

Research Brief #5
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Self-Monitoring

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Case Study: DR

Read below for a brief introduction to a young man with autism who was placed in a vocational training program. Consider how this individual may benefit from a self-monitoring intervention as you learn more about how self-monitoring can support individuals with disabilities.

A young man, Derek, participated in a community-based high school transition employment training program. When he began his first work internship in the Laboratory Services Department, various challenging behaviors emerged. Derek's self-stimulation prevented him from remaining on task for any extended periods of time, and he scripted loudly and frequently, often preventing his co-workers from concentrating and alarming visitors. Derek also exhibited inappropriate touching of himself in public, did not maintain hand hygiene for the work environment, and refused to follow staff or co-worker instruction on his worksite.

What is Self-Monitoring?

Every day we are faced with tasks that we need to finish and expectations we need to meet. These tasks can be personal, such as maintaining appropriate hygiene, or they can be professional, such as completing a task at work. For some of us, we are able to complete these tasks without support from someone or something else. Individuals with disabilities may require additional interventions to complete personal, educational, or professional tasks independently and to learn to generalize these skills across settings. Teaching self-monitoring skills can be a very useful method to facilitate independence and skill generalization (Bellini & Peters, 2008). Children, adults, and adolescents can benefit from learning how to self-monitor. Self-monitoring is defined as: the process of attending to one's own actions and recording the presence or absence of a specified behavior (Mace, Belfiore, & Hutchinson, 2001). In other words, self-monitoring occurs when an individual keeps track of whether or not he or she has completed, are in the process of completing, or has gotten off track with a targeted skill or behavior.

A self-monitoring plan can be used to track all sorts of daily behaviors. Keeping with our earlier example of personal hygiene skills, self-monitoring could involve keeping track of whether or not you have showered, brushed your hair and teeth, put on deodorant in the morning. An example of self-monitoring at work could include using a checklist to stay focused on the tasks you need to complete and observing how often you get off task with non-work related activities. Self-monitoring can also be used to support individuals with goal setting, such as counting the number of times you go to the gym in a week or monitoring daily caloric intake.

Why is learning this skill important?

Self-monitoring can assist individuals with disabilities to become independent in tasks and behaviors in various settings such as school, home and work (Clemons, Mason, Garrison-Kane, & Wills, 2016). When individuals with disabilities first learn a new task, more intensive support from staff may be needed, such as frequent verbal prompting. Ideally, these intensive sup-

ports should begin to be faded as soon as possible so that the individual learning the task does not become dependent on these supports (Bouck, Savage, Meyer, Taber-Doughty, & Hunley, 2014; Hume, Loftin, & Lantz, 2009). Developing and implementing a self-monitoring plan can be a bridge between the intensive instruction required to teach a person what is needed to complete a task initially and the ultimate goal of the individual completing the task independently, without help from others.

How do you teach self-monitoring?

First, you identify the skill that you would like to work on. Would it be important to increase the amount of time that the individual spends on task at work, rather than daydreaming or engaging in self-stimulation? Or would it be important to work on increasing the number of greetings an individual gives to co-workers when entering the workplace?

After the skill has been identified then you can decide how you would like to monitor the skill(s). Self-monitoring can occur during or after the behavior of interest (Bellini & Peters, 2008). Teaching self-monitoring can be individualized for the student's learning style and for the skill. For example, if you want to improve social skills then you may have a list of what an appropriate greeting looks like broken down into discrete steps. Once you have identified how you are going to monitor the skill, it is also necessary to decide how you are going to measure the skill.

Options for measurement:

- Frequency count: make a tally for each time the individual greets someone else
- Duration: time how long is the individual engaged in the activity
- Momentary time sampling: divide a time period into segments and record if the individual was engaged in the skill at a given point during each segment

Next, create a visual support (such as a checklist or chart) for the targeted skill and for the measurement of the skill. How will the individual record the occurrence or non-occurrence of the skill? Create the support so that the individual who will be doing the self-monitoring can understand each step. You might want to consider if the person prefers videos, pictures, or written instructions. It is always good to practice the skill with the supports and measurement system to make sure that the individual knows how to utilize the supports and can demonstrate all parts of the skill.

One way you can ensure that the individual can use the self-monitoring system is by teaching them through the "I do, we do, you do" method. Start by completing the first few rounds of recording for the person while he or she watches ("I do"), then complete the next few rounds of recording together with the person ("We do"), and then have the person do the recording themselves, while assessing for accuracy ("You do"). Remember, the goal is independence so once the individual can utilize the parts independently - you want to fade your presence!

Things to keep in mind:

- Self-Monitoring plans will look different depending on the skill being targeted
- Make sure the individual understands and knows how to use the support and measurement system
- Make a plan for follow up, to see if the support is working
- Some individuals do well with a plan for reinforcement
 - If the individual demonstrates the behavior a certain percentage or number of times can they earn a preferred activity or something else they enjoy?
 - Determine what the cutoff for earning reinforcement will be before the plan is started

Self-monitoring may also look different for different skills. For on task behavior or decreasing self-stimulatory behaviors may look different. You may decide on the period of time where you would like to address this skill, perhaps 15 minutes in the beginning of a shift. Make sure the individual can recognize what on task behavior looks like and can identify when they are not on task (ie. Day-dreaming, spinning pencils, rocking). Break this time period down into intervals of one minute. Set an alarm to go off at the end of each minute, when the alarm rings record if the student is on or off task. At first you may do this with the individual, and eventually they will be doing the recording themselves.

Sometimes, reinforcement plans are built into self-monitoring plans. Decide at the outset what the cut off for receiving reinforcement is going to be. For example, demonstrating 4 out 5 social skills or being on task 12 out of the 15 intervals. Also, ensure appropriateness of the reinforcement and at what time periods is it going to be delivered. Is this something the individual will access at home or on the worksite, for one minute or five?

What do self-monitoring supports look like?

Self-monitoring supports should be individualized based on the targeted skill and the student's learning preferences. As we mentioned above, plans will differ depending on what you are teaching. A skill that is broken down may have checkboxes next to each step, such as the steps for greeting co-workers or assembling folders. If you are looking to increase a behavior such as on task behavior or productivity, then you may set up periods of time for the individual to record a simple "yes" or "no".

Self-monitoring systems can be created using paper and pencil charts and checklists or assistive technology such as iPods or tablets. When considering the modality of the support or the measurement system, be sure to take into account the learning style and preferences of the learner. Also, consider the environment that the supports will be used in. Is technology allowed in this environment? Would paper and pencil be more appropriate? Would the use of assistive technology allow the individual to blend in better with their surroundings and co-workers?

What are some ways that self-monitoring can be used in the workplace?

So far we have mentioned how self-monitoring can be used for different types of skills and also in different environments. The majority of the research on self-monitoring has been conducted in schools with younger children (Aljadeff-Abergel, Schenk, Y., Walmsley, C., Peterson, S., Frieder, J., & Acker, N., 2015). It is just as important, if not more important, for adults with disabilities to be able to self-monitor too. Independence in daily living and self-care skills as well as job and social skills is a valuable asset and a necessity for high quality of life.

Self-monitoring can be used to facilitate the same skills at work as in the classroom. Increasing levels of productivity, on task behavior, and accuracy are all assets to the workplace. Additionally, using self-monitoring for workplace social and professional behaviors is useful.

- Examples of self-monitoring in the workplace:
- Professional greetings of co-workers and patrons
 - Professional workplace interactions with members of the opposite sex
 - Decreasing scripting while around customers
 - Increasing on task behavior and decreasing self-stimulatory behaviors while working
 - Graphing the amount of work completed each day

Case Study Application Follow Up

Remember Derek from earlier? Through on-going observation we learned that Derek does not respond well to verbal instruction and correction in the moment. We wanted to find a way to encourage him to follow work rules without engaging in dialogue, because verbal interactions seemed to reinforce the challenging behaviors. We decided to implement a self-monitoring plan to help Derek increase his independence on the job-site while also holding him accountable to professional workplace expectations. We ensured that he knew how to demonstrate each of the expected behaviors: following hand hygiene, asking for a break, maintaining professional hands, and asking appropriate questions.

<input type="checkbox"/>	I completed my classroom schedule
<input type="checkbox"/>	I asked for a break when I felt frustrated and used my coping plan
<input type="checkbox"/>	I used my manners
<input type="checkbox"/>	I responded to instructors and job coaches
<input type="checkbox"/>	I kept a quiet voice
<input type="checkbox"/>	I kept clean hands

My Coping Plan

When I'm upset, I ask "can I take a quick break?"

I stop to take 3 deep breaths.

I ask to go out for a 5 minute walk to clear my head.

I take another breath.

And then, I go back to work!!



Next, we developed a self-monitoring plan to increase appropriate workplace behaviors, social skills, and hygiene. At first, staff worked with Derek to teach him when to give himself a tally, but we ultimately faded so that he recorded the frequency of the behaviors himself. This plan also had an accompanying reinforcement plan that helped to bridge the gap between workplace expectations and behaviors at home. This helped to ensure that there was consistency in how his support team responded to his behaviors across environments.

Self-monitoring plans have been found to be useful across all types of behaviors and environments. It is important to continue to study how self-monitoring plans can be utilized in the worksite to facilitate independence and successful employment outcomes for adults with disabilities.

- TO EARN ALL 12 STARS I MUST EARN:**
- Responding = 1 tally per shift**
 - Quiet Voice & Questions - 1 tally per shift**
 - Independent Work - 1 tally per shift**
 - Hand Hygiene & Manners - 1 tally per shift**
 - Ask for a break/use coping plan - 1 tally per shift**
 - Goal - 2 tallies per shift**

	Monday	Tuesday	Wednesday	Thursday	Friday
I responded to coworkers and job coaches					
I kept a quiet voice & kept questions about patients to myself					
I kept working on my own					
I used hand sanitizer & my manners					
I asked for a break when I felt frustrated and used my coping plan					
I met my Shift Goals					

Did you earn all 12 stars today? →

	Monday	Tuesday	Wednesday	Thursday	Friday
	<input type="checkbox"/>				

AM						
PM						

References

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