

Self-Monitoring of Non-academic Behavior

Module 6

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Tim is an active fourth grader identified with an emotional disability (ED). Most of the students in his general education classroom are actively engaged in the lesson and are working on their assignment. Tim, however, is disrupting his peers by calling out off-topic comments during independent work. Mrs. Green, Tim's teacher, is frustrated by the many failed attempts to redirect Tim's behavior and his need for constant verbal reminders to remain quiet and working. Finally, another teacher suggested that Mrs. Green try self-monitoring with Tim to address his need to increase his hand-raising and making appropriate comments during class.

After collecting baseline data, and working with Tim, Mrs. Green developed a self-monitoring system for Tim to use during class. Focusing on hand-raising and calling out, Mrs. Green developed a chart that would be kept at Tim's desk. On the chart Tim was able to tally mark in the boxes each time he successfully raised his hand, and offered an appropriate comment in class. At the end of each day Tim would bring the chart to Mrs. Green to review. If he met his daily goal he earned five minutes of extra computer time the next morning. Over the next month the self-monitoring system led to an increase in Tim's hand-raising and a decrease in his talking out in class.

Description of Self-Monitoring in Non-Academic Behavior

Teachers daily face challenges regarding academic instruction or classroom management, or both (Sutherland, 2000). For these teachers, there are many strategies that can be used to support the management of student behavior. According to The IRIS Center for Training Enhancements (2008), behavior management is broadly classified as either teacher-directed or self-directed. With teacher-directed strategies the teacher plays the central role in identifying, monitoring, and reinforcing student behavior. The teacher is seen as controlling the students' behavior. In contrast, with self-directed strategies students monitor and regulate their own behavior. The teacher plays a role in guiding students in selecting and establishing appropriate self-directed strategies, but it is the students themselves who actually implement the strategies. Accordingly, students control their own behavior.

Although research highlights the fact that both teacher-directed and self-directed behavior strategies are effective in changing student behavior, self-directed strategies have several additional benefits (The IRIS Center for Training Enhancement, 2008). Self-directed strategies not only free up teacher time by directly involving the student in the intervention, but also have shown to encourage student responsibility, encourage self-control, and teach valuable life skills (Ganz, 2008). Self-management is a self-directed strategy that has been shown to be effective in increasing more appropriate behaviors such as on-task behavior (Hutchinson, Murdock, Williamson, & Cronin, 2000), less aggressive behavior (Gumpel & Shlomit, 2000), and positive social interactions (McDougall, 1998).

Self-management is any purposeful and systematic set of responses by an individual that changes or maintains some aspect of that individual's behavioral repertoire (Daly & Ranalli, 2003). Many techniques have been discussed in the self-management literature, but three main strategies have emerged and are well supported: self-monitoring, self-instruction, and self-reinforcement (Schloss & Smith, 1998). Of these three strategies, self-monitoring interventions are among the most flexible, useful, and effective (Loftin, Gibb, & Skiba, 2005).

Self-monitoring strategies are individualized plans used to increase independent functioning in academic, behavioral, self-help, and social areas (Loftin et al., 2005). Self-monitoring is the practice of observing and recording one's own academic and social behaviors (Hallahan, Kauffman, & Pullen, 2008; Rutherford, Quinn, & Mathur, 1996; Vaughn, Bos, & Schumm, 2000). Self-monitoring is a strategy that teaches students to self-assess their own behavior and record the results. Though it does not create new skills or knowledge, self-monitoring can increase (or decrease) the number of times, the intensity, or how long an existing behavior occurs (The IRIS Center for Training Enhancement, 2008). Finally, self-monitoring can be used with students of all ages and disabilities (DiGangi, Maag, & Rutherford, 1991), is relatively unobtrusive, appeals to students, is inexpensive, and relatively quick to implement (Carr & Punzo, 1993; Vanderbilt, 2005).

Research Supporting Self-Monitoring of Non-Academic Behavior

Research has shown that self-monitoring can be used successfully with students with a variety of disabilities, including autism, cognitive impairments, learning disabilities, and attention deficit hyperactivity disorder (Ganz, 2008; Lam, Cole, Shapiro, & Bambara, 1994; Mooney, Ryan, Uhing, Reid, & Epstein, 2005; Rafferty, 2010; Reid, 1996; Reid, Trout, & Schartz, 2005). In addition, several studies suggest that students at all grade levels (Dipipi, Jitendra, & Miller, 2001; Reinecke, Newman, & Meinberg, 1999), and in both general and special education classrooms, can benefit from self-monitoring interventions (Hughes & Boyle, 1991; Hughes, Copeland, Agran, Wehmeyer, Rodi, & Presley, 2002).

Researchers have begun to explore the use of self-mediated interventions, including self-monitoring, to improve the performance of students with behavior problems in public schools. Many of these studies have focused on students who needed to be given more responsibility for their own behavior. For example, in a study completed by Coyle and Cole (2004), video modeling was used to teach participants to use self-monitoring cards. Use of these cards resulted in a decrease of the participant's off-task behavior. Another study (Dipipi et al., 2001) that

included the use of time delay, differential reinforcement of other behavior, and self-monitoring, resulted in a significant decrease in echolalia and an increase in socially appropriate comments.

Likewise, Tabor, Seltzer, Heflin, and Alberto (1999) used self-operated auditory prompts (verbal cues to do work) to decrease student off-task behavior. The self-monitoring interventions resulted in increased on-task and appropriate behavior and generalization to new settings without additional training. Finally, in the study by Hughes et al. (2002), the use of self-monitoring increased the students looking up during interactions, saying “thank you,” and correctly writing answers on a worksheet, for all students in their general education classroom. Overall, research shows that the use of self-monitoring is beneficial for students with behavioral or social issues.

When to Consider Introducing Self-Monitoring of Non-Academic Behavior

Self-monitoring has the advantage of being relatively simple to implement as well as effective (Ganz, 2008; Vanderbilt, 2005). In addition, self-monitoring can be used in combination with other strategies, such as self-instruction or goal setting (Menzies, Lane, & Lee, 2009; Rafferty, 2010). In determining whether or not self-monitoring should be used for a particular student, several things should be considered. First, it is critical to determine if the student is able to identify or note when he or she has engaged in the target behavior (Menzies et al., 2009; Nelson & Hayes, 1981). This means that the student understands and can perform the desired behavior or knows how to suppress undesirable behavior, but may not be motivated to do so (Scheuermann & Hall, 2012). Next, it is important to determine whether the student is able to control the problem behavior (Menzies et al., 2009; Rafferty, 2010). Out-of-control behavior will require more intensive interventions than self-monitoring. Third, the behavior must occur relatively often. Low frequency behavior may be too far apart for a student and teacher to see meaningful, immediate changes in behavior (Menzies et al., 2009). The behavior must be readily observable and easily recorded by the student. Finally, the behavior must be worded in observable terms that the student can understand (Vanderbilt, 2005). Without these elements, it is unlikely that students will be able to self-monitor their behavior.

Guidelines for Implementation

Self-monitoring is a two-stage process whereby students observe and record their own behavior. Students must be able to: (a) distinguish between the occurrence/nonoccurrence of a behavior and (b) self-record some aspect of the behavior (Ryan, Pierce, & Mooney, 2008). In most cases, teaching students to self-monitor their own behavior is a relatively easy straightforward process (Menzies et al., 2009).

The first step in implementing self-monitoring is to identify the behavior of concern and select an alternative, replacement behavior. When identifying the problem behavior, the teacher should be able to tell the student exactly what behavior he or she will self-monitor (Loftin et al., 2005; Rafferty, 2010; Vanderbilt, 2005). If the student presents several areas of concern, the teacher should select the behavior that is causing the greatest problem (Vanderbilt, 2005). It is important to address only one behavior at a time, so as not to overwhelm the student. Students must be able to determine easily and accurately whether a behavior has occurred (Loftin et al., 2005). For example, behaviors like “being good” or “behaving yourself” are not easy to identify. Instead, use behaviors like “listening to the teacher” or “doing my work.” In addition, it is

important for the behavior to be appropriate for the setting and task. It would not be appropriate to self-monitor “talking out” if the students are working in a small-group where verbal participation is encouraged. However, during teacher instruction, self-monitoring of “talking out” would be appropriate. Finally, a replacement behavior may need to be identified for the student to do in place of the problem behavior (Vanderbilt, 2005). For instance, if Karen is to stay seated at her desk during work times, there may be times that Karen legitimately needs to get out of her seat. In those cases, a replacement behavior such as “raising her hand and asking for permission to leave her seat” should be identified.

Once the behavior has been identified and, if needed, a replacement behavior developed, the teacher should observe the extent to which the behavior is interfering with classroom learning; the most common way is to use a frequency count (Rafferty, 2010; Vanderbilt, 2005). A frequency count is exactly what it implies, every time the student exhibits the undesirable behavior (e.g., out of seat, calling out), the teacher puts a tally mark on the recording page, then adds up the tally marks at the end of the recording period. The recording periods can vary, depending on the number of times the behavior occurs. Therefore, a recording session can last for an entire class period or for only a ten-minute period. It is important to observe the student at least three to five separate times over several days to get an accurate picture of the behavior of concern (Ganz, 2008). Once this information is collected, the results should be graphed. By recording the data on a graph, the teacher and the student can compare the behavior prior to and after introduction of the self-monitoring strategy.

Next, the teacher and student together need to meet and develop the monitoring program. The purpose of the meeting is to convince the student that he/she would benefit from a self-monitoring program (Ganz, 2008; Vanderbilt, 2005). First, it is important to clearly define the incorrect behavior to ensure that the student will know the behavior when it occurs and outline the correct procedure to do in place of the inappropriate behavior (Rafferty, 2010; Loftin et al., 2005). For example, the teacher could say “Billy when you yell out answers the other students don’t have a chance to respond. However, if you raise your hand everyone will get a turn.” By stating the behavior in a positive way the student may be more willing to accept the plan and the behavior is reinforced, not punished (Loftin et al., 2005).

Once the student has agreed to try the plan, the teacher and student need to decide how frequently the student will record the behavior. The design of the self-monitoring plan is largely determined by the student’s needs and setting in which the intervention will occur. Checklists and charts are common ways to record behavior, while the teacher might use wrist counters and other mechanical devices (Loftin et al., 2005). Letting the student personalize the self-monitoring form helps with ownership and makes the process more enjoyable. In addition, it is also important that the self-monitoring form be age appropriate (Ganz, 2008; Menzies et al., 2009). For instance, when working with young children or those with limited reading skills, it may be wise to use clip art or digital pictures in place of text. When working with adolescents, it is more important to ensure the form does not draw unwanted attention from classmates. Next, blocks of times should be selected to decide how often the student will record the behavior and when reinforcement will be provided (Menzies et al., 2009). There are many advantages to breaking the day up into smaller chunks. For one, it makes the task less daunting and the student can be rewarded if he or she is successful in at least one of the time periods (Menzies et al., 2009). Finally, reinforcers are chosen for reaching the predetermined goal. Although some

students are motivated by self-monitoring alone, many students require extra teacher attention or other reinforcers (Loftin et al., 2005). When beginning the intervention frequent reinforcement is recommended. The student should have input regarding what items he or she wants to earn to increase motivation (Ganz, 2008). Reinforcer menus that have numerous items that the student wants to earn have been shown to increase the likelihood of a successful intervention (Loftin et al., 2005).

Teaching the student to use and implement the self-monitoring procedures is the next step in program implementation. It is best to use modeling, coaching, and role-play when explaining the process to the student (Ganz, 2008; Rafferty, 2010). The teacher needs to lead the student step-by-step through the self-monitoring process and discuss any possible questions and points of confusion (Vanderbilt, 2005). This collaboration helps prevent potential problems that may occur and increases the student's investment in the intervention. At the beginning, it is important for the teacher to provide frequent positive reinforcement, feedback, and assistance to encourage the student to continue using the self-monitoring plan (Loftin et al., 2005; Vanderbilt, 2005). For example, the teacher might place a visual prompt on the student's desk to help remind the student of the appropriate behavior (Vanderbilt, 2005). Then, at the end of each time period, the teacher can provide specific verbal praise to reinforce the correct behavior and increase the chances that the behavior will continue (Vanderbilt, 2005). Over time, the teacher can decrease the level of support as student behavior begins to improve.

Finally, it is essential to monitor the student's use of the plan and evaluate their progress. The teacher needs to monitor the student's behavior to determine the effectiveness of the self-monitoring plan (Rafferty, 2010; Vanderbilt, 2005). Teachers should also continue to observe the student and collect data on the frequency of the behavior to ensure that it is improving. Furthermore, occasionally the teacher may need to change aspects of the plan if it is not working well or the student tires of a particular reward (Vanderbilt, 2005). Once students have demonstrated consistent success with a self-monitoring plan, it should be gradually phased out until the student is maintaining their own behavior independently (Ganz, 2008; Rafferty, 2010).

To make self-monitoring effective, teachers should use the strategies constantly and overtly at first and then fade to less frequent and more subtle use across time (Stainback & Stainback, 1980). To help maintain and generalize positive behavioral changes, self-monitoring should be combined with ways that allow students to evaluate themselves against their earlier performance and to reinforce themselves for their successes (Hallahan et al., 2008; Smith 2002; Vaughn, Bos, & Schumm, 2000).

In sum, self-monitoring strategies are individualized plans that are used to increase students independent functioning in academic, behavioral, self-help, and social areas. Rather than focusing on reducing a student's undesired behavior, self-monitoring strategies develop skills that lead to an increase in appropriate behavior.

When Self-Monitoring May Not Work

There are potential problems that may limit progress and adversely affect the use of self-monitoring. According to Ganz (2008), teachers, parents, and administrators using self-monitoring should keep several points in mind. First, do not set the criteria for earning reinforcement so high that the student rarely receives reinforcement. The student should quickly earn reinforcement, particularly in the initial stages of implementation. This will help the student see the value of participating in the intervention. Next, teachers should not worry whether the student is completely accurate in self-monitoring. Students usually improve even when their self-monitoring data does not match teacher observations. Finally, if self-monitoring is not working, do not quit. For most students the intervention will work with some minor adjustments.

Conclusion

Self-monitoring is not a punishment; it is a tool that can help a student become more aware of his or her actions (Menzies et al., 2009). It has been proven to be effective with individuals of all ages and abilities. By following the step-by-step instruction, teachers will find self-monitoring to be a simple positive behavior support that improves student behavior in many settings.

References

- Carr, S. C., & Punzo, R. P. (1993). The effects of self-monitoring of academic accuracy and productivity on the performance of students with behavioral disorders. *Behavior Disorders, 18*(4), 241-250.
- Coyle, C., & Cole, P. (2004). A videotaped self-modeling and self-monitoring treatment program to treat off-task behavior in children with autism. *Journal of Intellectual and Developmental Disabilities, 29*(1), 3-15.
- Daly, P. M., & Ranalli, P. (2003). Using countoons to teach self-monitoring skills. *TEACHING Exceptional Children, 35*(5), 30-35.
- DiGangi, S. A., Maag, J. W., & Rutherford, R. B. (1991). Self-graphing of on-task behavior: Enhancing the reactive effects of self-monitoring of on-task behavior and academic performance. *Learning Disability Quarterly, 14*(3), 221-230.
- Dipipi, C. M., Jitendra, A. K., & Miller, J. A. (2001). Reducing repetitive speech: Effects of strategy instruction. *Preventing School Failure, 45*(4), 177-181.
- Ganz, J. B. (2008). Self-monitoring across age and ability levels: Teaching students to implement their own positive behavioral interventions. *Preventing School Failure, 53*(1), 39-48.

- Gumpel, T. P., & Shlomit, D. (2000). Exploring the efficacy of self-regulatory training as a possible alternative to social skills training. *Behavioral Disorders, 25*, 131-141.
- Hallahan, D. P., Kauffman, J. M., & Pullen, P. C. (2008). *Exceptional learners: Introduction to special education* (11th ed.). Boston, MA: Allyn and Bacon.
- Hughes, C. A., & Boyle, J. R. (1991). Effects of self-monitoring for on-task behavior and task productivity on elementary students with moderate mental retardation. *Education and Treatment of Children, 14*(2), 96-111.
- Hughes, C., Copeland, S., Agran, M., Wehmeyer, M., Rodi, M. S., & Presley, J. A. (2002). Using self-monitoring to improve performance in general education high school classes. *Education and Training in Mental Retardation and Developmental Disabilities, 37*, 262-272.
- Hutchinson, S. W., Murdock, J. Y., Williamson, R. D., & Cronin, M. E. (2000). Self-recording plus encouragement equals improved behavior. *TEACHING Exceptional Children, 32*(5), 54-58.
- Lam, A., Cole, C. L., Shapiro, E. S., & Bambara, L. M. (1994). Relative effects of self-monitoring on-task behavior, academic accuracy, and disruptive behavior. *School Psychology Review, 23*, 44-59.
- Loftin, R. L., Gibb, A. C., & Skiba, R. (2005). Using self-monitoring strategies to address behavior and academic issues. *Impact, 18*(2), 12-13.
- McDougall, D. (1998). Research on self-management techniques used by students with disabilities in general education settings: A descriptive review. *Remedial and Special Education, 19*, 310-320.
- Menzies, H. M., Lane, K. L., & Lee, J. M. (2009). Self-monitoring strategies for use in the classroom: A promising practice to support productive behavior for students with emotional or behavioral disorders. *Beyond Behavior, 18*(2), 27-35. Retrieved from <http://www.ccbd.net/publication/beyondbehavior>.
- Mooney, P., Ryan, J. B., Uhing, B. M., Reid, R., & Epstein, M. H. (2005). A review of self-management learning interventions on academic outcomes for students with emotional and behavioral disorders. *Journal of Behavioral Education, 14*, 203-221.
- Nelson, R. O., & Hayes, S. C. (1981). Theoretical explanations for reactivity in self monitoring. *Behavior Modification, 5*(3), 3-14.
- Rafferty, L. A. (2010). Step-by-step: Teaching students to self-monitor. *TEACHING Exceptional Children, 43*(2), 50-58.
- Reid, R. (1996). Research in self-monitoring with students with learning disabilities: The present, the prospects, the pitfalls. *Journal of Learning Disabilities, 29*(3), 317-331.

- Reid, R., Trout, A. L., & Schartz, M. (2005). Self-regulation interventions of children with attention deficit/hyperactivity disorder. *Exceptional Children, 71*, 361-367.
- Reinecke, D. R., Newman, B., & Meinberg, D. L. (1999). Self-management of sharing in three preschoolers with autism. *Education and Training in Mental Retardation and Developmental Disabilities, 34*, 312-317.
- Ryan, J. B., Pierce, C. D., & Mooney, P. (2008). Evidence-based teaching strategies for students with EBD. *Beyond Behavior, 17*(3), 22-29.
- Rutherford, R. B., Quinn, M. M., & Mathur, S. R. (1996). *Effective strategies for teaching appropriate behaviors to children with emotional/behavioral disorders*. Reston, VA: Council for Children with Behavioral Disorders.
- Scheuermann, B. K., & Hall, J. A. (2012). *Positive behavioral supports for the classroom* (2nd ed.). Upper Saddle River, NJ: Pearson Education.
- Schloss, P. J., & Smith, M. A. (1998). *Applied behavior analysis in the classroom* (2nd ed.). Needham Heights, MA: Allyn and Bacon.
- Smith, S. W. (2002) *Applying cognitive-behavioral techniques to social skills instruction. ERIC/OSEP digest*. Arlington, VA: ERIC Clearinghouse on Disabilities and Gifted Education.
- Stainback, S., & Stainback, W. (1980). *Educating children with severe maladaptive behaviors*. New York: Grune and Stratton.
- Sutherland, K. S. (2000). Promoting positive interactions between teachers and students with emotional/behavioral disorders. *Preventing School Failure, 44*(3), 110-115.
- Tabor, T. A., Seltzer, A., Heflin, L. J., & Alberto, P. A. (1999). Use of self-operated auditory prompts to decrease off-task behavior for a student with autism and moderate mental retardation. *Focus on Autism and Other Developmental Disabilities, 14*(3), 159-167.
- The IRIS Center for Training Enhancements. (2008). *SOS: Helping students become independent learners*. Retrieved on November 26, 2011, from <http://iris.peabody.vanderbilt.edu/sr/chalcycle.htm>.
- Vanderbilt, A. A. (2005). Designed for teachers: How to implement self-monitoring in the classroom. *Beyond Behavior, 15*(1), 21-24. Retrieved from <http://www.ccbd.net/publication/beyondbehavior> .
- Vaughn, S., Bos, C. S., & Schumm, J. S. (2000). *Teaching exceptional, diverse, and at-risk students in the general education classroom* (2nd ed.). Boston, MA: Allyn and Bacon.

Website Links

Center on the Social and Emotional Foundations for Early Learning: www.vanderbilt.edu/csefel

McIntyre, T. (n.d.). Self-monitoring of behavior. Retrieved from
<http://www.behavioradvisor.com/SelfMonitoring.html>

The IRIS Center for Training Enhancements: <http://iris.peabody.vanderbilt.edu/resources.html>
