played by the rules indoors***
Gross Motor	**Gross motor activities**	• ***Engaging in large motor activities such as dancing, marching, jumping, gymnastics, karate, etc.***
Housework/ Chores	**Housework and chores**	• ***Being involved in any housework or chores that have been directed by an adult*** o ***May include cleaning a room, picking up toys, setting the table***
Music	**Music activities**	• ***Engaging in activities that focus on music such as singing or playing instruments, listening to music***

Code	Code Name	Definition
Parent Arranged	**Adult arranged and lead physical activity**	• *Being involved with a formal gross motor activity that has been planned, arranged and lead by an adult:* o *with equipment (e.g., obstacle course, bean bag race) or;* o *without equipment (e.g., exercising, gymnastics without apparatus).*
Pets	**Pet care**	• *Playing with a family pet* • *Performing care duties for the pet* o *May include feeding, brushing*
Rough/Tumble	**Rough and Tumble Play**	• *Engaging in rough housing or wrestling* • *Engaging in action-style games or activities (imitating Kimpossible)*
Self Care	**Self Care**	• *Engaging in self care activities to meet general personal needs (e.g., toileting, washing hands, dressing, brushing teeth)*
Snacks	**Snacks, meals, and food**	• *Eating food during a snack or mealtime (including passing out food, and preparing food stuff)*
Sociodramatic	**Sociodramatic play or pretend activities**	• *Engaging in activities with materials and props that are often used for pretend play or make-believe roles*
Time Out	**Time out**	• *Child is placed in a solitary time-out as a punishment for disciplinary reasons*
Transitions	**Transition between activities**	• *Moving from one activity to another, wandering*
TV/Videos	**TV and videos**	• *Watching TV or a video on TV*
Video Games	**Video Games; Handheld and game systems**	• *Playing a handheld video game (Gameboy) or playing games on a game system (Playstation, X-box)* • *Watching others play video games*
Other	**Other**	• *Being in some other activity than listed above*
N/A	**Not Applicable**	• *Child is Outdoors or in Transition*
Can't Tell	**Cannot tell**	• *Cannot tell*

Coding Rules

- *Adult-arranged and led gross motor physical activity "trumps" or preempts any other indoor physical context in which children may be engaged. However, Adult-Arranged is only coded when the teacher has planned a gross-motor activity, has arranged the space with or without objects, is leading the activity, and remains an active participant in the activity.* The gross-motor activity can be directed to only one child or several children (siblings and peers). If the adult stops leading and/or participating in the arranged gross

motor activity that he/she has planned, arranged and has been leading, Gross Motor should be coded for Indoor Activity Context.

- *TV/Videos should be coded when the child is watching TV or a video.* If the child is participating in another activity while the TV is on in the room, the Indoor Activity Context should be coded on their actual activity. The TV Category should be coded as "On"
- *Inside games should be coded according to the flowing structure:*
    - If the game is for gross motor activity, and it is organized and led by the adult; the indoor context should be coded as <u>Adult Arranged</u>.
    - If the game is for gross motor activity, and the adult-arranged conventions are not met (i.e., the adult leaves the area, does not lead the game); the indoor context should be coded as <u>Gross Motor</u>. Gross Motor games include Duck-duck-goose, ring toss, Hopscotch, etc.
    - Board games should be coded as <u>Educational</u> in the OSRAC-H system. If the focal child is not engaged appropriately in the game, i.e. throwing game pieces, then the indoor context should be coded as <u>Other</u>. If this occurs, the observer should make a note indicating the circumstances and the activities being performed.

- **Indoor context** should be coded by physical activity type/behavior. This coding should be independent of surrounding children's activities and behaviors.
- **Preparation and clean-up** periods are coded as Housework/Chores. This includes cleaning up after a meal, setting the table, picking up toys, and cleaning a room.
- **Sociodramatic** should be coded if the focal child is not engaged in a specific activity, but wearing sociodramatic clothing.
- **Time out should not be coded when the child is simply pulled aside for a discussion.** It is appropriate to code <u>Other </u>for indoor context and make a note of what has occurred.

E. OUTDOOR ACTIVITY CONTEXT CATEGORY

The Outdoor Activity Context Codes represent involvement with specific outdoor play settings (e.g., fixed equipment, open space) or materials (e.g., portable equipment, balls and throwing or jumping objects) and is ONLY recorded when the focal child is located outdoors or in a large gymnasium/room during the observation interval. If the focal child was indoors and not in a gym or physical activity/recreational room or he is in Transition, NA is recorded for not applicable.

Seventeen outdoor activity contexts along with Other, NA, and Can't Tell codes may be coded and are described below. Higher order activities are those which "trump" location such as riding a scooter in an open space. We want to capture the activity in which the focal child is engaged. Refer to the flowchart for a depiction of higher order codes.

1. <u>Ball</u>- Ball and object play should be coded when the focal child is clearly engaged in a play activity with balls or other equipment for gross motor activities, such as hula-hoops, jump ropes, Frisbees, etc.   If the child is carrying a ball with them or playing with a ball in any location, ball should be coded for outdoor context.

2. <u>Fixed</u>- Fixed equipment should be coded when the focal child is engaged with an activity involving the use of fixed equipment such as a jungle gym, play house, swing set, spring toys, etc. Fixed equipment should also be coded when the focal child is waiting for his or her turn on the equipment (waiting in line to ride the tire swing). Fixed equipment <u>should not</u> be coded when the focal child is engaged in some other activity while on the fixed equipment, i.e. socioprop or ball/object play while sitting in the play house.

3. <u>Game</u>- Game should be coded when the focal child is clearly engaged in an outdoor game such as tag, red rover, duck-duck-goose, etc. These games should be formal, meaning they have rules, rather than just a child chasing another child around the playground. It will be important to look for verbal and behavioral rules as to the formality of the games.

4. <u>Open Space</u>- Open Space should be coded when the focal child is in an open area not defined by the other codes <u>and</u> is not engaged with any other activity or material such as games, socioprop, ball/object, wheels, etc. This is similar to the transition code for indoor, in that the child should not be engaged in other activity and the area, which they are in, is not defined.

5. <u>Outside Chores</u> – Outside Chores should be coded when the focal child is engaged in an adult- directed behavior that may include, but is not limited to, picking up toys, sweeping, getting the mail. Outside Chores will most likely be an adult-directed activity, however the instructions may not occur during the observation period.

6. <u>Parent Arranged</u>- Adult arranged and led gross motor physical activity should be coded only when an adult arranges or transforms space, materials, or an activity for the purpose of gross motor activities. In addition, formal gross motor activity with the focal child has to be led or supervised by an adult with (e.g., obstacle course, bean bag race) or without equipment (e.g., exercising, gymnastics without apparatus).

7. <u>Pets</u> - Pets should be coded when the focal child is playing with a family pet outside, taking care of the pet (walking, feeding, brushing, and cleaning up after). The presence of the pet with the child does not constitute the code; the child must be engaged with the pet in order for pets to be coded.

8. <u>Pool</u>- Pool should be coded when the focal child is physically located in a static or portable pool (baby swimming pool) or involved in water play such as sprinklers, hoses, and slip-n-slides. If the focal child is playing with other objects while in the pool, the outdoor context should be recorded as Pool. Regardless of what the child is doing, if the child is involved in water play, pool should be coded.

9. <u>Portable</u>- Portable equipment should be coded when the focal child is engaged in activity involving portable equipment that an adult has brought out for play. This does not include balls/objects, socioprops, wheel toys, etc., but does include sand/water tables, pop-up tents, etc. Similar rules apply for portable equipment as for fixed equipment. If the child is engaged in a higher order activity (balls, socioprops, wheels) while using portable equipment, the higher order activity should be coded.

10. <u>Rough/Tumble</u> – Rough and Tumble should be coded when the focal child is in engaged in rough housing or wrestling or an action-style game or activity while outside.

11. <u>Sandbox</u>- Sandbox should be coded when the focal child is physically located in the sandbox or clearly defined digging/sand play area, regardless of what he or she is doing. Similar to pool, sandbox should be coded when the focal child is in or around the sandbox, even if they are playing with other objects in the sandbox.

12. <u>Self Care</u> – Self Care should be coded when the child is engaged in self care activities outside; including changing clothes, putting on and tying shoes, etc.

13. <u>Snacks</u>- Snacks, meals, and food activities should be coded when the focal child is participating in an activity that involves the preparation of and the eating of real food. Snacks should be coded when children are cooking and preparing foodstuffs, and eating or have food accessible.

14. <u>Socioprops</u>- Socioprops should be coded when the focal child is engaged with play involving a prop that can be used for sociodramatic play or any prop that is not used for gross motor play or wheels. Socioprops does not include any organic objects such as sticks, leaves, or bugs. Socioprops are typically small objects that are brought from inside for play outside. Examples include: dolls, cars, trucks, books, buckets, blocks, sidewalk chalk. Remember that water toys such as water guns, and spray bottles are considered socioprops when they are removed from the water play area. Similarly, when digging tools are removed from the sandbox or digging area, they are considered socioprops.

15. <u>Time Out</u>- Time out should be coded when the child is placed in a separate area as a punishment for disciplinary reasons. Regardless of where the child is or what he/she is doing, if they are in "time-out", it should be coded. Activity level and type should match the child's behavior. If it is not clear whether or not a child is in time-out, the observer should ask the appropriate adult.

16. Video Games – Video games should be coded when the focal child is playing or is engaged with a handheld or portable video game system (Gameboy, PS) while outside.

17. Wheel- Wheel should be coded when the focal child is engaged in play with a wheeled object such as a bicycle, tricycle, scooter, wagon, Powerwheels, etc. If the focal child is pushing, rising, or sitting on any piece of wheeled equipment, that is not fixed, the outdoor context should be coded as Wheels.

18. Other- Other is recorded if the child is somehow participating in an activity not otherwise designated above. If other is recorded, the observer should make a note indicating what the child is doing.

19. NA- NA is coded when the focal child is located in the Transition or Indoors Location

20. Can't Tell- Can't tell is coded when the focal child is participating in activities that you cannot see. ***If you code Can't Tell, see your coordinator after the observation to discuss the event.***   These codes are recorded ONLY if the focal child was outdoors during the observation interval. If the focal child was indoors or in transition, NA is recorded for not applicable

Code	Code Name	Definition
Ball	**Ball/object play**	• *Engaging in activity with objects used for gross motor activities such as balls, throwing toys, jump ropes, hula hoops, etc.*
Fixed	**Fixed equipment**	• *Engaging in activity with large fixed playground equipment (swing set, playhouse, treehouse)* • *Waiting for a turn on fixed equipment (swings, monkey bars, etc.)*
Game	**Formal game**	• *Participating in a game with formal rules; Tag games, basketball, soccer, red rover, etc.*
Open Space	**Open space or non-designated area**	• *Being in an open outdoor area that is not one of the other outdoor locations or activities*
Outside Chores	**Outside Chores**	• *Being involved in any outside work or chores that have been directed by an adult* ○ *May include sweeping, getting the mail, picking up toys*
Parent Arranged	**Adult arranged and lead gross motor physical activity**	• *Being involved in a formal gross motor activity that has been arranged by and lead by an adult with (e.g., obstacle course, bean bag race) or without equipment (e.g., exercising, gymnastics without apparatus).*

Code	Code Name	Definition
Pets	**Pet care**	• *Playing with a family pet* • *Performing care duties for the pet* o *May include walking, feeding, brushing*
Pool	**Outdoor pool**	• *Being in and around a pool or other water play (slip-n-slide, sprinklers, hose)* • *Using pool materials (water guns, buckets, water toys) in the pool area*
Portable	**Portable equipment**	• *Using physical activity equipment brought by adults or peers to the yard or outside area (not fixed equipment, wheel toys, or ball and object toys)*
Rough/Tumble	**Rough and Tumble Play**	• *Engaging in rough housing or wrestling* • *Engaging in action-style games or activities (imitating Kimpossible)*
Sandbox	**Sandbox**	• *Being in a sandbox or a designated area for a sandbox/digging activities. DOES NOT include gardening.*
Self Care	**Self Care**	• *Engaging in self care activities to meet general personal needs (e.g., changing clothes, tying shoes)*
Snacks	**Snacks, meals, and food**	• *Eating food during a snack or mealtime (including passing out food, and preparing food stuff)*
Socio-Props	**Small Sociodramatic play props**	• *Engaging with small sociodramatic play props that are brought outdoors (does not include outside debris, sticks, leaves, etc.)*
Time Out	**Time out**	• *Child is placed in a solitary time-out for disciplinary reasons*
Video Game	**Video Games; Handheld**	• *Playing a handheld video game (Gameboy, PS)* • *Watching others play video games*
Wheel	**Riding/pushing wheeled toys**	• *Touching, riding, or pushing wheeled toys that are not fixed equipment*
Other	**Other**	• *Other Outdoor Activity Context than the delineated above*
N/A	**Not Applicable**	• *Child is Indoors or in Transition*
Can't Tell	**Cannot tell**	• *Cannot tell*

Coding Rules

- A bench or chairs that exist in the yard or outside area are not considered fixed equipment because they are not intended for use as a play object per se, and therefore should be coded as open space.

- ***Adult-arranged gross motor physical activity "trumps" or preempts any other outdoor context in which children may be engaged. However, Adult-Arranged is only coded when an adult has planned a gross-motor activity, has arranged the space with or without objects, and is leading the activity.*** The gross-motor activity can be directed to only the focal child or a group of children with the focal child.
    - o If the children are already engaged in a gross motor activity and an adult joins them and starts providing cues or prompts them, this is not Adult-Arranged. The code chosen should define the activity context the focal child is engaged in (e.g., if they are playing basketball, Ball should be coded).
    - o If an adult is leading a gross motor activity he/she has planned and arranged and stops leading the activity or moves away from the child or children and is not interacting with them, the Outdoor Context Code directly linked to the activity type the focal child is engaged in should be coded.

- Socioprops should be coded when the focal child is interacting with an appropriate object, and also if the child is clearly interacting with a child or group where socioprops are being used. If unsure of the interaction, the focal child should be coded in open space.

- Socioprops should be coded when the focal child is playing with water guns and spray bottles outside of the water play area. For example: when a child is in the pool pouring water from a bucket, the outdoor context should be coded as Pool. If the child then takes the bucket to the fixed equipment, the outdoor context should be coded as Socioprop.

F. INITIATOR OF ACTIVITY CATEGORY AND CODES

Activity initiator is defined by who selected the activity in which he or she is involved. Although observers watch the focal child during the five-second-observation interval, they should remember that information about who started the activity might be obtained from adult or child behavior before any specific five-second observation window. For example, an adult may initiate preparation for dinner prior to the observation period beginning, but all activities related to dinner preparation should be coded as adult directed. If the child is involved in that adult initiated activity, then the activity initiator is coded as adult initiated even though the activity was started prior to the five-second observation interval. Once the child makes a choice to do something other than dinner preparation, the initiator becomes the child. The following three activity initiator options may be coded.

Code	Code Name	Definition
Adult	**Adult initiated**	***The activity in which the focal child is observed was selected or clearly started by an adult*** • Adult tells the focal child to go to the sink and wash his or her hands and the focal child complies • Adult tells the focal child to pick up toys • Adult tells the focal child to turn off the TV and get ready for dinner
Child	**Child initiated**	***The activity in which the focal child is observed was selected by the focal child*** • Child takes out a board game and begins to play • Child goes outside and begins to play
Can't Tell	**Can't tell who initiated activity**	***It is impossible to determine the initiator of the activity in which the focal child is engaged*** • The observer arrives and begins coding after an activity has begun and cannot tell who initiated the activity and is unable to ask an adult.

Coding Rules

• If you cannot determine who initiated the activity for a specific observational interval, try by the next observational interval to determine the activity initiator with contextual information. For example, if the child is sweeping, code Adult Initiated until you can confirm the nature of the activity , i.e. whether it's chores or a pretend play activity.

G. GROUP COMPOSITION CATEGORY AND CODES

Group is defined by the number of children and adults who are engaged in activity with the focal child or are in proximity of the focal child. Group composition is defined first by interaction with another child, group of children or adult, and secondly by proximity (within 5 feet) of another child, group of children or an adult. Remember that Group Composition is not dependent on explicit social interaction or engagement with the same materials.

1. <u>Solitary</u> – Solitary arrangement, sometimes known as solitary/alone is coded when the focal child is not interacting with or in proximity of adults or peers. Usually, the focal child will be involved in an activity by himself or herself. Examples include: the focal child is in his or her room and there is no verbal interaction with adults or peers and no other peers or adults in the vicinity.

2. <u>One-to-One Adult</u> – One-to-one adult is coded when the focal child is in an activity area by himself or herself with at least one adult or interacting with an adult. Examples include: the focal child is alone with an adult at the sink; an adult is talking to the child from across the room. This code should be used when there are one or more adults interacting with the child or within 5 feet of the focal child in the absence of a group.

3. <u>One-to-One Peer</u> – One to one peer is coded when the focal child is engaged in an activity or is in proximity (within 5 feet) of 1 peer. Examples include: the focal child is playing outside with 1 other child; the child is watching TV and a sibling joins him or her; the focal child passes by a sibling at the table

4. <u>Group Adult</u> – Group adult is coded when the focal child is engaged in an activity with or is in proximity to 1 or more peers <u>and</u> an adult (1 or more). The adult is considered WITH the group if he or she is sitting at the table with the focal child, is passing out materials to the group, or is in proximity of the children. If the adult moves away from the activity area, but maintains verbal contact during the five-second observation interval, the adult is STILL considered WITH the group. If the adult moves away, but does not maintain verbal contact during the five-second-observation interval (i.e., by talking to a child or the group), the adult is NOT considered with the group. Examples include: the focal child (along with 2 other children) are read a story by an adult; the focal child and one other child are working on homework with an adult present; and the focal child and an adult are playing catch with 2 other children in the yard.

5. <u>Group Child</u> – Group child is coded when the focal child is engaged in an activity with <u>2 or more</u> peers and <u>no adult</u>. Examples include: the focal child and 2 children are playing in the basketball outside; the focal child and 3 children are riding bikes in proximity to one another and following one another.

6. <u>Can't Tell</u> – Can't Tell is coded when you cannot see the size of the group cannot be determined.

Code	Code Names	Definition
Solitary	**Solitary/alone**	• *Engaging in an activity alone and not in proximity to children or adults*
1-1 Adult	**One-to-one with adult**	• *Engaging in an activity with or in proximity to only an adult*

1-1 Peer	One-to-one with peer	• *Engaging in an activity with or in proximity to only a single peer*
Group Adult	Group with adult	• *Engaging in an activity with or in proximity to one or more peers and an adult*
Group Child	Group without adult	• *Engaging in an activity with or in proximity to two or more peers, without an adult in the group*
Can't Tell	Cannot tell	• *Cannot tell*

- ***Group composition should be coded first by interaction, then by proximity.*** "Looking" by either the focal child or by someone towards the focal child does not constitute interaction. When inside, proximity is based on defined areas when applicable. For example, if the focal child is alone in the living room, and other children/adults are in the kitchen, code = solitary if there is not interaction with the focal child. In non-defined areas inside or when outside, proximity is based on a 5-foot parameter measure. Anyone outside of 5 feet of the focal child should not be considered in group composition. Proximity can also be determined by parallel play (someone slightly outside of the 5-foot parameter, but engaged in activities matching that of the focal child).

- ***Remember that group composition is based upon the focal child's interaction/proximity to other children or to 1 adult.*** If the focal child is interacting or in proximity to no other children, but to multiple adults, code = 1-1 adult. Also note that while parents and other adults contribute towards group composition, observers do not unless they are specifically interacting with a child for a necessary non-routine, non-observational purpose.

- ***"Passing through" a group or by another adult or child is considered being part of that group if it occurs during the 5-second observation window.*** If the focal child is interacting with another child(ren) or adult(s) or in proximity to others at all during the observation period, group should be coded as the appropriate option other than solitary. This includes a walk-by during TV watching(code = 1-1 adult), running by another child while outside (code = 1-1 peer).

- **Solitary** should be coded when the focal child is alone for the full 5 seconds and does not interact with, or come in proximity of another child, group of children or an adult.

- **Group adult** should be coded when the focal child is engaged with an adult who is part of a group of children.

- **1-1 adult** should be coded when the focal child is engaged with an adult who is in proximity to, but not interacting with a group of children, i.e. the focal child is talking to a adult who is cleaning the table and is in proximity to children playing on the computer, code = 1-1 adult.

H. PROMPT FOR PHYSICAL ACTIVITY CATEGORY AND CODES

Prompts are explicit and observable adult behaviors presented for the purpose of increasing or decreasing the likelihood of children's responding (Wolery, Bailey, & Sugia, 1988). Adult prompts may be presented before or after children respond. In the Home Physical Activity study, we are interested in adult prompts that either increase and maintain (i.e., facilitative prompts) or that stop and decrease (i.e., inhibitory prompts) children's physical activity. Bailey et al. (1988) have identified several types of prompts that we will be looking for during the study: (a) verbal prompts, (b) modeled prompts, and (c) physical prompts. Remember, prompts for physical activity should be explicit and observable and clearly linked to an increase, maintenance, or decrease in physical activity.

Code	Code Name	Definition
None	**No adult or peer prompts**	*Child was not explicitly prompted to increase or decrease physical activity or the adult or peer's prompt is informational in nature and unrelated to physical activity* • If the physical activity is an inherent part of a formal preschool game (e.g., "Simon Says") children's imitation of physical activity should not be recorded as an adult or peer prompt for physical activity • If the adult merely moves a child a short distance or instructs the child to move • If an adult tells the child to sit still
AP-I	**Adult prompt to focal child or a group with the focal child in it to increase or maintain physical activity**	*Adult prompted the focal child to engage in or maintain physical activity* • Adult says to the focal child, "Tim, run fast as you can!" • While jumping, an adult says to the focal child, "Jon, jump up and down like me."
AP-D	**Adult prompt to focal child or a group with the focal child in it to stop or decrease physical activity**	*Adult prompted the focal child to stop or decrease physical activity* • Adult tells the focal child to stop running inside • Adult tells the focal child, to slow down on the bicycle and wait for them.
PP-I	**Peer prompt to focal child or a group with the focal child in it to increase or maintain physical activity**	*Peer prompted the focal child to engage in or maintain physical activity* • Peer tells the focal child to run across the playground with him. • Peers on a tire swing request that the focal child run faster or push harder to make the swing go faster.
PP-D	**Peer prompt to focal child or a group with the focal child in it to stop or**	*Peer prompted the focal child to stop or decrease physical activity*

Code	Code Name	Definition
	decrease physical activity	• Peer asks the focal child, "Stop running and let's sit down." • Peer asks child to slow down so that they can catch up
Can't Tell	**Cannot Tell**	*Cannot tell*

- Simultaneous prompting, when the teacher and a group of peers are prompting, should be coded as the higher priority person prompting, code = TP-I/D.

I. ADULT AND PEER ENGAGEMENT CATEGORY AND CODES

Adult and Peer Engagement is a category that attempts to capture whether or not adults and peers were actively involved in the activity that the focal child was performing during the observation period. Engagement is defined as being involved in and attentive to the activity which the focal child is involved. Observation of an activity or being in proximity to the child does not constitute engagement.

Code	Code Name	Definition
None	No adult or peer engagement	*Adult(s) and/or peer(s) is/are not engaged in the activity in which the focal child is participating* • Child is solitary playing in his or her room • Child is watching TV in the living room while an adult is in the kitchen preparing dinner
Adult	Adult is actively engaged with focal child	*Adult is actively engaged in the activity in which the focal child is participating and no peers are activity engaged with the focal child* • Adult and child are working on homework at the kitchen table • Adult is playing basketball in the driveway with the focal child
Peer	Peer is actively engaged with focal child	*Peer is actively engaged in the activity in which the focal child is participating and no adults are activity engaged with the focal child* • Peer is playing a video game with the focal child • Peer and focal child are playing outside in the sprinkler
A+P	Adult and peer are actively engaged with the focal child	*Adult(s) and peer(s) are actively engaged in the activity in which the focal child is participating* • Adult and peers are playing a board game with the focal child • Focal child and adult and peer are walking the dog in the neighborhood
Can't Tell	Cannot Tell	*Cannot tell*

J. TV USE CATEGORY AND CODES

TV Use is included to capture whether or not the TV is on in the room in which the focal child is located. TV Use can only be off, on, or not applicable, where there is not a TV in the room in which the focal child is located or the child is outside during the observation period. The TV use category is independent of the child's actual activity, and should be coded based on whether or not the TV is on, not whether or not the focal child is watching TV. The focal child's activity will be captured by the Indoor (or Outdoor) Activity Context codes. Obviously, if a child is watching TV or playing a video game on a game system that is connected to a TV, the TV Use category should be coded as "on".

Code	Code Name	Definition
Off	**TV is Off**	*The TV is off in the room in which the focal child is located*
On	**TV is On**	*The TV is on in the room in which the focal child is located*
N/A	**Not Applicable**	*There is not a TV in the room in which the focal child is located or the focal child is outside*

K. REACTIVITY CATEGORY AND CODES

Reactivity is acknowledged when the focal child responds to being observed. Reactivity is only coded if the focal child looks at, talks to, or interacts with the observers. Reactivity <u>should not be coded</u> if the observer simply believes that the focal child is performing behaviors that are in response to the observer's presence. For example, a parent may tell a child to go outside and play a game during the observation session. The observer may think that normally the child is allowed to watch TV, but because of the observer presence the parent is trying to increase activity. This situation <u>should not</u> be coded as reactive, because there would be assumptions involved. If the focal child walks up to the observer and tells them about the toy they are playing with, Reactivity should be coded as 'yes'.

Code	Code Name	Definition
No	**Child is not reactive**	*The focal child is not reactive to the observers (no looking, talking or other interaction)*
Yes	**Child is reactive**	*The focal child is looking at, talking to, or interacting with the observer(s).*
Can't Tell	**Can't Tell**	*Coded when the observer can't see the focal child (self care)*