

Direct Observation Script

Slide 1 – Welcome

Welcome! My name is Robin Parks Ennis, and I will be walking you through this presentation on momentary time sampling, one form of direct observation of behavior. We have developed this training module to support practitioners in using this user-friendly data collection approach.

Slide 2 – Agenda (0:53)

In this training we will cover several important topics.

First, we will provide an overview of direct observation – what it is and what it entails in a classroom setting. For this training, the type of direct observation we will review is momentary time sampling, including its benefits for use.

Second, we will discuss the operational definitions of the behaviors we will be measuring during this study. Behaviors we typically want to increase, such as active and passive academic engagement as well as the behaviors you would like to see decrease, such as off-task behavior.

Third, we will review the recording forms that can be used to measure these behaviors, including what they look like and how to complete them.

Finally, we will discuss how to collect inter-observer agreement data where two raters complete a behavioral observation simultaneously.

Slide 3 – Direct Observation

First, an overview of direct observation.

Slide 4 – What is direct observation? (1:07)

Direct observation is when we collect data in vivo, or “live,” while we watch the behavior actually occurring.

While this can be a challenge due to all the other activities going on in a classroom, we need to complete direct observation data collection while teaching – as the behavior occurs while the lesson occurs.

The goal of this presentation is to provide you with a reliable way to collect data on student behavior while performing all of your other duties in the classroom.

Some benefits of direct observation are listed on this slide.

To begin, direct observation is objective, less influenced by subjectivity than other forms of behavior measurement, like rating scales, for example.

Because of this, direct observation can be more reliable than indirect forms of behavior measurement.

Once data are collected, they can be used for both formative or ongoing assessment as well as summative or terminal assessment.

Direct observation data can also be used to measure the impact of an intervention on student behavior in the classroom.

Direct observation can be a very powerful tool.

Slide 5 – When will data be collected? (0:38)

When should we collect direct observation data?

We should collect it anytime we are looking at collecting data to assess whether or not an intervention has had a positive impact on a student's behavior.

It is important that we collect data during the same time each day during the same or similar activities to ensure the data we are collecting are as accurate and reliable as possible.

For example, we want to see how student performance (such as academic engagement) changes over time in certain situations.

Ideally, we will use the same data collection procedures, including the same behavioral definition, while you are measuring student performance.

For example, you would measure student's academic engagement during baseline to see how engaged they are before putting an intervention in place, during the intervention to see how a student's behavior shifts once an intervention is put in place, and during maintenance phases to see how behavior changes maintain over time.

By keeping data collection procedures consistent, it helps us have confidence that any change in the students' behavior is a result of the intervention rather than changes to our data collection method.

Slide 6 – Momentary Time Sampling

Now we will go over one specific form of direct observation data collection, momentary time sampling.

Slide 7 – What is momentary time sampling? (0:57)

Momentary time sampling is an interval recording method where an observation session is divided into equal intervals. For this project, intervals will be 2 minutes in length. During the observation time period, the observer will have a cueing system where they will be alerted by a signal at the end of every interval. This will be done by using a device known as a MotivAider

that pulses or vibrates at preset intervals alerting the observer that the interval has ended and it is time to directly observe a student's behavior. Once the observer hears/feels the signal, he or she looks up to observe the student's behavior at that moment and records the occurrence or non-occurrence of the target behavior (is the behavior happening or not happening at this exact moment). At the end of each interval (for example 2 minutes) when the timer/buzzer goes off, the teacher is asking the question, "is the behavior occurring at that second?" We are not asking if it occurred at any point during the interval, or the entire interval. We are simply asking was it occurring at that exact moment?

Slide 8 – What are some benefits to using momentary time sampling? (1:28)

As teachers, we are responsible for a lot of moving parts and for maintaining the flow of instruction, which means we most often cannot drop all other duties to focus solely on collecting data. Teachers require practical and feasible methods of data collection. Some benefits to using momentary time sampling are that it does not require the observer to pay attention to the target student's behavior for the duration of the observation session. Because behavior is only recorded at the end of the preset intervals, the teacher can be leading a whole class discussion, working with individual students, or engaging in other classroom activities. Then, once the timer goes off or the pulse is felt, the teacher can redirect his or her attention to the target student momentarily to observe and record behavior and then quickly return attention back to the rest of the class. Because of this, momentary time sampling can also be used to collect data on multiple students at the same time. If you were collecting data on multiple students, you would simply observe and record each student's behavior in succession following the tone/pulse before returning to your other classroom duties. This can be done in a few seconds.

Because momentary time sampling does not require you to watch the student or students for the entire observation session it provides only an estimate of the occurrence of behavior, which may be less precise than other direct observation methods. However, it may still be more accurate than indirect forms of data collection and can be collected with reliability in a classroom setting. Momentary time sampling is useful for recording behaviors that occur frequently or last for longer periods of time, like task engagement and off-task behavior.

Slide 9 – Behavioral Definitions (0:10)

Now that you have a clear picture of how to collect direct observation data using momentary time sampling, we are going to talk about how to define the behaviors for which data are collected.

Slide 10 – What are behavioral definitions? (1:14)

We can't begin collecting data until we know precisely what behavior we are recording and we have defined that behavior in a way that is observable, measurable, and consistently understood by all observers.

This involves describing behavior in a way that we can both see and measure. This also involves generating both examples and nonexamples of the behavior. One way to make sure our

behavioral definitions are clear are to see if they pass the “stranger test.” What this means is if I ask someone who doesn’t know the student and is not familiar with my classroom to read the behavioral definition, could they visualize the behavior and understand what they are being asked to measure.

In addition to collecting data at the exact same time, we want to make sure we collect data on the exact same behavior by using behavioral definitions that are held constant and not changed throughout the duration of the data collection process. If the behavioral definition is changed, then what we are measuring changes and we can no longer compare data from before and after our definition changed.

Changing our behavioral definition would be the equivalent of changing our scale to measure our weight in kilograms instead of pounds while on a diet. If we just compared the numbers, it would like we had lost a substantial amount of weight even if we gained weight in the process because the measurement system changed.

To support the goal of keeping our behavioral definition consistent, we encourage you to briefly review the definition at the top of the data collection form before each observation session, so we are always reminded of exactly what we are measuring.

Slide 11 – Academic Engagement

The reason we focus on academic engagement is we want to make sure that we are increasing the amount of time that our students spend participating in teacher-assigned activities and task.

Slide 12 – Active vs. Passive

Specifically, we will look at two types of engagement – active and passive. Active refers to the student taking action as a means of being engaged in an activity, like writing or answering a teacher’s question. Passive refers to a student demonstrating engagement by reading silently or listening to a teacher present a lesson.

Slide 13 – Active Academic Engagement

Slide 14 – Nonexamples of Active Academic Engagement

Slide 15 – Passive Academic Engagement

Slide 16 – Nonexamples of Passive Academic Engagement

Slide 17 – Examples of Off-task Behavior

Slide 18 – Nonexamples of Off-task Behavior

Slide 19 – Data Recording Forms

Slide 20 – Momentary Time Sampling Recording Form (1:24)

Here is a momentary time sampling form used to observe a 40-min lesson divided into 2-min intervals. I want to highlight several key elements of this form. At the top you will see a place to record the date, the observer's name, and the activity. Next you will see the behavioral definitions for each behavior being recorded. Then you see the data collection table you will use once the observation session has begun. At the end of each 2-min interval, when you feel the pulse, you will circle the behavior you observed the student engaging in at that moment or in other words at the end of that interval. At the bottom of each column is a place to calculate the total and % of each behavior for each student and interobserver agreement, which I will talk about next. Finally, you will see a place for notes. Here you will record if anything was out of the ordinary that day (You might write: forgot medication, over half of the class absent, not a typical lesson). All of this information is very important in case we have any questions about how the observation was coded after the lesson is over. We can look for trends in days of the week or activities which could impact a students' behavior

Slide 21 – How do I complete the data recording form? (0:55)

So how do you complete the data recording form.

Step 1 is to complete the date, student names, and observer before the observation ever begins.

Step 2, you want to review the behavioral definitions prior to each observation, so the behavioral definitions are current in your mind and you know what you are watching for during the observation session.

Step 3, when you, and the reliability observer (if you are collecting Interobserver agreement) are ready to begin, start your MotivAider by sliding it to run.

Step 4, each time the MotivAider pulses, circle the behavior observed at that moment.

Step 5, after the session is over, note any important observation about the session in the notes section.

Slide 22 – How do I complete the data recording form? (1:05)

When the observation session is over, you will want to complete Step 6 – computing behavior sums and percentages. To get the sum of the behavior, add up each time that behavior was circled in a given column. Then divide this number by the total number of intervals observed and multiply by 100. Record this %. Repeat this step for each type of behavior being observed. If you collected interobserver agreement during this session, you will want to complete step 7 – calculating interobserver agreement. To do this, you will compare both observers recording forms interval by interval and mark whether the observers were in agreement for that interval, meaning they circled the exact same behavior or were in disagreement. Count the total number of times both observers were in agreement and divide by the total number of agreements + disagreements and multiply by 100. Record this %.

Slide 23 – Interobserver Agreement

To ensure the accuracy of direct observation of behavior, occasionally you will want to have a second observer collect momentary time sampling data simultaneously during the same lesson and compare results, checking for interobserver agreement (or IOA for short).

Slide 24 – How do I collect IOA data? (01:16)

Interobserver agreement data can be collected when two observers watch the same student or students and complete the same behavior form. It is very important that this is done independently of one another – not referencing the other observer’s coding during the observation.

However, both observers must be in a location where they have an equally clear view of the student or students. It is essential when collecting interobserver agreement that both observers collecting data use the same timer system and have their timers synchronized so each observer hears the beep or feels the vibration pulse at the same time. You may want to stand together and do a count down to start your timers. Or, use the same timer placing it on the table so you can both hear it pulse. Although, if you choose this option, be mindful that the sound may also alarm students in the area. Either of these methods will enable you to observe students’ behavior at the exact same moment. It is important to complete interobserver agreement for a minimum of 25% of all observation sessions for each student. Ideally, we would have a minimum of 25% of observation sessions within each phase assessed for interobserver agreement. For example, 25% of sessions in baseline and withdrawal phases, and 25% during each intervention phase.

Slide 25 – Check for Understanding (0:19)

We hope this training has provided some very valuable information for collecting data in your classroom. Now it is time to complete a check for understanding assessment to make sure you understand behavioral definitions, recording forms, and procedures discussed within this PowerPoint presentation.

Slide 26 – Video Practice

Slide 27 – Related Resources