Check-In, Check-Out (CICO)
CICO is an intervention designed to reduce mild problem behavior and improve classroom engagement by increasing the amount of behavioral feedback students receive (Hawken & Breen, 2017). Research suggests that CICO will be effective for 65-75% of students (Hawken et al., 2014). For others, CICO can be modified to better suit their behavioral needs by adapting, intensifying, and individualizing components of the intervention to match the function of behavior.

**Behavioral Function**

- Tangible (15)
- Escape (9)
- Attention (8)

**Functional Behavior Analysis**

**Function Based Support at Tiers 2 and 3**

Functional behavior assessments (FBAs) are often used to generate hypotheses about potential functions of problem behaviors (Gresham et al., 2001) and create function-matched interventions. Researchers have successfully used multicomponent treatment packages to address the behavioral needs of individuals whose behavior serves multiple functions (e.g., Carr & Carlson, 1993), but support is limited regarding contemporary school-based interventions.

**Purpose of the Current Study**

The purpose of this study is to extend the literature to support an intensive CICO procedure to address behaviors that serve multiple functions for students in general education classrooms.

## Participants

- **3rd grade male students** who were referred by their classroom teachers for disruptive classroom behavior. Multiple functions (i.e., access to attention, escape from tasks, and tangible items) were identified via a brief FBA.

## Measures

The dependent variable was percentage of academically engaged behavior. Other measures included a treatment integrity checklist and social validity scales (Behavior Intervention Rating Scale [BIRS; Elliot & Treuting, 1991] and Children’s Intervention Rating Profile [CIRP; Witt & Elliot, 1983]).

## Procedures

The CICO procedure was implemented within a one-hour period of the day, where the CICO coordinator provided behavioral feedback via a daily progress report (DPR). Intervention began with an initial check-in to review behavioral expectations, provide encouragement, and set the point goal for the initial block of instruction. The CICO coordinator then conducted an observation to measure academic engagement and compliance with behavioral expectations outlined on the DPR.

The CICO coordinator provided the student with performance feedback and delivered reinforcement if applicable. The student then transitioned back to the classroom for the second observation period. The check-out followed the same procedures as the mid-point check. Students were instructed to bring the DPR home to be signed by their parent.

## Treatment Integrity

CICO intervention procedures were implemented with 100% fidelity across 20% of observations.

## Interobserver Agreement for Behavior Observations

Interobserver agreement (IOA) was assessed once per week, or for 20% of observations, and was calculated using interval-by-interval agreement. Observations were collected across all participants equally. Average total agreement for observations was 89% (range: 86-96%).

## Individual Student Outcomes

- **Percent On Task**
  - Participant 1 = .67, 90% CI [.58-.76]
  - Participant 2 = .54, 90% CI [.46-.64]
  - Participant 3 = .39, 90% CI [.30-.48]

## Social Validity

Teacher responses to the BIRS and student responses on the CIRP indicated high acceptability of intervention procedures and outcomes.

## IV. Conclusion

Implications

- With the wide base of research support for CICO (e.g., Bruhn et al., 2014) and the findings of the present study, targeted interventions that address multiple functions represent a time- and cost-efficient way to serve students with a variety of behavioral needs. These modifications to CICO can serve as a bridge between Tier 2 and Tier 3 support.

- If a solid CICO system is established as a pillar of Tier 2 in PBIS schools, minor adjustments—such as intervention timing, frequency of feedback, or function-based reinforcement procedures as used in our study—may represent a feasible way to continuously adapt and meet the needs of students receiving behavior support services.

Future Research

Future research may consider comparing basic CICO, function-matched CICO, and intensified CICO for multi-function behavior to better define the implications of the findings of the present study. Specifically, researchers should seek to examine whether all intervention components are needed, or whether a more streamlined procedure would yield similar rates of success for the identified sample.

## References