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An Educator's Guide to Tier 2 and Tier 3 Evidence-based Interventions for Students with Emotional and/or Behavioral Needs

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An Educator's Guide to Tier 2 and Tier 3 Evidence Based Interventions for
Students with Emotional and/or Behavioral Needs

Minnesota State University Moorhead

SPED 696 Capstone Project

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Abstract

Students with an emotional and behavioral disorder or emotional/behavioral needs can be impacted in many different areas that are critical to school success. These impacts not only affect student success within schools, but also drastically affect post-school success and can result in negative long-term outcomes. Fortunately, many school-based models have been identified to be effective in addressing these impacts for students with and at-risk for emotional and behavioral disorders. A distinctive feature within all these models includes the implementation of tiered evidence-based interventions. However, from personal experience and from literature reviewed, there seems to be a lack of implementation of such interventions – interventions that are clearly needed to improve the current and future success of the students described above. This project entails a review and synthesis of common tiered evidence-based interventions for those with emotional and behavioral disorders, common behaviors addressed by these interventions, and a review of barriers to implementation that may contribute to a lack of implementation of evidence-based behavioral interventions. It also includes the creation of a handbook which details implementation of common evidence-based interventions cited by research and literature and which behaviors these interventions are effective for. It is my hope that the handbook will be helpful in increasing implementation of these practices in schools.

Keywords: Evidence-based behavioral interventions, Emotional and Behavioral Disorder, Interventions for EBD, Tier 2 behavior interventions, Tier 3 behavior interventions, Handbook of behavioral interventions

Why? Significance of An Educator's Guide to Tier 2 and Tier 3 Evidence Based Interventions for Students with Emotional and/or Behavioral Needs

Mental health in schools has been a popular topic in recent years. I have personally witnessed the growing number of students who exhibit behavioral and emotional needs in schools. Based on a review of professional literature, it is clear that evidence-based interventions aimed at emotional and/or behavioral needs result in many positive outcomes. However, throughout my research I learned literature surrounding evidence-based interventions for such needs is extremely limited. This became clear as I began my research and found myself struggling to find scholarly resources that discussed these interventions' implementation. Due to these struggles, it is no wonder that research has identified a lack of support for implementation and task-related concerns for implementation. This project is significant because it has the potential to support educators in providing appropriate and evidence-based interventions to increase positive outcomes for students with emotional and behaviors disorders or emotional/behavioral needs.

Future Use

Within the school I teach, I have noticed a pattern where student referrals for special education evaluations lack evidence-based pre-referral interventions related to student behavior or emotional needs. In my position as a professional learning community (PLC) leader, I able to lead a PLC that includes our K-4 special education teachers who focus mainly on case-managing and teaching those identified with emotional and behavioral disorders. In our conversations, I have been able to identify this pattern extends to other elementary schools in the district as well. Although there are many factors that contribute to a lack of implementation of such interventions, studies have identified supports in implementing evidence-based frameworks including providing technical assistance to leadership teams in schools (Lloyd et al., 2020) and professional development aimed at the logistical concerns expressed by staff. This may include trainings specific to such concerns, meeting with targeted groups of staff with such concerns and needs, and how-to-guides and materials to guide implementation. These efforts have been proven to increase fidelity of implementation (Tyre et al., 2018).

Based on this information, I will work to disseminate this handbook to my special education and building administrators within the district I teach so that it can be shared with regular education and special teachers at my school, but also with teachers at other schools within the district as research shows these interventions are effective for those identified with emotional and behavioral disorders and those at-risk for being identified with such disorders. I will also distribute this handbook to the special education teachers within my PLC so they are able to assist in guiding implementation across other schools in the district. I am also involved

with the student support team at my school where teachers bring academic and behavioral concerns forth regarding specific students. I can utilize my research and my handbook when meeting with specific teachers or teams in order to assist them in developing appropriate interventions for students with behavioral or emotional needs. Finally, I will continue my professional development in this area by continuing to research evidence-based interventions to add to my handbook. Specifically, I hope to continue my research and add interventions for students with internalizing behavioral characteristics rather than just externalizing behavioral characteristics.

Reflection

In doing this research, my understanding of evidence-based interventions for those with emotional and behavioral disorders has grown. I, of course, was familiar in implementing some of the evidence-based practices included in this handbook such as Check-In and Check-Out (CICO), self-monitoring, and differential reinforcement of other behavior. However, although I had some awareness of other interventions, I gained knowledge regarding their specific implementation steps. This included Class-wide Function-related Intervention Teams, self-instruction, self-evaluation, and self-reinforcement. Although I was aware of function-based interventions as I have had numerous experiences creating behavior plans with similar elements, my research and creation of the handbook allowed me to understand how to implement these interventions more systematically.

Along with this, from my research, I was able to better understand what these interventions are really effective for. Previously, when looking for interventions to implement and how to implement them, I would be frustrated by the lack of information regarding what was proven to be improved via the intervention. Thus, it made it difficult to select and appropriately plan interventions for students with emotional and behavioral disorders or needs. Through review of professional literature, I was able to identify common behaviors interventions were most often effective for. I was then able to read through literature or new professional and scholarly resources to identify which interventions were effective for which common behaviors.

Finally, my awareness for the need to systematically implement these interventions increased. Although I felt confident in designing and implementing the interventions mentioned above, I realized that there were areas of implementation that I could improve upon. For one, almost all interventions included in the handbook involved systematic collection of baseline data and information. I realized that while I often collect this data, I could improve my practices in ensuring I am collecting this data accurately and consistently before beginning an intervention. Next, I realized my awareness of procedures for fading were limited. Knowledge learned in terms of fading procedures includes reducing the schedule of reinforcement, increasing intervals, and reducing prompts (including visual prompts such as charts).

Literature Review

Students with Emotional and Behavioral Disorders

Definition and Characteristics. According to the Individuals with Disabilities Education Improvement Act (IDEIA) section 300.8 (c)(4), a student with an emotional and behavioral disorder, also known as an emotional disturbance, is a condition in which at least one of the following is displayed over a period of time, to a significant degree, and adversely affects a student's educational performance: an inability to learn not explained by other factors; an inability to create or maintain interpersonal relationships with classmates or teachers; inappropriate behaviors or feelings in normal conditions; a pervading mood of unhappiness or depression; and/or physical symptoms associated with such problems. Thus, most individuals with emotional or behavior disorders often display needs in academic, social, emotional and/or behavior domains. Just as with any disability category, students with emotional and behavioral disorders (EBD) and needs can exhibit a wide range of characteristics.

Behaviorally, students can display externalizing behavior, or behavior problems that are demonstrated in a child's outward actions (Liu, 2006). In fact, in literature, these externalizing behaviors consistently include aggressive, disruptive, "delinquent", and hyperactive behaviors (Liu, 2006). Again, these characteristics can be diverse, but aggressive behaviors can include self-injurious behaviors, aggression towards others, and aggression towards property (Yell et al., 2014). "Delinquent" behaviors often reflect acts such as lying, cheating, and stealing (Liu, 2006) and hyperactive behavior can include three types of problems; hyperactivity (e.g., an excess of motor ability, restlessness), impulsivity (e.g., fighting, interrupting), and an inability to attend or difficulty with attention (e.g., difficulty sustaining attention, being easily distracted) (Liu, 2006). Along with externalizing behaviors, children identified with EBD can display internalizing behavior, or emotional problems that affect a child's internal environment (American Academic of Special Education Professionals [ASSEP], n.d.). According to AASEP, this includes having a general, persistent mood of unhappiness, a depressed or irritable mood most of the time, decreased interest in daily activities, diminished energy, feelings of worthlessness, and suicidal thoughts. Other emotional characteristics commonly associated with emotional/behavioral disorders include unexpected changes in mood and difficulty managing emotions (n.d.).

Socially, students identified with EBD tend to experience social conflict with peers (Yell et al., 2014). Children can be physically or verbally aggressive towards others, have a lack of or misrepresented emotions towards others, withdraw from social interactions, possess problems with reasoning due to misperceptions of social situations, and obtain a lack of understanding of social rules and norms (AASEP, n.d.). Although most students identified with emotional and

behavioral disorders score in the average to above average range intellectually, students often have academic deficits and perform below their expected level academically in comparison to peers. Along with this, students with EBD often exhibit avoidance of school, poor attendance, and high dropout rates (Yell et al., 2014).

Identification in Schools. Student are identified with emotional and behavioral disorders through a special educational evaluation process. The evaluation practices used mainly result from legislation (Yell et al., 2014). According to Minnesota statute 3525.1329, an individual can be identified for an emotional or behavioral disorder if they display a pattern of emotional or behavioral responses in at least one of the following areas: withdrawn or anxious behaviors, pervasive unhappiness, extreme problems with mood and self-worth; disordered thought processes that are demonstrated by atypical behavior patterns or communication styles and distorted interpersonal relationships; and/or developmentally inappropriate aggressive, hyperactive, or impulsive behaviors. Establishing the pattern in one or more of the areas above must be based upon evaluation data. Minnesota statute 3525.1329, subpart 3 states this evaluation data must include, at the very least: clinically significant scores on standardized, nationally normed behavior rating scales; standardized and nationally normed tests of intellectual and academic ability, at least three observations in the classroom or other learning environments, a record review, interviews with parent(s), the student, and teacher(s), a health history review, a mental health screening, and a functional behavior assessment. Data collected from these measures must establish: the pattern(s) do not result from inadequate educational progress primarily caused by intellectual, sensory, physical/health, cultural, or language factors, autism spectrum disorders, or inconsistent education; cause impairments in at least one skill areas, which include intrapersonal, academic, vocational, or social skills; and that the patterns are consistently displayed in at least two different settings. Finally, these impairments must have occurred for a minimum of six months unless there is documentation of a serious mental health disorder from a licensed mental health professional (Minn. Stat 3525.1329, subp. 2a).

Negative Implications

Prevalence estimates for students identified with emotional and behavioral disabilities in public schools range from 1% to as high as 21% (Yell et al., 2014). These disorders can result in academic deficits which can result in low academic achievement. In fact, students with EBD are reported to experience the poorest educational, social, and behavioral outcomes than any other disability group (Yell et al., 2014). According to Landrum and Tankersley (2013), long-term outcomes for students with emotional and behavioral disorders are the poorest among students with or without disabilities. Students with EBD often fail more classes, earn lower scores on state tests, drop out of school, are more likely to be unemployed when they leave school, and are more likely to be involved in the justice system (Landrum & Tankersley, 2013).

Definitions of Models and Tiered Interventions

Models. Approaches for addressing student behavior have shifted drastically in the past thirty years and have now emphasized proactive measures for schools to teach and reinforce behavioral expectations to students (Lloyd et al., 2020). This includes Multi-tiered Systems of Support for Behavior (MTSS-B), which is comprised of approaches to identify students at risk for behavior problems, evidence-based interventions that are based on intensity of needs, and data-based decision making to determine appropriate levels of supports for each student (Lloyd et al., 2020). Among MTSS-B, Positive Behavioral Interventions and Supports (PBIS) and Response to Intervention for Behavior (RTI-B) are other common evidence-based frameworks related to MTSS-B (Lloyd et al., 2020, Bruhn et al., 2014). Within these models, data is used to determine the appropriate level of behavior support to students. These include Tier 1, Tier 2, and Tier 3 interventions. As students' needs change over time, so do the level of supports (Bruhn et al., 2014).

Tiered Interventions. Evidence-based tiered interventions are an essential component of the models above. This includes interventions at three levels of intensity. According to Tyre et al. (2018), universal or Tier 1 supports include support for all students through teaching of behavior expectations and acknowledgement of appropriate behavior. These supports include clearly identified expectations taught to students, a process for acknowledging appropriate behavior, and consistent reteaching and responses to inappropriate behavior (Mitchell et al., 2011). At the secondary level, or Tier 2, supports provided are more individualized and targeted for those who do not respond to the universal supports. Finally, at the tertiary level, individualized intensive supports are implemented for those with severe behavior needs (Tyre et al., 2018). Tier 3 interventions are provided for students with complex concerns, which require individualized assessment and intervention (Mitchell et al., 2011; Rodriguez et al., 2016).

Need for Evidence-Based Behavioral Interventions in Schools

Justification. Federal mandates, including No Child Left Behind require that every child with or without disabilities be successful in school. Along with this, both the Individuals with Disabilities Education Improvement Act (IDEA) and Elementary and Secondary Education Act require schools employ practices based on scientifically-based research. This legislation, thus, requires that interventions used be supported from evidence from research. School success also depends largely on a teacher's ability to deliver effective instruction to students. However, students displaying disruptive, violent, or aggressive behaviors can negatively impact their ability to engage in instruction and academic functioning. Therefore, it is crucial that teachers and schools implement systems and practices that address behavioral and emotional needs to

promote academic learning (Rodriguez et al., 2016). With the severe impacts on educational performance and long-term outcomes associated with characteristics of EBD, it is clear why appropriate interventions to remediate these issues are not only needed but required by legislation.

Benefits. Since PBIS is the most distinguished of these frameworks and programs (Lloyd et al., 2021), its' components and research regarding its effects will be focused upon in this review. Based upon research over the past few decades, including numerous randomized control trials (RCTs), positive outcomes related to the implementation of PBIS have been identified. This includes evidence of reductions in antisocial behavior, office disciplinary referrals, suspension, detention, and expulsion. Additionally, implementation of tiered evidence-based interventions has been associated with increased instructional time, improved academic achievement, and more positive interactions for students (Tyre et al., 2018). Research has also identified these efforts do not only improve symptoms and prognosis for students with emotional and behavioral disorders (EBD) but can also reduce the onset of EBDs (Bradshaw et al., 2021). Similarly, Rodriguez et al. (2016), state tiered evidence-based interventions are shown to result in positive impacts for many students at-risk for reoccurring behavior issues. Thus, one can assert these interventions not only benefit students with emotional behavior disorders, but also those at risk for developing or being identified with such disorders.

Tier 2 and 3 Evidence-Based Interventions

In response to negative outcomes, legislation, and benefits associated with models of tiered evidence-based interventions discussed above, many interventions for students have been developed and have shown a vast amount of evidence for preventing and reducing symptoms for those with behavioral and emotional disorders and/or needs (Mitchell et al., 2011). Although there seems to be more variability among these interventions and less research and literature associated with them, there are common Tier 2 and Tier 3 evidence-based practices cited within the literature. Along with this, common behaviors targeted by such interventions exist within research surrounding this topic.

Common Interventions. One commonly used Tier 2 evidence-based intervention includes Check-In Check-Out (CICO) also known as Behavior Education Program (BEP). Based on a systematic review of Tier 2 interventions within peer-reviewed experimental studies that included Tier 2 interventions as independent variables, approximately two thirds of the studies reviewed included interventions targeting behavioral skills and 15 of these studies included Check, Connect, and Expect interventions, CICO, or BEP (Bruhn et al., 2014). In support of these conclusions, Bunch-Crump and Lo (2017), assert CICO is an intervention used commonly as a Tier 2 interventions, with promising results in supporting behavioral needs of students. Similarly, Rodriguez et al. (2016), state a range of Tier 2 interventions used in schools include

Check-In, Check-Out programs (or BEP programs). In fact, the results of their qualitative study indicate the most cited intervention by respondents within their qualitative study included CICO type interventions. This was cited by 80% of respondents across elementary, middle, and high school levels.

In addition to CICO (or BEP), the intervention Class-wide Function-related Intervention Team (CW-FIT) was also included in literature as a Tier 2 intervention. In fact, there is a growing amount of research supporting the use of group contingencies to reduce problem behavior in elementary schools for normally developing children and those with EBD (Weeden et al., 2016). This amount of research has supported group contingencies as evidence based-practice. CW-FIT is an example of a group contingency shown to be beneficial for improving class-wide behavior as well as students at risk for EBD across multiple studies and a randomized controlled trial (Weeden et al., 2016). Along with these evidence-based interventions, other studies reported outcomes regarding the implementation of a Class-Wide Function-Related Intervention Teams (CW-FIT) and found a functional relationship between the implementation of intervention and increases in positive behavior (Bruhn et al., 2014).

Other common interventions included within literature include reinforcement-based interventions and self-monitoring. Many articles associated with tiered, evidence based behavioral interventions included reinforcement based-interventions. Bruhn et al.'s (2014) systematic review of Tier 2 intervention included four studies that included Differential Reinforcement of Other behavior (DRO). Along with this, Landrum and Tankersley (2013) assert the use of differential reinforcement have support as an evidence-based intervention for students with EBD. The authors also include self-monitoring as an intervention that has been empirically validated through systematic reviews of literature (Landrum and Tankersley, 2013). Self-monitoring has been used commonly within school-wide PBIS models as a Tier 2 and Tier 3 intervention and is in fact the most used self-management intervention (Bunch-Crump & Lo, 2017; Yucesoy Ozkan & Sonmez, 2011).

In terms of tier 3 interventions, two common interventions occurred within literature reviewed. These include function-based interventions and self-management interventions. Bunch-Crump and Lo (2017) assert that common, and researcher suggested, Tier 3 interventions include function-based interventions which often include identifying the function of behavior to alter antecedent variables, teach replacement behaviors, and/or alter consequence variables. Other literature supports this claim and list the use of functional assessment-based interventions as an evidence-based Tier 3 intervention (Bruhn et al., 2014; Mitchell et al., 2011; Landrum & Tankersley, 2013). Along with this, Weeden et al. (2016), reports self-management interventions as Tier 3 interventions. Self-management strategies are described as a categorical term which involves procedures where students have a leading role in implementing and evaluating the intervention (Howard et al., 2020). Across literature, common interventions within the self-management category emerged. Along with self-monitoring, these include self-instruction, self-

reinforcement, and self-evaluation (Howard et al., 2020; Yucesoy Ozkan & Sonmez, 2011; Yell et al., 2014).

Common Behaviors Targeted. Within the literature reviewed, common behaviors targeted by interventions also emerged. This includes off-task behavior, engagement, problem behavior, and disruptive behavior. For example, Bruhn et al. (2014), state although designs and details of intervention within their review varied slightly, participants mainly showed decreases in “problem behavior” and academic engagement. Along with this, they discussed decreases in disruptive behavior and off-task behavior due to interventions. Additionally, Bunch-Crump and Lo (2017) included measurements of disruptive behavior and academic engagement in their study regarding implementation of Tier 2 and 3 interventions. Within studies that including “problem behavior” several defined it as non-compliance, disruptive behavior, negative verbal or physical actions, and off-task behavior (Mitchell et al., 2011). Similarly, within the literature, disruptive behavior was defined to include non-compliance, negative physical or verbal interactions, and off-task behavior (Bunch-Crump & Lo, 2017). Finally, academic engagement was defined as looking or attending to the teacher or instructional materials and engagement in activities or with instructional materials (Mitchell et al., 2011; Bunch-Crump & Lo, 2017). It is clear these terms, such as disruptive behavior and problem behavior, are described synonymously within literature. Thus, one can assert that common behaviors targeted include the following based upon the definitions from above: non-compliance, disruptive behavior, negative verbal interactions, negative physical interactions, off-task behavior, and academic engagement.

Barriers to Implementation

As identified in relevant literature, there is a lack of detail within literature regarding tier 2 and 3 interventions, which can lead to difficulty with their implementation. In fact, literature states schools struggle to identify and successfully implement Tier 2 interventions, partly because they have received less attention in research (Rodriguez et al., 2016). Similarly, Rodriguez et al. (2016), states there is relative consistency in research regarding the clarity and components of Tier 1 behavior support, but Tier 2 supports are less well researched and thus described. Mitchell et al. (2011), support this claim by describing that although many evidence-based practices are available for individuals with behavior problems, the details of providing these interventions are not clearly articulated within research. Thus, one can assert a large barrier to application of these evidence-based practice is the lack of literature explaining their implementation.

Additionally, literature reviewed commonly discussed gaps with identifying specific characteristics of individuals receiving interventions, or more specifically, for what problems the interventions are effective for. For example, the studies included in various reviews were clear about how students were identified for more intensive supports, but characteristics of individuals receiving interventions were vaguely and inconsistently described (Bruhn et al., 2014; Mitchell

et al., 2011). A failure to provide these characteristics makes it difficult to define participants in which interventions make a compelling case for (Mitchell et al., 2011). Landrum and Tankersley (2013) identify that an identification of EBD provides no information regarding how to intervene. Rather, when selecting interventions, a focus should be made on selecting interventions that impact targets for intervention including skill deficits or behavioral characteristics. Thus, it can be argued that a lack of knowledge regarding which skills or behavioral concerns an intervention targets would serve as a large barrier to implementation.

Along with this, in a study completed from Rodriguez et al. (2016), which sought to identify the impact of MTSS-B and included training in MTSS-B beyond existing Tier 1 frameworks with 58 high-schools in a group-randomized controlled trial, schools expressed high interest in specific tiered evidence-based practices, but full-implementation rarely occurred. Although the study did not examine why this occurred, other literature has. Within the past decade, researchers of school-wide PBIS have begun to research staff perceptions and early studies by Kincaid et al., (2007), have identified factors promoting or preventing implementation in schools. They reported that poor knowledge of behavioral principles and a lack of support for implementation were all factors influencing staff implementation (Tyre et al., 2018). Along with this, it has been identified in literature that staff most frequently reported task-related concerns with implementing school-wide PBIS within their job role, suggesting staff have the most prevalent concerns in managing and implementing PBIS components (Tyre et al., 2018). Finally, Lloyd et al. (2021), identified the most forceful reason for school members to want to adopt multitiered systems of support for behavior was a need for teacher and staff supports and strategies to address student behavior which provides evidence that this support is lacking within schools.

Recommendations

According to research from Hall and Hord (2011) and Simonsen and Sugai (2013), support for staff with task-related concerns regarding the implementation of PBIS should focus on the “how-to-do-its” and should provide hands-on materials to guide implementation (Tyre et al., 2018). Lloyd et al. (2021), recommends support and resource efforts aligned with the primary concerns motivating individuals to adopt these systems of support, which again, is found to primarily be a need for teacher and staff supports and strategies to address student behavior. Literature also recommends describing interventions for those with EBDs or behavior needs and who or what they are effective for. For example, research recommends defining behavioral interventions for effective implementation to take place (Rodriguez et al., 2016). Similarly, Tyre et al. (2018) states it is necessary to define the critical implementation features of interventions and Bruhn et al. (2014) asserts that it is essential for researchers to report whom intervention work best for. Landrum and Tankersley (2013) also call for a more “systematic” consideration at targets for interventions, or in other words, an approach that matches specific behavior needs or skill deficits, such as “aggression,” “compliance,” “social interaction,” and/or “attention to

task'' to empirically supported interventions as this is far more logical and useful to teachers in implementation. Thus, it is clearly important to not only include a review of common interventions, but for what behaviors they seem to be effective for.

Conclusion

In conclusion, evidence-based tiered interventions have already been proven to be effective at improving academic, behavioral, and social outcomes for students with EBD, but also for students at-risk for EBDs. Although there are a range of interventions and behaviors targeted, there are commonalities that arise from literature. This includes common interventions, such as Check-in Check-out (or Behavior Education Program), Differential Reinforcement of Other behavior, Class-wide Function-related Intervention Teams (CW-FIT), function-based interventions, self-monitoring, and self-management interventions. It also includes the following common behaviors: non-compliance, disruptive behavior, negative verbal interactions, negative physical interactions, off-task behavior, and academic engagement. However, there are major gaps in implementation of these interventions which consists of a lack of intervention description in the literature, a lack of the description of what problems interventions are effective for, and a lack of staff knowledge and support. It is my hopes that the creation of this handbook addresses the recommendations in literature by providing a hands-on guide and support to implementation, by describing for who and what interventions could be effective for, and by providing definitions and implementation features of interventions.

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Minnesota State University Moorhead
SPED 696 Capstone Project
Sara Schmidt
December 8, 2021

Quick Guide to Interventions

Behaviors Targeted by Intervention

Intervention and Page Number

	Non-compliance	Disruptive Behavior	Negative Verbal Actions	Negative Physical Actions	Off-Task Behavior	Academic Engagement
Self-Monitoring Page 17		X		X	X	X
Check-in Check-out/BEP Page 19	X	X	X *Minor	X *Minor	X	X
Differential Reinforcement of Other Behavior (DRO) Page 21	X	X				X *Task engagement
Class-wide Function-related Intervention Teams (CW-FIT) Page 23		X			X	X
Self-Instruction Page 26				X	X	X *Task completion
Self-Evaluation Page 28		X			X	X
Self-Reinforcement Page 30		X			X	X
Function Based Interventions Page 32	X	X	X	X	X	X



Tier 2 Interventions



Tier 3 Interventions

An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention: **Self-Monitoring**

Effective for:

Literature has shown self-monitoring to be effective at improving on-task behavior, engagement, academic productivity (e.g., completion of written work and fluency), social behavior, aggressive behavior, and disruptive behavior.

Definition

Self-monitoring is a self-management intervention, which is a type of intervention strategy where students have a primary role in implementation and evaluation of their behavior. Self-monitoring is a type of intervention where students are taught to observe (self-observation) and record (self-record) their behavior.

Implementation

Identify and define a behavior to self-monitor (also known as a target behavior):

1. First, choose a target behavior and ensure that the student can perform it.
2. Although self-management procedures can decrease problem behaviors, it is recommended that positive behaviors or desirable behaviors that contrast undesirable behaviors are identified as the target behavior (e.g., raising hand, listening to the teacher, doing my work).
3. Next, operationally define the target behavior. This involves describing the target behavior, so it is clearly observable and identifiable to the student.
 - a. For example, listening to the teacher could be described as: eyes on the teacher, following my teachers' directions the first time, and working on the things I am asked to work on.

Collect baseline data on the behavior:

1. First, determine when the self-monitoring tool will be used.
2. Then, collect baseline data during those times.
3. To collect data, school personnel should decide on a baseline data collection method. This is dependent on the target behavior being observed.
 - a. The two main data collection methods are duration and frequency data.
 - i. Duration data collects information on the length of time behaviors occur. A stopwatch, timer, or data form including start and end times for the behavior can be used. This is effective for behaviors such as on task behavior and staying in seat.
 - ii. Frequency data collect data on the number of times a behavior occurs. This can be collected by recording the number of times the target behavior happens during a given time period. This is effective for behaviors such as raising hand and number of tasks completed.
4. School personnel must collect data over multiple days (3-5 days) and graph the results. See appendix A for an example graph.

Design a self-monitoring form:

1. Again, this depends on student behavior. If students are monitoring a behavior that can easily be measured by frequency, they may use a tally sheet or other similar methods to record behavior. If students are monitoring a behavior that should be measured by duration, they can use a time-sampling system where they are cued at certain intervals.
2. One can see examples of self-monitoring forms below.

Decide on a cue that will signal the student to self-monitor:

1. This cue can be from a teacher, a timer, or other electronic device that issues a type of signal (e.g., beep, vibrate, prompt).

Teach the student to self-monitor:

1. First, model the target behavior and how to use the system.
 - a. This may involve when and where to use the system and using example and non-examples of the target behavior.
2. Next, role-play the self-monitoring procedures with the student.
3. Then, have the student practice the system and give feedback regarding their performance.
 - a. This may include having the student observe and record their behavior with appropriate cues in a 20-minute period. The student should be provided with multiple practice opportunities.

Monitor performance:

1. The teacher should provide check-ins with the student to praise behavior, encourage behavior and accurate recording, and to give feedback regarding accuracy of recording.
2. Additionally, a reinforcement system may be attached to performance if desired.
3. Finally, continue to collect data using baseline data collection methods. This data should be added to the original graph to monitor student growth and performance. See appendix A for an example graph.

Fade the system:

1. Once the positive behavior is established, the system should be faded by incorporating lighter schedules. This may first include increasing the length of time between intervals, then removing materials (e.g., self-monitoring forms), then only providing verbal checks, and finally fading the system all together.

Example Monitoring Forms

Did I raise my hand when I wanted to ask a question or share information?	
When I raise my hand, I will make a tally in the next box	
Goal:	10

*Modified from Schulze (2016)

Name: _____	Date: _____
Was I on task?	
-Was I listening to the teacher?	
-Was I completing the jobs I was asked to complete?	
-Was I getting my jobs done in the time allowed?	
8-8:20	Y or N
8:20-8:40	Y or N
8:40-9:00	Y or N

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References

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- Howard, A. J., Morrison, J. Q., & Collins, T. (2020). Evaluating self-management interventions: Analysis of component combinations. *School Psychology Review, 49*(2), 130–143. <https://doi.org/trmproxy.mnpals.net/10.1080/2372966X.20.1717367>
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18

An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention:

Check-in Check-out (CICO)

(Also known as Behavior Education Program or BEP)

Effective for:

CICO is effective for reducing minor problem behavior, off-task behavior, and increasing academic engagement. Within studies that include measures of "problem behavior" several define it as non-compliance, disruptive behavior, negative verbal or physical actions, and off-task behavior. It is not effective for violent or dangerous behaviors.

Definition

CICO is a system that provides students with feedback and promotes positive behavior through schoolwide behavioral expectations. Students are assigned a "mentor" who check-ins with the student, sets goals with the student, provides them with a daily report card, and check-outs with the students to provide them with feedback and reinforcement to the student based on their behavior. Consistent parent communication is also included within this intervention.

Implementation

Planning

Select no more than 5 target behaviors to be targeted by the intervention:

1. These should be stated positively (e.g., follow the teacher's directions) versus negatively (e.g., no refusing) and typically include school-wide expectations for student behavior (e.g., be respectful, be responsible, and be safe).

Create a daily report card:

1. The daily report card should include the target behaviors decided upon above.
2. Next, it should include a defined rating scale teachers will use to rate student behavior. It should also include a point system and a rating key describing the differences in ratings.
3. Finally, the sheet should include at least four rating periods (no longer than 75 minutes), columns for teacher ratings, an area for total points, and an area for a parent signature.
4. One can refer to examples of daily report cards on the next page.

Decide on appropriate rewards and incentives:

1. Staff involved in creating this intervention should select and include appropriate rewards and incentives the student can earn if they are successful in meeting behavioral expectations.

Determine a minimum rating on the report card students must earn:

1. Staff should collect 3-5 days of baseline data before implementation. To collect this, the classroom teacher(s) should be provided with daily report card sheets to rate student behavior. However, it is crucial that feedback is not provided to the student at this time.
2. Next, the average percent of points should be calculated in each target behavior area for each day. This involves totaling the number of points the student earned in each target behavior area and dividing by the total possible points the students could have earned. The average percent of points earned each day should be graphed and each target behavior should receive its own series within the graph.

Important Note:

Several adaptations can be made to CICO including modifying the intensity of implementation steps and individualizing components to better match student needs.

One should see Commisso et al., for more guidance regarding adaptations.

Implementing the System**Morning Check-In:**

1. Upon arriving to school, the students should check-in with their CICO mentor. The mentor will provide the daily report card sheet, review the behavior goals and expectations, and will remind the student of their behavior goal or set a behavior goal with the student.

Feedback:

1. Students should receive feedback on their daily report card from their teachers at the end of the rating period. To do so, teachers rate the student's behavior on the daily report card and provide feedback by praising the student for appropriate behavior or giving corrective feedback on behavioral performance when necessary.

Check-out:

1. At the end of the day, the student will check-out with the same mentor. The mentor determines if the daily goal was met, provides reinforcement if the student met their goal, and/or feedback (reteaching, problem solving) in areas where points were not earned.

Home Component:

1. Students take their daily progress report home each day. Parents will review the daily progress report, sign the daily progress report, and send it back to school.

Progress Monitoring:

1. The mentor should enter the percent of the points earned by the student in a data collection spreadsheet for all target behaviors. This data should be graphed with the baseline data.
2. The team should meet periodically to review student progress and to make any changes to the intervention.

Fade the Intervention:

1. The intervention should be faded when a student has been consistently responsive and there is a consistent pattern of desired behavior. Fading typically occurs by systematically reducing the number of times the student receives feedback (e.g., the number of rating periods) until the intervention is stopped or ended.

Example Daily Report Card

Name: _____ Date _____

1= 0-1 reminders 2= 1-2 reminders 3=3 or more reminders

My goal: _____

	Be Safe	Be respectful	Be responsible
Reading	1 2 3	1 2 3	1 2 3
Math	1 2 3	1 2 3	1 2 3
Social Studies	1 2 3	1 2 3	1 2 3
Gym	1 2 3	1 2 3	1 2 3
Total:			

Parent Signature: _____

*Modified from Commisso et al., (2019).

References

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An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention:

Differential Reinforcement of Other Behavior (DRO)

Effective for:

DRO has shown positive results in decreasing noncompliance, disruptive behavior, and increasing task engagement. It is not effective for very severe behaviors. It has also been shown to increase appropriate behavioral responses.

Definition

DRO procedures consist of reinforcing desired behaviors, or other positive responses other than the problem behavior (the behavior that is trying to be eliminated), while avoiding reinforcement of any undesirable behaviors.

Implementation

Identify the problem behavior (the behavior to eliminate):

1. This behavior should be defined by describing exactly what the behavior looks like, exactly what the behavior includes, and by using precise language.

Identify the baseline level of the problem behavior:

1. School professionals should conduct observations of the behavior for at least 3-5 days prior to the intervention to determine the frequency, or the occurrences, of the problem behavior.
2. Next, the data collected should be graphed. See appendix A for an example graph.
3. One can refer to an example data collection sheet included on the next page.

Collect data regarding what is reinforcing the target behavior:

1. The student can be observed for 20 minutes over a series of days to determine the consequences, or events that occur directly after a behavior, that have been reinforcing the student.
2. An A-B-C observation form, which is observation data collection methods that collects the antecedents (A), or events that occur before a behavior, and consequences (C), or events that occur after a behavior, can be utilized to determine what is reinforcing the behavior. An example A-B-C- observation form is included on the next page.

Determine an interval time:

1. Using a timer, school professionals should select an interval for how often you will check on this unwanted behavior. It is essential to implement shorter schedules, or shorter intervals, for behaviors that occur more frequently.
2. School professionals can determine an appropriate interval time by calculating the duration of observation time frame and dividing this by the occurrences of the target behavior. For example, if two occurrences of the problem behavior happened in the 20-minute observation, an appropriate interval would be 10 minutes.

Implementation Continued

Begin reinforcement:

1. First, set a timer according to the interval determined.
2. Next, when the timer goes off, determine if the behavior occurred during the interval.
3. If the problem behavior did not occur, provide the reinforcement that has been shown to reinforce the problem behavior in step 3 on the previous page (e.g., praise/attention, tangible, star on chart).
4. If the problem behavior did occur, reset the timer and tell the student they will need to try again. Staff should not respond in any other way to the problem behavior if it is presented.

Fade the intervention:

1. Staff should collect data for at least 5 days on the target behavior during an instructional period where the intervention is being used for at least 10-20 minutes.
2. Again, it is important to collect data on the frequency of the behavior and continue to graph this data on the same graph where baseline data exists. See appendix A for an example graph.
3. The school team should review data and if the target behavior has decreased, it is recommended that they reevaluate the interval and begin to fade the intervention. This can be done by increasing the schedule of reinforcement. In this case, the schedule of reinforcement would be the interval time.

Example A-B-C Observation Form

Antecedent (What comes before behavior)	Behavior (Off-task behavior)	Consequence (What comes after behavior)
Student was given a math worksheet.	Student began playing with materials in their desk.	Student was told to put their items away and to get started on the math worksheet.
Students were asked to read independently.	Student began coloring at desk.	Student was told to get their independent reading book out.

Example Data Collection Form

Date	Activity	Time of observation	Frequency of off-task behavior (tally)
10/24	Math	20 minutes	IIII

Forms modified from Gongola & Daddario (2010).

References

- Burns, M. K., Riley-Tillman, T. C., Rathvon, N. (2017). *Effective school interventions* (3rd Ed.). New York: The Guilford Press.
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An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention:

Class-wide Function-related Intervention Teams (CW-FIT)

Effective for:

Studies have shown CW-FIT to be effective for increasing on-task behavior and academic engagement and reducing disruptive behavior for student at risk for or with emotional behavior disorders.

Definition

CW-FIT is a class-wide group contingency intervention that includes explicitly teaching appropriate behavior, reinforcing appropriate behaviors through a game-like activity, and removing attention for inappropriate or problem behaviors. For students not responding to the primary level of intervention within CW-FIT, more targeted interventions are provided. These are explained on page 10.

Implementation

Determine the most problematic times of the day:

1. Within this intervention, the most problematic times to focus upon typically include academic times that are 30-60 minutes in length.

Determine what behavioral skills needs to be taught:

1. Within CW-FIT interventions, this typically includes these three primary skills: getting the teacher's attention, following directions, and ignoring inappropriate behavior.

Assign students to intervention teams:

1. First, divide the class into 2-5 teams and assign them a team name or number.
2. Next, display the team names in an obvious and convenient location.
3. Then, schools professionals should ensure that teams are in close proximity to each other no matter their location in the classroom.
4. Finally, ensure that only one student with frequent behavior problems is on a team.

Collect baseline data:

1. School professionals should conduct observations for 3-5 days before beginning the intervention.
2. Group on task (GBR) and/or direct behavior rating (DBR) can be used to measure baseline data.
 - a. GBR is a 20-minute observation method in which an observer records if any individual was off-task within each of the teams every 30 seconds. At the end of the 20 minutes, the total off-task intervals per team can be calculated by dividing the intervals off-task by total intervals. Then an average percentage can be calculated to figure out the whole class level of off-task behavior.
 - b. A DBR is a method where specific behaviors are observed and rated. See an example form and directions from the National Center on Intensive Intervention:
https://intensiveintervention.org/sites/default/files/V1-4-DBRStandForm3StandBehav_508.pdf
3. Similar procedures can be used to observe singular students with the greatest behavioral needs to determine the effects of CW-FIT on an individual level.

Teach:

1. First, define each behavioral skill by describing 3-5 simple steps along with picture cues on a poster. One can refer to the poster below for a specific example.
2. Next, review the poster with the students.
3. Then, model what the behavioral skills look like and show students examples and nonexamples.
4. After this, allow students to practice the skills through role-plays and demonstrations.
5. Finally, school professionals should give feedback to students during their practice of the skills.

Implementation:

1. Before beginning the academic time, school professionals should remind students of the behavioral skills, set a point goal, and specify a reward for meeting the goal.
2. Then, school professionals should lead instruction as usual.
3. Appropriate staff members should set a timer for every 2-3 minutes. When it goes off, they should stop and quickly give points to teams in which all students were displaying behavioral skills. This time interval can be increased gradually to 5-8 minutes as the intervention continues.
4. It is important for staff to remember to provide little to no attention to inappropriate behaviors
5. At the end of the time period, teachers should count each group's points and reward the groups who met the class point goal.

Fade the intervention:

1. When behavioral data shows students are consistently displaying appropriate behaviors, schools professionals should gradually lessen the interventions' reinforcement or prompting. This may include:
 - a. Increasing the amount of time in the time-period or increasing the goal to obtain a reward.
 - b. Changing the goal from within one time-period to across the whole day or across multiple days.

Targeted Interventions for Students Not Responding to the above Procedures

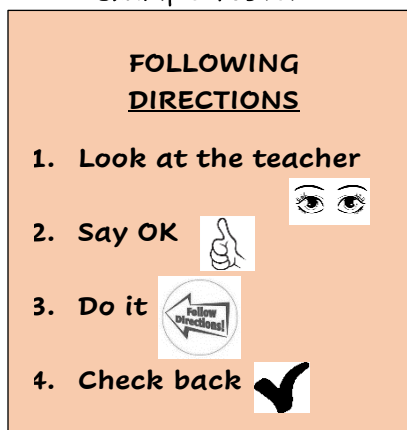
Help Cards

Help cards are implemented to address students who seem to avoid or escape academic demands. These cards include the word "help" and students are taught to use them to obtain peer or teacher help. Students can offer the cards to a teacher and peers can also be taught to respond to the cards. Students are taught this strategy in a small-group

Self-Management

In this intervention, mini-sheets with the same class behavior skills are provided to individual students. This student is considered a team of their own. When the teacher awards class points, the student should award themselves points if they are displaying the behavior skills. This is presented in a small group booster teaching session.

Example Poster



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Example Help Card



*Examples adapted from the Wills & Casey (2016).

Example Self-Management Sheet

Name: _____ Date: _____

Points

CW-FIT Rules

1. Follow directions
2. Get the teacher's attention
3. Ignore inappropriate behavior

Goal: _____ Reward: _____

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References

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An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention: **Self-Instruction**

Effective for:

Self-instruction has been effective for a variety of behavior problems including impulsive behavior, aggressive behavior, task-completion, and on-task behavior. Self-instruction has been effective in assisting students to deal or cope with stressful situations and difficult tasks.

Definition

Self-instruction includes teaching self-statements, or verbal prompts/statements to help direct, redirect, or regulate behavior. These statements or prompts serve as prompt to guide behavior and eventually, behavioral change. Self-instruction training teaches students to restructure their thinking to develop more adaptive thoughts and eliminate behavioral problems.

Implementation

Determine the skill the student needs and what their current performance level is regarding that skill:

1. Self-instruction will not enable the student to complete tasks not within their repertoire. Thus, self-instruction alone is useless if the student cannot perform the desired skill!
2. Explicit teaching and student mastery of the skill should occur before implementation of the self-instruction intervention if the student does not obtain the skill within their repertoire.

Create self-instructions with the student. Typical self-instruction sequences include:

1. A problem definition in which the student defines the problem.
2. Attention instructions in which the student focuses their attention to the problem or generates solutions/plans to solve the problem.
3. Problem approach and/or strategy instructions where the student verbalizes strategies to solve the problem and/or how to engage in or use a strategy.
4. Coping statement instructions which include the student's verbalization of strategies to handle failure or error.
5. Self-reinforcement instructions where the student rewards oneself for their performance.

Teach the strategy:

1. First, teachers should model using the self-instructions and verbalizing them out loud.
2. Next, the student should perform the task while an adult verbalizes the steps.
3. Then, the student should verbalize the task while completing the task. The teacher can whisper steps with the student until they the student is able to complete this step independently.
4. After this, the student performs the task while whispering the self-instructions to themselves OR the teacher models the task silently alongside the student.

5. Finally, the student performs the task while using self-instructions silently.
*It is important that the student can perform each task or step with proficiency before moving onto the next step. This may take several days/sessions!

Reinforce the student:

1. School professionals must reinforce the student for accurately using the self-instruction strategy with delivery of a predetermined award.
2. Reinforcement should be systematic, so it is important to create and implement a consistent and systematic reinforcement plan.

Example Self-Instruction

When I Need Help

Problem Definition:

“What’s making me upset? This work is too hard.”

Attention Instructions:

Ok, I can use some different strategies to solve this problem.

Problem Approach/Strategy Instructions:

“I can ask for help. I need to raise my hand and wait to get called on. Or I can go up to the teacher and ask.”

Coping Instructions:

“The teacher isn’t calling on me. I can take some deep breaths and stay patient or I could go up to her and ask for help.”

Self-Reinforcement:

I did it! I’m proud of myself and I earned a reward!”

*Adapted from Yell et al. (2014) and The IRIS Center (2008)

References

- Fitzpatrick, M., & Knowlton, E. (2009). Bringing evidence-based self-directed intervention practices to the trenches for students with emotional and behavioral disorders. *Preventing School Failure: Alternative Education for Children and Youth*, 53(4), 253–266.
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An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention: Self-Evaluation

Effective for:

Many studies have shown self-evaluation to be effective at increasing academic productivity, academic engagement, and on-task behavior. Studies have also identified this intervention to be effective at decreasing disruptive behavior. Other research has shown self-evaluation to increase academic preparedness skills (e.g., being seated when the bell rings, having appropriate materials) and positive social behavior towards peers and adults.

Definition

Self-evaluation is similar to self-monitoring. In self-evaluation, students compare their behavior, or rate behavior(s), to a set criteria or goal to determine if their behavior meets the performance criteria.

Implementation

Select a target behavior interfering with the student's learning, other students' learning, and/or development:

1. Once a target behavior, or a behavior that has been selected for change, has been identified, select an appropriate replacement behavior, or a behavior that is socially acceptable compared to the target behavior.

Collect baseline data on the target behavior:

1. To collect baseline data, performance assessments and observational measures can be used.
 - a. This may include developing and completing rating scales with a predetermined rating criteria and measuring performance over a series of days (e.g., measuring levels of engagement or levels of working independently).
 - b. It may also include observational methods to measure the frequency of duration of a behavior.
 - i. An example of duration data collection would be recording if student was on-task or off-task every minute throughout a 50-min class period and determining the percentage of minutes off-task or on-task throughout all 50 intervals.
 - ii. An example of frequency data collection would be recording the number of times a behavior occurred in a specific time period.
 - c. This data should be graphed. One can view an example graph in appendix A.

Set appropriate goal(s):

1. The goal(s) set should be reasonable and attainable. Reasonable and attainable goals are informed by the baseline data collected.
2. The goal(s) should be created with the student, when appropriate.
3. An example goal includes: "The student will complete their math work 3/4 days in a row to earn a reinforcer."

Ensure that the student can self-monitor their behavior:

1. If the student is not able to self-monitor their own behavior, it is imperative that they are taught before beginning a self-evaluation intervention.
2. Follow the procedures on page 4 of this manual to teach the student to self-monitor if necessary. The procedures include designing a self-monitoring form, deciding on a cue, teaching the student to self-monitor, and monitoring performance.

Develop and teach the self-evaluation system:

1. This can include creating external visual aids with clearly defined behavioral expectations and/or skills. It may also include a rating scale at the bottom of a self-monitoring sheet the student can use to compare their behavior to the predetermined criteria.
2. The behavior expectations or skills should be broken down into component tasks or steps.
3. To begin with, staff should discuss the importance of the more adaptive behaviors identified above.
4. Then, staff must explicitly teach each step by explaining the types of behaviors that meet the expectations and/or skills.
5. After this, staff should teach each step of the self-evaluation system and should model each step.
6. Finally, the student should practice the self-evaluation system until it is used with proficiency and accuracy.

Have the student monitor their behavior:

1. At this point, school professionals should have the student implement the system.
2. They should also conduct evaluation meetings with the student to provide feedback to responses on the self-evaluation system. Staff should monitor progress using the data collected from the ratings or other scoring measures involved in the self-instruction system.
 - a. This data should be graphed to determine if the student is making appropriate progress.

Reinforce the student for meeting their target goal.

Fade the intervention once the students' behavior reaches pre-determined levels:

1. This may include first removing the visual system itself.
2. Then it may include removing the visual system and the evaluation meetings with the student.

Example Self-Instruction Systems

Name: _____
 Date: _____
 Goal: _____

1- 3 or more reminders
2- 2 to 1 reminder(s)
3- No reminders

Did I raise my hand when I wanted to speak?
 1 2 3

Did I make appropriate comments in class?
 1 2 3

Date: _____

Goal: ____ 3 or better ____

Doing My Work

	Did I... Start on my work right away	Did I... Get back to work if I was distracted	Did I...Get my work done
Math	Y or N	Y or N	Y or N
Writing	Y or N	Y or N	Y or N
Reading	Y or N	Y or N	Y or N

How did I do?

Could have done better (3 or less Y's)	Fair (4-6 Y's)	Good (7-9 Y's)	Great (10- 12 Y's)
1	2	3	4

*Adapted from Yell et al. (2014) and Ness & Middleton (2012).

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An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention: **Self-Reinforcement**

Effective for:

Research has shown self-reinforcement to increase academic productivity and homework completion and decrease disruptive behavior. Students have also shown self-reinforcement to be effective in increasing on-task behavior and academic engagement.

Definition

Self-reinforcement occurs when a student chooses a reinforcer and delivers said reinforcer when a predetermined criteria is met regarding appropriate behavior. It is often involved within other self-management interventions. Thus, it can be combined with other self-management interventions within this manual (e.g., self-monitoring, self-instruction, self-evaluation).

Implementation

Select a target behavior (a behavior selected for change):

1. This behavior should be one that interferes with the student's learning or other student's learning or other areas of development.
2. Once a target behavior has been identified, identify appropriate replacement behaviors, or a behavior that is socially acceptable compared to the target behavior.
 - a. Blurting (target behavior) → Raising hand (replacement behavior).

Collect baseline data on the target behavior:

1. First, schools professionals should collect data on the appropriate replacement behavior
 - a. Data should be collected over several days within the setting the self-reinforcement system will be used. This can be done several ways, depending on the behavior being measured.
 - i. Duration data collection involves measuring the length of time the behavior occurs. Examples of behaviors that can be measured using this method include staying on task and remaining in seat.
 - ii. Frequency data collection measures the number of times a behavior occurs. Examples of behaviors that can be measured using this method include the raising hand and number of problems completed.
2. Appropriate staff should collect baseline data over a series of days.
3. Finally, the data should be graphed to determine behavioral changes during the intervention. See appendix A for an example graph.

Choose the reinforcers with the student:

1. The reinforcers should be motivating to the student and readily available to them.
2. Interest inventories and/or reinforcement menus can be utilized to list and/or create a visual of reinforcement options. One can see an example of a reinforcement menus on the next page.

Set an appropriate goal with the student:

1. School professionals should determine how often or at what level the student must engage in the appropriate replacement behavior to receive the reinforcement.
2. These goals should be clear and objective. For example, an objective and clear goal would be stating the student must display the replacement behavior 80% of the time or 3/5 days versus "most of the time."

Make sure the student can self-monitor their behavior:

1. If the student cannot self-monitor and evaluate their behavior accurately, they should be taught prior to intervention.
2. Follow the procedures on page 4 of this manual to teach the student to self-monitor if necessary. The procedures include designing a self-monitoring form, deciding on a cue, teaching the student to self-monitor, and monitoring performance.

Develop and teach the self-evaluation system:

1. First, school professionals should determine how the student will evaluate and record their behavior.
2. Once this is determined, this process should be broken down into its component parts or steps. Then, school professionals must teach and model each step.

Have the student monitor their behavior:

1. At this point, school staff should have the student implement the system.
2. They should conduct evaluation meetings with the student to provide feedback to responses on the self-evaluation system.
3. Finally, they should graph the data from the self-evaluation system in order to monitor student progress. See appendix A for an example graph.

Have the student self-reinforce their behavior:

1. Students should only reinforce when they have met the goal set above.
2. An option within this step is having the teacher monitor student behavior as well. This may include student-teacher matching where the teacher also monitors performance and compares results between the student's and teacher's data to ensure accuracy and that criteria was met.
3. Data collected by the teacher should be graphed and used to determine if the student is making progress in behavioral performance. See appendix A for an example graph.

Reward List

Choice to work with partner
Lunch with friend
Computer time
Teacher helper
Good call home
Free time with teacher



Schmidt

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An Educator's Guide to Tier 2 and Tier 3 Evidence-Based Interventions

Intervention: **Function-based Interventions**

Effective for:

Function-based interventions have been shown to be effective at decreasing non-compliance, off-task behaviors, and disruptive behavior. They have also been shown to decrease negative social interactions, increase prosocial behavior (or behaviors that benefit others or society), increase academic or task engagement, and decrease problem behavior (which often includes non-compliance, disruptive behavior, negative verbal or physical actions, and off-task behavior).

Definition

In a simple sense, function-based interventions address why problem behavior occurs. To do so, a functional assessment is conducted to determine the function of behavior, or the reason why the behavior is occurring. The process also includes teaching a replacement behavior, or a behavior that serves the same function as the problem behavior, but is socially acceptable. Along with this, the intervention(s) are created that adjust antecedents (or situations that cause problem behavior), increase reinforcement for the replacement behavior, and decrease reinforcement of the problem behavior.

Implementation

Conduct a functional assessment:

Functional assessments assist in determining the reason why the problem behavior occurs, or the function of behavior, and the conditions that maintain the problem behavior. In many cases, problem behaviors occur to obtain something (e.g., sensory stimulation, tangible items or activities, attention) or avoid something (e.g., tasks, activities, sensory stimulation).

1. Identify and define the problem behavior(s):
 - a. This should include an operational definition which is a description of the behavior that is detailed enough so the behavior can be identified and measured. The definition should also include examples and non-examples of the behavior.
2. Collect indirect and direct data:
 - a. Indirect data collection involves the use of rating scales and interviews to collect information about the behavior and should be completed with those who know the student well such as teachers, parents, and/or paraprofessionals.
 - i. Interviews:
 1. Interviews should collect information on how often the behavior occurs, the intensity of the behavior, events that seem to influence to occurrence of the problem behavior, events that happen immediately before the behavior (antecedents), events that happen right after the behavior (consequences) and times and places the behavior is likely and unlikely to occur.
 2. One can refer the resources section to view recommended interview forms.

- ii. Rating scales:
 1. Rating scales should include a set of questions to determine how often the behavior occurs, during which activities it occurs, and any skill deficits that may exist.
 2. Many rating scales exist, such as the Achenbach Behavior Rating Scales, Motivational Assessment Scale, Social Skills Rating System, and the Preliminary Functional Assessment Survey.
 3. One can refer to the resources section for recommended rating scales.
- b. Direct data collection:
 - i. This typically involves direct observation of the student to collect A-B-C data which is a structured observation model to identify antecedents (A), or what happens before the behavior (B), and consequences (C), or what happens after the behavior. Direct observation of the student should occur when behaviors are likely to take place based on information collected through indirect data collection methods.
 1. An observer should collect A-B-C data over several sessions to collect at least 8-10 occurrences of the behavior.
 2. Additionally, the setting, time, and individuals in the environment should be noted.
- 3. Analyze data and form a hypothesis for the function of behavior:
 - a. School staff should analyze all the data collected to determine patterns of when the problem behavior occurs, what happens before problem behavior, and what follows problem behavior. When identifying patterns, establish common responses, common antecedents in observations, and commonalities in what happens after inappropriate behavior such as how adults and others respond to the inappropriate behavior.
 - b. A functional assessment matrix may help to organize and analyze this data.
 - i. Examples of these matrixes are included in the resources on the next page.
 - c. School staff should use the commonalities in the data to create a hypothesis that states the motivating consequences for behavior.
 - i. An example is: The student exhibits off-task behavior to escape non-preferred academic tasks such as writing and math.

Design an intervention that includes:

1. The defined target or problem behavior (off-task behavior).
2. A replacement behavior that serves the same function as the problem behavior (e.g., asking for help).
3. Strategies to teach the replacement behavior.
4. Strategies to adjust the antecedents for problem behavior based on assessment information.
 - a. This includes modifications to the environment, curriculum, instructional delivery, and schedule that would reduce the likelihood that the problem behavior will occur.
5. Strategies to reinforce the replacement behavior and strategies to avoid reinforcement of the problem behavior.

*Resources on antecedent, consequences, and teaching strategies are included in the resources section.

Implement the intervention

1. School professionals should identify measures to collect data on problem behavior based on the behavior being measured. Two popular methods include:
 - a. Frequency or event recording which involves recording each time the behavior of interest occurs. This is effective for behaviors with a distinct start and end but do not occur at a high rate.

- b. Duration recording which includes measuring the length of time a behavior occurs. This is effective for behaviors with a distinct start and end, but occur regularly.
2. Appropriate staff should graph the data collected for ease of comparison to baseline data and to determine if the intervention is effective in changing behavior. See appendix A for an example graph.

Evaluate the intervention

1. Appropriate staff should analyze data against original data collection to determine if the student is making progress with their behavior.
2. If the student is not making progress, staff must adjust the intervention strategies.
3. If the student is making progress, staff should continue the intervention. Once the student has reached the desired level of behavioral performance, the intervention should be faded.
 - a. This may include fading prompts, increasing the length of time the desired behavior needs to be displayed for, and/or decreasing reinforcement.

Resources

Interview Forms / Examples	National Center for Intensive Intervention (page 7): https://intensiveintervention.org/sites/default/files/Handout1_BehaviorCEC2014.pdf Ci3T: Comprehensive, Integrated, Three-Tiered Model of Prevention: https://www.ci3t.org/fabi The IRIS Center: https://iris.peabody.vanderbilt.edu/module/fba/cresource/q2/p06/#content
Rating Scales	University of Washington: https://depts.washington.edu/dbpeds/Screening%20Tools/FAST.pdf University of Oregon: https://coe.uoregon.edu/cds/files/2018/01/Motivational-Assessment-Scale-ll.pdf
A-B-C Data Forms	Ci3T: Comprehensive, Integrated, Three-Tiered Model of Prevention: https://www.ci3t.org/fabi The IRIS Center: https://iris.peabody.vanderbilt.edu/wp-content/uploads/modules/fba/pdfs/cr_assess_ABCform.pdf#content National Center for Intensive Intervention (page 13): https://intensiveintervention.org/sites/default/files/Handout1_BehaviorCEC2014.pdf
Functional Assessment Matrix Forms	The IRIS Center: https://iris.peabody.vanderbilt.edu/module/fba/cresource/q2/p08/#content Ci3T: Comprehensive, Integrated, Three-Tiered Model of Prevention PowerPoint and Video: https://www.ci3t.org/fabi ; https://www.youtube.com/watch?v=L1Kv-eXB-P8&feature=emb_imp_woyt
Intervention Strategies	CEEDAR Center: Microsoft Word - Handout 16 Function-Based Intervention Strategies.docx (ufl.edu) National Center for Intensive Intervention (page 17-19): https://intensiveintervention.org/sites/default/files/Handout1_BehaviorCEC2014.pdf Liaupsin, C. J., & Cooper, J. T. (2017). Function-based intervention plans: What and how to teach. <i>Beyond Behavior, 26</i> (3), 135–140. https://doi-org.trmpoxy.mnpals.net/10.1177/1074295617728511

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