Increasing Student On-Task Behavior through Implementation of the Tier II Intervention Check-In Check-Out

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Submitted in Partial Fulfillment of the Requirements for the

Degree of Master of Education

December 2021

Graduate Programs in Education

Goucher College

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Abstract

This study served the purpose of determining whether the Tier II intervention Check-In Check-Out would increase student on-task behavior in the classroom for elementary school students. This study utilized a point sheet system adapted from PBIS (Positive Behavior Support System), with a pretest and posttest comparing student on-task behavior prior to and after implementing Check-In Check-Out. Student performance and data were analyzed throughout the study and were communicated with students on a daily basis. The Check-In Check-Out program did not have a strong impact on student on-task behavior. However, it is encouraged that further study into the Tier II intervention Check-In Check Out be conducted.

Keywords: Check-In Check-Out, Tier II Interventions, On-Task Behavior

CHAPTER ONE

INTRODUCTION

Overview

Students across all grade levels demonstrate varying levels and capabilities of self-management skills in the general education classroom. Teachers use varying strategies to differentiate their instruction and practices in order to meet the needs of all students in the classroom. This level of support is also referred to as Tier I support, which on average aids in 80% of student population success (Hatton et al., 2020). Tier I supports include but are not limited to, providing a daily schedule to class, modeling appropriate organizational strategies, creating a calming atmosphere for learning, and providing time for re-teaching opportunities of expected learning behaviors.

For some students, this level of Tier I instruction is not enough to demonstrate success with on task-behaviors in the general education classroom setting. In fact, on average, 15% of students in a classroom require additional supports through Tier II interventions (Hatton et al., 2020). Supports at this level are often provided in the classroom but through small group settings, focusing on deficit areas of function needed to be successful independently in the classroom. Tier II supports range include student behavior contracts, individual/visual daily schedules, reward systems, and check-in check-out adult support. For the purpose of this research study, focus will be placed on the benefit of check-in check-out as it relates to independent student work completion.

Statement of the Problem

Increased levels of off-task behaviors are directly related to decreased levels of student work completion. Direct instruction at the Tier I level has been deemed insufficient for the level of

prompting and guidance required to maintain student attention requiring additional interventions to be explored. This study will utilize the Tier II strategy Check-In Check-Out to increase student work completion, through comparison of data collection prior to and after implementation.

Hypothesis

The study will analyze the difference in student on task behavior prior to implementation of the Tier II intervention Check-In Check-Out and post implementation of the identified strategy. The hypothesis is that there will be a positive difference in student on task behavior after the implementation of Check-In Check-Out.

Operational Definitions

Positive Behavioral Interventions and Supports (PBIS): an evidence-based three-tiered framework to improve and integrate all of the data, systems, and practices affecting student outcomes every day

Response to Intervention (RTI): is a three-tier approach to the early identification and support of students with learning and behavior needs.

Tier I: Tier I systems serve as the foundation upon which all other tiers are built. With school-wide systems in place, schools can identify which students require additional support more efficiently

Tier II: Consists of the data tools and sources, systems, and practices needed to support students for whom Tier I behavior supports are necessary, but not sufficient (Reference B)

Check-In Check-Out (CICO): A Tier II intervention in PBIS that supports students behavioral needs to be successful in the classroom and guide them towards proficiency in Tier I

instructional settings. Check-In Check-Out utilizes forms that reflect the targeted behaviors of the student and allow for conversation and feedback between student and teacher.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review is designed to explore the importance of increasing student

engagement in the general education classroom setting. Within the review student engagement

will be defined and directly linked to the Tier II intervention strategy Check-In Check-Out. The

review will outline the components of the identified intervention with suggestion for targeting

students in need of teacher assisted behavior modifications.

Function of Student Engagement

Student academic engagement serves the function of bridging student behavior to student

success. The operational definition of student engagement includes a student demonstrating

attention, interest, and enthusiasm in the lesson content being portrayed while being observed to

carefully listen when teachers are presenting new information (Hoang et al., 2018). Students who

routinely engage with presented content have a greater likelihood of maintaining a positive

educational trajectory throughout their educational career (Moriera et al., 2015) with increased

opportunity to behave and respond appropriately to presented tasks (Royer et al., 2017).

Likewise, Moriera et al. (2015) correlate the consequences of low school engagement to a strong

risk factor for developing poor academic performance, possibilty for school dropout, to

disrutpive and anti-social behaviors. Such a correlation indicates the need to ensure students are

actively engaged in educational content throughout the school day.

Identifying At-Risk Students in the General Education Setting

It is clear that student academic engagement serves as a high functionality for student

success, but as many as 15-20% of students within the general education setting are at risk for

insufficiently demonstrating and applying independent engagement characteristics without   further supports (Swoszowski et al., 2017). Students most likely to be identified as at-risk, for below average levels of engagement, include students identified with special educational needs (SEN) such as, Attention Deficit and Hyperactivity Disorder (ADHD), neuromotor impairments, Intellectual Disability (Moriera et al., 2015), emotional disorders, and autism (Amato-Zech, 2016). Although patterns of learning behaviors can be analyzed and categorized to identify disability groups, it should not go without mention that other factors can negatively affect student engagement including psychological factors related to socioeconomics, and family and teacher learning support (Moreira et al., 2015). In fact, Weber et al. (2019) specifically chose to include students in their study, "regardless of disability status" (p. 472).

To best identify students at greatest risk for below average levels of academic engagement, it is important to restate structures that have previously been used in recent studies. Amato et al. (2006) conducted a study in which they directly observed students with the use of interval data tracking sheets to identify students that demonstrated less than 55% of on-task behavior throughout the time sampling. Weber et al. (2019) made final decisions for students characterized for at-risk by demonstrating off-task behaviors across two or more learning settings. The observable off-task behaviors described include, failure to complete assignments, making inappropriate noises during instruction, off-task behavior during independent work, frequent movement around the room, and talking during instruction (Weber et al., 2019).

Supporting At-Risk Students with Low Intensity Teaching Strategies

In the case that students are consistently struggling to independently demonstrate on-task engagement to academic content and are at risk of developing more significant behavior

problems (Weber et al., 2019) should be considered for further intervention to aid in their positive educational growth. Students with ratings for mild to high levels of off-task behavior in the general education setting or Tier I of the educational system, should be included in intervention at the first sign of student difficulty (Royer et al., 2017). Placement into a low-intensity intervention or small group setting would categorize the student into receiving Tier II supports (Royer et al., 2017)

Low-intensity Tier II supports are "easily integrated into routine instructional practice with minimal additional planning time or materials" (Ennis et al., 2018, p. 176). Low-intensity strategies are preferred by educators because they are easy to implement (Swoszowski et al., 2017) and have the possibility to yield "increased mean engagement by 30%" (Royer et al., 2017, p. 90). Students also benefit from the application of low-intensity strategies because it gives them consistent contact with an adult (Swoszowski et al., 2017).

Through application of low-intensity Tier II interventions, educators are able to apply strategies based on educational choice, pre-correction, increasing opportunities to respond, behavior-specific praise statements, behavior contracts, self-monitoring (Ennis et al., 2018) scaffolding independent work, peer tutoring, and increasing opportunities to respond (Royer et al., 2017). The application of stated strategies is encouraged to take place inside the general education setting, or natural learning environment to "target student behaviors where they actually occur" (Moreira, et al., 2015, p. 55). For educators, this allows for making minor adjustments to lessons and/or the instructional schedule (Ennis et al., 2018) while developing the required self-esteem, self-determination, and feelings of independence needed to promote increased student engagement (Royer et al., 2017).

Check-in Check-Out as a Tier II Intervention

Students who demonstrate non-responsive classroom engagement characteristics to Tier I teaching strategies as identified from consistent review and assessment of data collection, may benefit from the Tier II strategy of Check-In Check-Out (CICO) (Swoszowski et al., 2017). CICO is designed to increase on-task behavior as well as academic engagement (Commisso et al., 2019) by utilizing five key components, including a daily check-in, behavioral feedback throughout the day, a daily check-out to discuss progress on identified behaviors, data collection, and daily information to report back to an at-home guardian (Weber et al., 2019).

Implementation of CICO begins with a student being paired with an adult who is identified as their CICO mentor. This adult uses encouragement for positive behaviors as well as goal setting to aid in altering the course of the student's educational school day (Swoszowski et al., 2017). The CICO facilitator provides at minimal a morning and afternoon check-in for the student to discuss daily goals and progress towards those goals (Commisso et al., 2019). Teachers, along with their mentor, provide students with engaging conversation on learning behaviors throughout the school day. This acknowledgement of when students are or are not engaging in desired learning behaviors is an essential part of teaching on-task learning strategies (Ennis et al., 2020). Ultimately, students who have teachers encouraging them to engage in learning tend to increase their levels of on-task behavior (Clair et al., 2018), while eliminating maladaptive behavior (Ennis et al., 2018).

Self-Monitoring as a Check-In Check-Out Support

In order for students to reach their full potential for independent on-task behavior, conditions must be provided that meet their psychological needs of autonomy relatedness and

competence (Moriera et al., 2015). To provide such structure, students require implementation of self-monitoring to boost positive changes in academic performance related to independent productivity and accuracy (Amato-Zech et al., 2006). Self-monitoring includes daily student point sheets for identified areas related to on-task behavior. The daily point sheets serve the purpose of increasing student self-awareness to their own learning behaviors in order to make the greatest level of needed change. (Swoszowski et al., 2017). Daily point sheets are the tool to bring cohesiveness to the five components of CICO, as it tracks student progress with academic engagement, guide student and adult discussion based on goal setting and progress, as well as provide supporting data for record keeping.

Further practice suggests, self-monitoring to be paired with positive reinforcement based on progress and discussion of achieved daily goals (Briesch et al., 2019). Positive reinforcement is defined as, "contingent introduction of any stimulus presented after the occurrence of a behavior that increases the likelihood that behavior will occur again" (Ennis et al., 2020, p.132). Since CICO is within the parameters of a Tier II low-intensity intervention, it is necessary to structure positive reinforcers in a manner that is consistent and attainable for both teacher and student. One way to ensure students receive needed reinforcement to demonstrate positive changes in academic performance (Amato et al., 2006) is to provide behavior-specific praise (Ennis et al., 2020). Ennis et al. (2020) suggest that praise specifically describes what a student has done well. This feasible practice within CICO can be directly implemented during the fourth component of daily check-out with a mentor teacher when discussing progress on identified behaviors (Weber et al., 2019). Ultimately, specific behavioral praise embedded into CICO and self-monitoring practices, has the ability to increase student on-task behavior while decreasing

problem behaviors (Amato et al., 2006) and potentially changing a student's educational

trajectory to greater possible outcomes (Moriera et al., 2015).

Conclusion

Low levels of student academic engagement can occur for a number of reasons, varying

from special education needs, and psychological factors such as socioeconomics and parent

teacher support. Although student engagement occurs naturally more often than it does not, it is

crucial to identify students early on for off-task behavior, and begin referral for further support.

The Tier II intervention Check-In Check-Out provides students with a foundation for success

negating away from hindering learning behaviors attached to a menial learning trajectory. The

outcome of implementing the low-level intervention is fostering the lifelong ability to be

productive. Increasing student engagement is important in the classrooms today.

CHAPTER THREE

METHODS

Introduction

This study was conducted to assess the effect of the Tier II intervention, Check-In Check-Out, on student on-task behavior. The study was conducted over a nine-day period and spanning across two consecutive weeks of school. Students were selected for this intervention based on their demonstrated needs within the classroom, and with the intentions to raise their success rate as lifelong learners.

Design

This study utilized a pre and post design by the school where the research was conducted. The purpose was to increase student on-task behavior in the general education setting. Research and data were conducted for a total of two weeks, one week prior to implementation of Check-In Check-Out and one during implementation of Check-In Check-Out.

The independent variable was the implementation of the Tier II behavior intervention program, Check-In Check-Out. The program was modified to fit the needs of the students and teaching structures. Students were identified for this program based on their general education classroom needs and identification within special education services. During implementation of the program, students were paired with a special education teacher who checked in with students in the morning and set daily goals for the day. The general education teachers would track with students their level of on-task behavior through the daily tracking sheet.

The dependent variable was the student's level of on-task behavior. At the end of each school day the special education teacher would assess with students if the on-task behavior goal was achieved with the provided numbering and scoring system. Students were assessed on their ability to follow teacher directions, complete work thoughtfully, focus on instruction, ask for help when needed, and be an active participant. Students received a culminating score of their performance in the overall categories and used this to support discussion within their daily Check-In Check-Out program.

Participants

The sampling method for this study was purposive. Students were selected based on their level of work completion in the classroom. Students will low levels of work completion were given the Tier II support of Check-In Check-Out to increase their level of task completion. The students in the study participate in a Title I, low-income, school in the northeastern region of the country with seventy-five percent of the students receiving free or reduced lunch. The students in this study were all third-grade male Caucasian students. All three students receive services through special education and their Individualized Education Plan (IEP), for classified disabilities, Other Health Impairment, and Specific Learning Disability in Reading. The sampling population is a limited reflection of the overall school. The school is made up of 44% White students, 25% African-American, 15% two or more races, 12% Hispanic, 3% percent Asian, and 1% American Indian. It should also be noted that 16% of the population receives special education services. The adults involved in this study include the three grade-level general education teachers and the inclusion special education teacher.

Instrumentation

In order to determine the effectiveness of the strategy, Check-In Check-Out, in relation to student on-task behavior, a daily recording sheet was utilized to document student behavior in the classroom. Both the general educators and the special educator would complete the form during their aligned teaching time. This behavior sheet was adapted to the specific needs of the students in the classroom, and stems from the classroom management system, PBIS (Positive Behavior Supports and Interventions). The five identified target behaviors documented on the point sheet includes, follow teacher directions, complete work thoughtfully, focus on instruction, ask for help when needed, and be an active participant (Appendix A).

Data was collected for on-task behavior for a total of two weeks. The first week of assessment, or pretest, data was collected through teacher observation of student on-task behavior utilizing the five identified target behaviors. The second week of assessment (posttest), data was collected utilizing the Tier II intervention strategy Check-In Check-Out with each student. Both the pre and posttest assessments utilized the same data tracking point sheet and scoring system.

On each day of data collection, it was noted across each subject area if a student demonstrated on-task behavior for one or all of the defined categories. If a student demonstrated the skill independently, the student received a score of a two. If the student demonstrated the skill but required up to two adult prompts, the student received a score of a one. If the student did not demonstrate the skill at all or required three or more teacher prompts than the student received a 0. If the student did not have the opportunity to demonstrate the skill the student received a rating of NA for non-applicable. For each subject area, each student had the opportunity to earn up to ten points and throughout the day earn a total of 50 points. At the end

of each school day a percentage was calculated and used as the guiding measurement for determining an increase or decrease in student on-task behavior.

Procedure

This study was chosen due to a decrease and stagnant performance of student on-task behavior in the classroom returning from the virtual teaching setting. Third grade general education teachers and the special educators collaborated on the need for further support for the identified students. Through collaboration, classroom observations, and meetings with other school personnel, it was determined that a system of Check-In Check-Out may be the most beneficial strategy to aid in increasing student performance and on-task behavior.

This study was conducted over a two-week period of time. The first week of on-task behavior tracking the third-grade team of teachers observed the three student behaviors in the five identified target behavior categories. During this time, students did not begin the Tier II Intervention Check-In Check-Out. Instead, students were provided their typical Tier I teaching interventions, such as teacher prompting and repeated directions. Student behaviors were documented on the daily point sheets and used as the baseline date during the pre-assessment week.

The second week of on-task behavior tracking the same team of teachers observed the three student behaviors. During this week implementation of Check-In Check-Out started. On Monday, February 22, 2021, the three students were included in a morning meeting group that taught the concept and target behaviors being measured within the daily point sheet. Students were provided with the understanding that each morning they would go over their daily goals, progress from the previous day, and be provided time in the afternoon to check-out with the

teacher, calculate their daily percentage, and revisit any skills for re-teaching. After both weeks of data collection were complete, daily percentages were gathered and averaged to determine the effectiveness of Check-In Check-Out on student on-task behavior.

CHAPTER IV

RESULTS

The hypothesis for the study stated that there would be a positive difference in student on task behavior after the implementation of the Tier II Intervention, Check-In Check-Out. Data collection for both the pre-test week and pos-test week were gathered through collection of indicated rating scales translated to percentages. The graph below demonstrates the increase of on-task behavior for students prior to implementation of Check-In Check-Out (pretest) and during implementation of Check-In Check-Out (posttest).

Figure 1

Pretest and Posttest of Student On-task Behavior
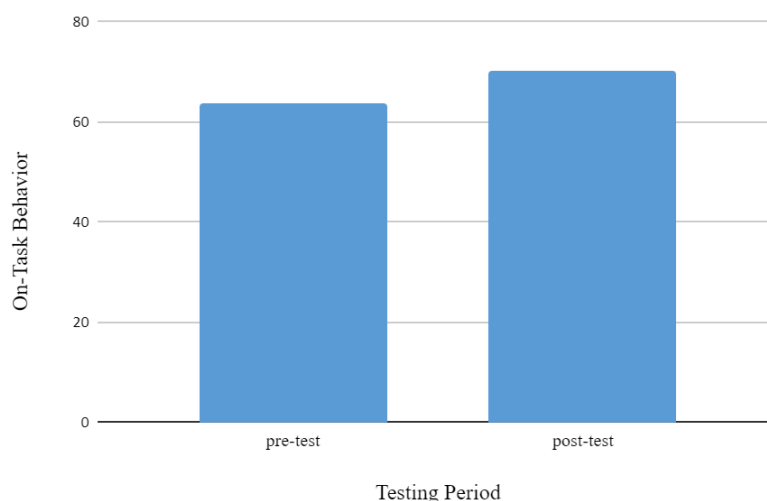
A dependent groups *t*-test revealed that there was not a statistically significant difference in on-task behavior before the implementation of Check-In Check-Out ($M = 63.67$, $SD = 31.07$, n = 3), as compared to after Check-In Check-Out was implemented ($M = 70.00$, $SD = 18.36$, $n = 3$), with small effect size, $t(2) = -0.55$, $p > .05$, $d = .25$. On average there was a 6.33 difference on student on-task behavior.

CHAPTER V

DISCUSSION

The purpose of this study was to determine if the Tier II intervention, Check-In Check-Out, had a positive effect on student on-task behavior. The hypothesis stated that implementation of Check-In Check-Out would increase student on-task behavior. The hypothesis was not accepted because the results show that there was no significant increase of student on-task behavior.

Implications and Results

As a result of the study, two out of the three students demonstrated an increase in on-task behavior with the implementation of the Tier II intervention Check-In Check-Out, while one student demonstrated a decrease in on-task behavior. The Check-In Check-Out program allowed for students to meet with their special education teacher daily to discuss target learning behaviors, set goals, and discuss opportunities for re-teaching as necessary. The special education teacher was able to act as a mentor to the students and provide feedback at a much higher rate than previously received within the Tier I instructional framework. This study did not prove a strong connection between teacher Check-Ins and student growth of on-task behavior. Many factors could cause for such behavioral discrepancies and will later be discussed in threats to validity.

Connections to Previous Literature

Weber et al. (2019) described Check-In Check-Out in their study. Their research included implementing Check-In Check-Out in order to decrease identified negative student learning behaviors. Their research, although similar in ways to the research conducted in this study,

involved other measurements such as increasing and scaffolding teacher support throughout the research period. Weber et al. (2019) began research with baseline data collection without any supports, the following week included the Check-In Check-Out point sheet, and the last week included teacher feedback in conjunction with the point sheet.

In the study conducted all three students demonstrated positive outcomes with the implementation of Check-In Check-Out. The high level of positive outcomes can largely be attested to the specifications in the researchers' determination of student participants. When determining student participants, Weber et al. (2019) purposively did not include students that may negatively impact the response to intervention. Learning behaviors defined as a negative impact on the Check-In Check-Out program are behaviors that ignore and not seek positive adult attention.

This difference in selection to student participants in Check-In Check-Out program could attest to the reason the study outlined in the current research demonstrated student participants to show minimal growth to a decrease in on-task behavior from the pre-test analysis. According to Hoang et al. (2018), students demonstrating disaffection, passivity, and disinterest in school are more likely to struggle with building productive relationships with their teachers in school. These disassociated feelings to the academic setting directly correlate to the time taken to build meaningful student/teacher relationships that enable progress to be made.

Threats to Validity

The greatest threat to the validity of these results is the uncontrollable and non-typical school year and setting the students were provided. The research was conducted in the 2020-2021 school year. During the time of implementation of Check-In Check-Out, students

experienced a large shift in the number of students and teachers they were seeing and working with every day. The 2020-2021 school year included continual revised protocols for the Covid-19 virus, including elementary staff and students returning to the building for virtual, hybrid, or face-to-face learning. The week of Check-In Check-Out implementation, the study group of students went from learning in the special education office, to rotating classrooms in the general education setting with a small group of their newly returned teachers and peers. This is a threat to validity because the environment in which students were baselined in changed quite significantly and caused disruption in their previously known routines and procedures.

Implications for Future Research

In future research, longer observation time frames should be considered. The recommendation would be to complete the implementation of Check-In Check-Out over a span of two to three weeks. This would allow students the opportunity for appropriate and positive relationships to be built through the portion of teacher feedback, and demonstrate greater growth. During the observation period in this student, students were spending more time getting acquainted to their point sheets and additional teacher feedback, without the opportunity to develop mastery of the process.

In addition to lengthening the observation timeframe, in future research, it should be considered to expand the participants population size. Although adequate data was able to be collected to demonstrate opportunities for positive implantation from three student participants, a larger population size should be considered. Including a greater number of students could allow the researcher to compare results of students with varying academic needs and self-management behaviors and develop greater conclusions of the effectiveness of Check-In Check-Out on a wide range of student needs.

Conclusion

Although not statistically significant the research demonstrates that student on-task behavior can be increased utilizing the Tier II intervention Check-In Check-Out. The data shows that individual students did improve behavior over the research time frame. If the learning atmosphere could have remained more consistent and constant, students would have had a greater opportunity to demonstrate success with academic routines.

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Appendix A

Name: _____   Date: _____

Today's Goal Focus Area: _____   %: _____

Follow Teacher Directions	Y P N X	Y P N X	Y P N X	Y P N X	Y P N X
Complete Work Thoughtfully	Y P N X	Y P N X	Y P N X	Y P N X	Y P N X
Focused on Instruction	Y P N X	Y P N X	Y P N X	Y P N X	Y P N X
Ask for Help When Needed	Y P N X	Y P N X	Y P N X	Y P N X	Y P N X
Active Participant	Y P N X	Y P N X	Y P N X	Y P N X	Y P N X
Total:					

_____

Y: Yes= 2   **P**: Partial (Required Prompts)=1   **N**: No=0   **X**= No Opportunity to Demonstrate Skill

_____
_____
_____

Parent Signature: _____