Direct Observation Training

Physical Activity Standards in Child Care Settings

Created by,

Transtria LLC

Agenda

Activity	Time
Introductions	10 minutes
Training purpose and desired outcomes	15 – 20 minutes

Direct observation
  • Overview
  • Review tools
	1 hour

Direct observation • Practical application	1 hours
Discussion and feedback	30-45 minutes

Introductions

◄ Evaluation Officer

◄ Evaluation Coordinator for local data collection

◄ Data collectors and experience with data collection

Training Purpose
and Desired Outcome

Direct Observation

- Observations are made before and after the implementation of a physical change in the environment (e.g. removal of vending machines, development of a new playground).

- Researchers document the number of children, as well as their age, gender, race/ethnicity and activity level or healthy eating behaviors, at a particular location for a duration of one hour.

Direct Observation

- Timing of the observations before/ after project completion (consider the following):
  - ✓ Weekday periods of greater/ lesser use – morning/ evening rush hour trips (adults), before/ after school (youth), lunch trips (adults), following afterschool programs (youth)
  - ✓ Weekend periods of greater/lesser use – faith-based services, sports games/ leagues
  - ✓ Special events – holidays (e.g., Halloween), concerts, parades
  - ✓ Seasonality – extreme heat/ cold, other unfavorable conditions (e.g., rain, ice)

- Resources needed to conduct the observations (consider the following):
  - ✓ Observers and training – number of people available to conduct observations (e.g., staff, students, volunteers), space and equipment to provide training
  - ✓ Security – monitoring observer safety when necessary (particularly at night)
  - ✓ Data collection – devices vs. pen/ paper

Benefits and Challenges

◀ **Participants:** Youth

◀ **Strengths:** Allows for pre/post comparison; Evaluates the impact of physical changes or improvements on behavior

◀ **Limitations:** Influenced by external circumstances (e.g., weather, special events); Limited generalizability due to infrequency of observations
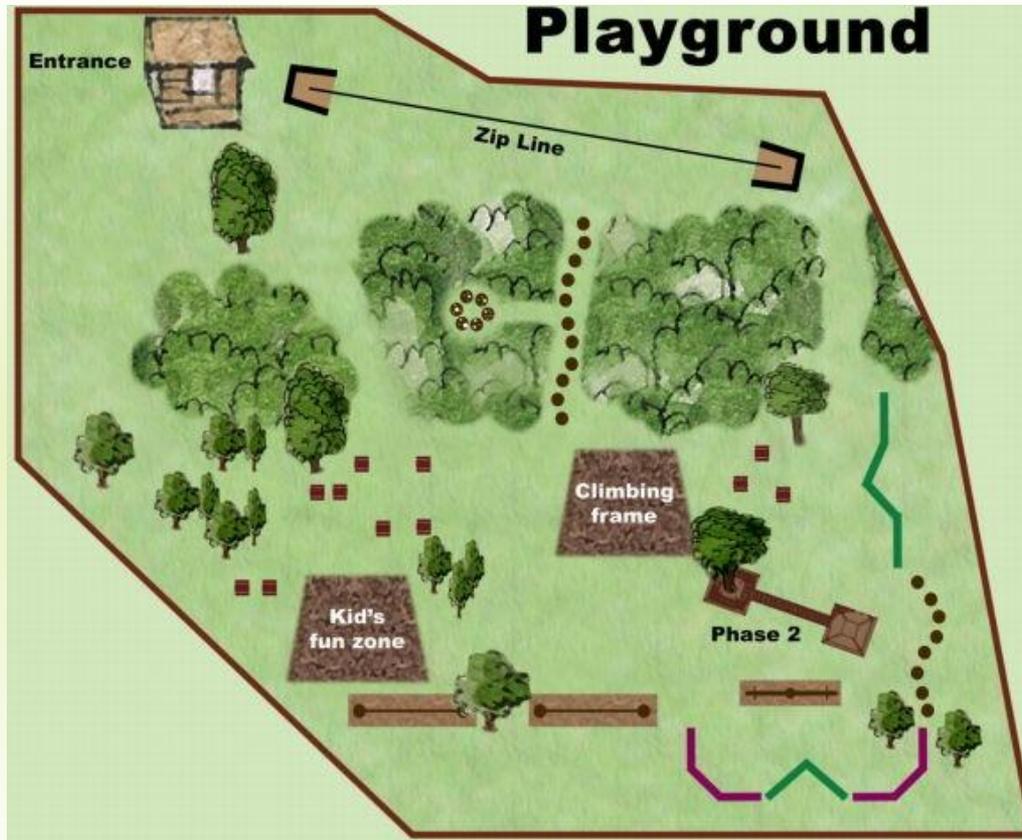
Physical Activity Observation

Child Care & After-School Physical Activity Standards Direct Observation Tool

Facility name:_____

Facility address:_____

Observer 1:_____

Observer 2:_____

Size of facility (number of youth):_____

Child care facility ID *(Transtria use only)*:_____

Community partnership:_____

Date:_____

Weather:_____

Start Time: __ __ : __ __   ○ AM ○ PM

End Time: __ __ : __ __   ○ AM ○ PM

- ◄ Facility name: Print the name of the facility.
- ◄ Facility address: Print the street address, city, state, and zip code for the facility.
- ◄ Observer(s): Print the first and last name(s) of the observers.
- ◄ Size of facility (number of youth): Print the approximate square footage of the facility, if known.
- ◄ Child care facility ID: Transtria will assign an ID for this farmers' market for the data analysis.
- ◄ Community partnership: Print the name of your community partnership for *Healthy Kids, Healthy Communities*.
- ◄ Date: Print the date of data collection.
- ◄ Weather: Temperature and climate the day of data collection (e.g., rainy, sunny, cloudy, windy)
- ◄ Start Time: Print the time that the data collection process starts.
- ◄ End Time: Print the time that the data collection process ends.

1. What is the type of facility?

School

Child care center

Community Center

Faith-based organization

transtria
translate evidence
transfer skills
transform health

2. What types of services does this facility provide?

Summer care
and education

Early child care and
education only

Afterschool care
and education only

3. What are the hours of service?

SPRING HOURS

MON	CLOSED
TUES	11:00 – 9:00
WED	11:00 – 9:00
THURS	11:00 – 9:00
FRI	11:00 – 10:00
SAT	11:00 – 10:00
SUN	11:00 – 9:00

Indicate start and end times

Physical Activity Observation

Child Care & After-School Physical Activity Standards Play Spaces Mapping Table

Facility Name/Address: _____ Observer Name: _____

Community Partnership: _____ Weather Condition: _____ Date: _____

Play Space	Setting	Location	Type	Condition	Surface	Intervention
1	☐ Park ☐ School ☐ Community Center ☐ Early childhood education center ☐ Other playground ☐ Other recreation facility ☐ Other:	☐ Indoor ☐ Outdoor	☐ Court ☐ Field ☐ Playground ☐ Pool ☐ Gym ☐ Multi-purp. room ☐ Multi-purp. field ☐ Other:	☐ Usable ☐ Equipment ☐ Other:	☐ Sand/dirt ☐ Grass ☐ Gravel ☐ Wood chips/ mulch ☐ Foam/ rubber/ tile ☐ Cement/ pavement ☐ Hardwood ☐ Carpet ☐ Other:	

Play space: All descriptive details about the play space should be easily referenced between the sketched map and the Mapping Table. From the sketched map, place the area number in the first column of the Mapping Table and follow the row across to complete all categories

Setting: Record whether the play space being used is a park, school, community center, early childhood education center, other playground, other recreation facility, or other space (specify).

Location: Record whether the play space being used is indoors or outdoors.

Physical Activity Observation

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Community Partnership: _____ Weather Condition: _____ Date: _____

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Type: Choose from the following categories.

•Court: An area marked for basketball, volleyball, racquetball, and/or other court games. It contains permanent markings specifically for court games.

•Field: An area marked for football, soccer, baseball, and/or other field games. It contains permanent markings or goals, backstops, or other features specifically for field games.

•Playground: A self-contained space for swinging, sliding, climbing, or other types of play.

•Pool: Consists of wading or swimming pool and the surrounding space.

•Gym: A large indoor space primarily for physical activity and game play.

•Multi-purpose room: An auditorium, classroom, studio, or other indoor space that may be used for physical activity (e.g., dance, aerobics, strength training).

•Multi-purpose field: An open, outdoor, unmarked field that may be used for physical activity.

•Other (specify): Record any other type of area not specified above.

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Community Partnership: _____ Weather Condition: _____ Date: _____

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Condition: This section provides basic descriptive information about the designated play space.
Usable: Play space is safe for physical activity (e.g., equipment is in good condition).
Equipment: Equipment is provided (e.g., balls, jump ropes).
Other: Specify any other condition of interest.

Surface: Record what type of surface is present on the majority of each play space. Choose from the following: sand/dirt, grass, gravel, wood chips/ mulch, foam/ rubber/ tile, cement/ pavement, hardwood, carpet, and other (specify).

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Intervention: Record the specific intervention changes that assist children in participating in physical activity in this play space. This will include modifications such as lines painted on courts (e.g., four-square), cuts in the grass or field areas (e.g., baseball diamonds), and poles (basketball hoops, etc.). ***Do not*** record temporary improvements such as chalk lines and portable nets. A modification identifies what the area is primarily designed for, regardless of how it used at a particular time. Identify spaces that have multiple improvements that overlap but cannot be used simultaneously. For instance, a court space may have poles and painted lines that are used for both volleyball and basketball.

Physical Activity Observation

Child Care & After-School Physical Activity Standards Direct Observation Tool

Facility Name/Address: _____ Observer Name: _____

Community Partnership:_____ Weather Condition:_____ Date:_____

Start Time	Area	Teacher/Provider Behavior		Preschool 3-5 (# of children)				Elementary School 6-10 (# of children)				Middle School 11-14 (# of children)				High School 15 + (# of youth)			
(1 min)		Active Instruction	Observe	S*	M**	VA***	Activity Code+	S	M	VA	Activity Code	S	M	VA	Activity Code	S	M	VA	Activity Code
—:—																			
—:—																			

Observers: Observers will be split into groups of two to observe different areas at the same time (see example below). Areas correspond with the play spaces on the Parks and Play Spaces Mapping Table.

Play Space 1: Observer 1
               Observer 2

Start Time: This is the clock time for the beginning of each observation period. Each observation will last the same amount of time (with the length of time dependent on the number of individuals within the observed area) with a <u>one</u> minute break in-between observations to record (see below for an example). In the first column, record the start time for each period of observation.

Period 1:   Minute 1 – Observation
            Minute 2 – Break/Record

Physical Activity Observation

Start Time	Area	Teacher/Provider Behavior		Preschool 3-5 (# of children)				Elementary School 6-10 (# of children)				Middle School 11-14 (# of children)				High School 15 + (# of youth)			
(1 min)		Active Instruction	Observe	S*	M**	VA***	Activity Code+	S	M	VA	Activity Code	S	M	VA	Activity Code	S	M	VA	Activity Code
—:—																			
—:—																			

Map: Before observation begins, the observers will split the area into sections and each observer will be responsible for observing his/her section. The observers should record the area number in the second column of the observation tool.

Scanning: When scanning an area, observers should start on the far right end of the area and scan to the left side, then back to the right side for the duration of the scan time. During the scan, the observer should complete the observation tool by tallying activity by age group, in addition to reporting the activity codes for the age group. Be sure to count each individual only one time for both activity codes and activity intensity level (see below).

Teacher Behavior: Mark which behavior the teacher/provider is engaged in for the *majority* of the observation interval. Select only one. **Active Instruction** involves showing children how to conduct themselves in an activity and management of children, game play, equipment use, etc. **Observation** includes watching children participating in an activity and discussion of well-being, sports, and activities.

Physical Activity Observation

Start Time	Area	Teacher/Provider Behavior		Preschool 3-5 (# of children)				Elementary School 6-10 (# of children)				Middle School 11-14 (# of children)				High School 15 + (# of youth)			
(1 min)		Active Instruction	Observe	S*	M**	VA***	Activity Code+	S	M	VA	Activity Code	S	M	VA	Activity Code	S	M	VA	Activity Code
—:—																			

Age/Grade: Each age/grade category has its own count. Observers should try to identify a child's age before academic grade. Only when age is unknown, should observers identify the grade that the child is currently in. Please provide the number of youth or individuals represented during the observation period participating in different intensity levels of activity and their specific activity (i.e., activity code).

Activity Level (Sedentary (S), Moderate (M), Very Active (VA)): During scans of the target area, all people should be accounted for as either participating in very active, moderate, or sedentary behaviors. Mark a tally mark for each individual in the proper activity level and age box (i.e. if you see a 14 year old walking, put a tally mark in moderate under Adolescent).

- **Sedentary** behaviors are defined as activities in which people are not moving (e.g. standing, sitting, playing board games)
- **Moderate** intensity behaviors require more movement but no strenuous activity (e.g. walking, biking slowly)
- **Very active** behaviors show evidence of increased heart rate and inhalation rate (e.g. running, biking vigorously, playing basketball)

Activity Codes: Define what tasks individuals are participating in during the scanning period. All codes are labeled at the underline bottom of the observation tool.

Practical Experience

Practical Experience Discussion

◄ Review and discuss each item on the tool

◄ What was easy to code? Difficult to code?

◄ Were there items missing from the tool or protocol?

◄ What else was challenging about applying this tool or protocol?

◄ Did you need additional instructions during the training?

◄ What are strengths that you see from this method?

◄ Do you have any other feedback or reflections on the training?

◄ Do you have any other suggestions to improve the tool, protocol, or training?

Data Collection

Timeframe
- ◄ Date(s) of data collection?
- ◄ Date(s) of environmental change (if applicable)?
- ◄ Date that Evaluation Officer will receive the data?

Process for receiving the data
- ◄ Send data to Evaluation Officer by scanning and emailing
- ◄ Send data to Evaluation Officer by making copies and sending through mail

Data Analysis

Receiving the data

◄ Evaluation Officer will send an email stating they have received the data

◄ Evaluation Officer will contact the Evaluation Coordinator if there are questions about the data

Data entry and cleaning

◄ Evaluation Officer will work with Transtria staff to entry and check the data in spreadsheet

Data analysis and summary

◄ Evaluation Officer will analyze the data and prepare a summary

◄ CPs will receive raw data and a summary

Evaluation Plan

◄ How many child care facilities will you be collecting data for?

◄ What design are you using?
  – Before/after
  – Comparison
  – Cross-sectional (pre or post only)

◄ If comparison design, how do you plan to select your comparison child care facility?

◄ How do you plan to use this data?

◄ What audience to you intend to share this data with?

Questions?