

# The effects of check-in check-out on the academic planning and behavior of African American males

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## Abstract

**Purpose** – The Check-in Check-out (CICO) program is a Tier II behavioral intervention that has received empirical support as an effective way to reduce problem behaviors (Hawken and amp; Horner, 2003; March and amp; Horner, 2002). The purpose of this study is to use an intervention that combined CICO with social skill instruction and academic planning with three African-American ninth-grade males identified with emotional and behavioral disorders. A concurrent baseline across participants design was used to evaluate participants' performance on academic planning and behavior. Results indicate that the combination of social skill instruction and academic planning with the CICO mentoring program improved participants' academic planning and behavior.

**Design/methodology/approach** – This study used a concurrent multiple baseline across participants design to determine the effect of the CICO mentoring program. CICO was combined with academic planning and social skills training to determine the effect on the DRC scores and the student's educational success skills. This study included three phases: baseline, intervention (which included academic planning, social skills training and CICO) and maintenance.

**Findings** – All of the participants were below 50 per cent during baseline for points earned on the daily report card and the execution of steps for academic planning. During intervention, all of the participants had an increase in level and trend for both skills. Participants were able to maintain the skills two weeks after intervention.

**Research limitations/implications** – This study has several limitations. First, the study was conducted in an urban setting; therefore, it cannot be generalized to other geographical populations, such as rural or suburban students. Second, the study is not generalizable to self-contained settings, resource rooms or other school environments. Third, the use of DRC data, as opposed to direct observations of behavior, is a strong limitation. Consequently, it is possible that improvements in DRC scores were because of changes in teacher perceptions rather than actual changes in student behavior.

**Practical implications** – The study presents several implications for future studies. First, researchers could investigate different service-level settings (e.g. self-contained or resource) and different settings (e.g. suburban or rural). Second, researchers could focus on varied populations that are targeted for inappropriate behavior or academic difficulties such as English Language Learners. Researchers could also examine the effects of tutoring with CICO and investigate if mentoring is generalizable to community settings.



**Social implications** – Social validity outcomes from students, parents and classroom teachers who participated in this study were positive. Although social validity measures do not add to data for our dependent variables, it is important to consider perceptions from our stakeholders. Students indicated that they found daily mentoring sessions helpful and beneficial. Based on student perceptions and performance and teacher feedback, components of CICO were effective in reducing disruptive behavior of African-American males at the high school level.

**Originality/value** – Not only does the study focus on African-American males in high school, but also contributes to the literature by focusing on the increase of students' academic planning skills, social skills and the reduction of office discipline referrals. The version of CICO used in the present study included the use of FBAs. Few studies found in the literature even mentioned conducting an FBA before or during the implementation of CICO with successful results (Campbell and Anderson, 2008; March and Horner, 2002). The authors also monitored the positive gains of the student using Daily Report Cards (DRC). For this study, DRC is simply a method of reporting success to the mentor, student, parent and mentee.

**Keywords** Multicultural, Education, Ethnicity, Academic planning, Social skills

**Paper type** Research paper

### Disproportionality of exclusionary practices of African-American males

Data released in 2014 by the US Department of Education Office for Civil Rights indicates that African-American males in our nation's middle and high schools are:

- disproportionately disciplined;
- suspended and expelled from school at a rate three times greater than white students;
- receive more multiple suspensions than students from other racial backgrounds;
- represent 32 to 42 per cent of those suspended or expelled; and
- have a higher drop-out rate.

Because of this phenomena, African-American males are over-identified as having Emotional and Behavioral Disturbance (EBD) (Lamont *et al.*, 2013). Although the aforementioned statistics are jaunting, the African-American male is not solely the cause. The perceptions of African-American male student behavior are driven by the white, middle class context in which they occur.

Bourdieu (2005) argues that each cultural class has a framework, a set of norms, values and ideas. Middle class dominant culture norms, values and experiences prepare children for school so they "just fit in" with the school's behavioral, social and academic expectations. In contrast, children from the working class culture, who may not have had such experiences, are devalued, have difficulty assimilating to the norm and are more likely to struggle in educational settings. The aftermath results in a cultural gap.

Oakes *et al.* (2015) defined the cultural gap as a theoretical, conceptual and practical disconnect between the culture (values, traditions, customs, beliefs, etc.) of the learners, the communities from which they come and the differing proponents of the educational institutions. Therefore, cultural behaviors displayed by African-American students many times, are perceived by educators and administrators as non-compliant and disrespectful and most often, these infractions are endured more by students of color, typically males, and students from low-income families (Jordan and Anil, 2009) and contribute to expulsion and out-of-school suspensions resulting in more office referrals (Gregory and Weinstein, 2008). Consequently, students are repeatedly suspended for the same violation, providing evidence that suspensions are not proactive in preventing future offenses and result in even less success for students (McCurdy *et al.*, 2007; Razfar, 2011; Webb-Johnson and Long, 2012). These infractions are one of the major causes of the over-identification of African-American males in

EBD (Codrington and Fairchild, 2012; Skiba *et al.*, 2006) and exacerbate drop-out behavior (Losen and Martinez, 2013; USA Department of Education Office for Civil Rights, 2014).

### Check-in check-out intervention

Although the problem of over-identification is intensified by the cultural gap and is increased by the schools inability to adapt and understand the culture of all children represented in a microcosm, methods to provide African-American males with a set of social skills that work well in these settings has proven to be effective (Brophy, 2011; Kourea *et al.*, 2016; Robinson-Ervin *et al.*, 2016). CICO is a simple behavioral intervention designed for use during a single 15- to 30-minute period (Dart *et al.*, 2012). Someone checks in with the student (i.e. teacher, mentor) to set behavioral goals at the start of the day, then checks out with the student at the close of the day to rate that student's conduct and award points or other incentives earned for attaining behavioral goal(s). The structural goals of CICO are to:

- increase appropriate behavior and contingent adult feedback;
- improve the daily structure for students; and
- provide feedback to families regarding student behavior via daily report cards (DRC) (Crone *et al.*, 2004).

There are several strategies or methodologies that can be incorporated with this system. For example, in this study, the approaches of mentoring, social skills training and positive behavior supports in conjunction with functional behavior assessments were used during the CICO period.

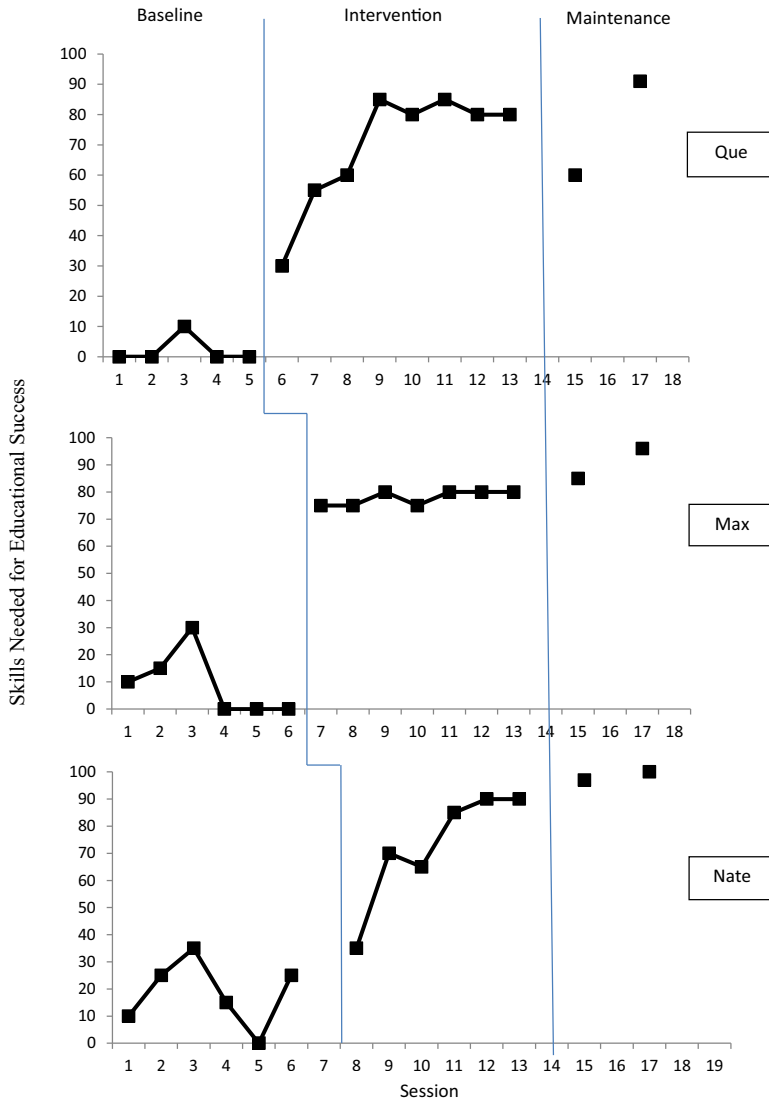
### Components used with CICO

Mentoring, defined as having a trusted counselor or guide, is an evidence-based intervention that has been recognized as effective in increasing appropriate behaviors, while decreasing office discipline referrals and out of school suspensions (Maynard *et al.*, 2014; Owens *et al.*, 2012). Incorporating Positive Behavior Intervention and Support (PBIS), a behavior management system that supports and teaches desirable changes in behavior through positive reinforcement in the environment, produces even more of a positive effect in the classroom setting when combined with mentoring (Crone, Horner and Hawken, 2004; Todd *et al.*, 2008) both in elementary (Cheney *et al.*, 2009) and high school settings (Sinclair *et al.*, 2005).

Social skills training (SST), a method that has a strong positive research base, is a form of instruction used by teachers and trainers to help persons learn positive and varied ways of relating to others through verbal, as well as non-verbal behaviors involved in social interactions (McDaniel *et al.*, 2017; Robinson-Ervin *et al.*, 2016). The mentor provides the platform for introducing appropriate social skills instruction, social goal setting for the day and reinforcement when the goals are met. Functional behavior assessments (FBAs), procedures to ascertain the purpose or reason for behaviors displayed by individuals, can be used to target particular behaviors in social skill instruction. The use of FBAs has had positive results in the literature (Bruni *et al.*, 2017; Scott and Alter, 2017).

### Purpose of study and research questions

The purpose of this study was to assess CICO's effects for a sample of African-American males with EBD in an urban high school. Although the effectiveness of CICO are demonstrated at the elementary level (Hawken *et al.*, 2007; Swoszowski *et al.*, 2012; Todd *et al.*, 2008), there are no studies that specifically target African-American males (McCurdy *et al.*, 2007; Sinclair *et al.*, 2005), especially at the high school level. Not only



**Figure 1.**  
Per cent of steps for  
skills needed for  
educational success  
executed

does the study focus on African-American males in high school, but also contributes to the literature by focusing on the increase of students' academic planning skills, social skills and the reduction of office discipline referrals. The version of CICO used in the present study included the use of FBAs. Few studies found in the literature even mentioned conducting an FBA before or during the implementation of CICO with successful results (Campbell and Anderson, 2008; March and Horner, 2002). We also monitored the positive gains of the student using Daily Report Cards (DRC). For this study, DRC is simply a method of reporting success to the mentor, student, parent and mentee.

Research Questions: This study addressed the following research questions:

- RQ1.* To what extent did the CICO program combined with academic planning social skills instruction improve participants' execution of skills needed for educational success?
- RQ2.* To what extent did the CICO program combined with academic planning and social skills training increase participants skill levels (e.g. measures on the daily report card scores (DRC), (a method for reporting student success)?
- RQ3.* What are the perceptions of teachers, students, parents and facilitators of the CICO implementation and outcomes?

## Method

### *Participants*

African-American male students were chosen because of disproportional:

- placement in special education (particularly in the EBD category);
- disciplinary referrals; and
- out of school suspensions.

Three African-American ninth grade males identified with EBD were chosen for the study. Selection criteria included:

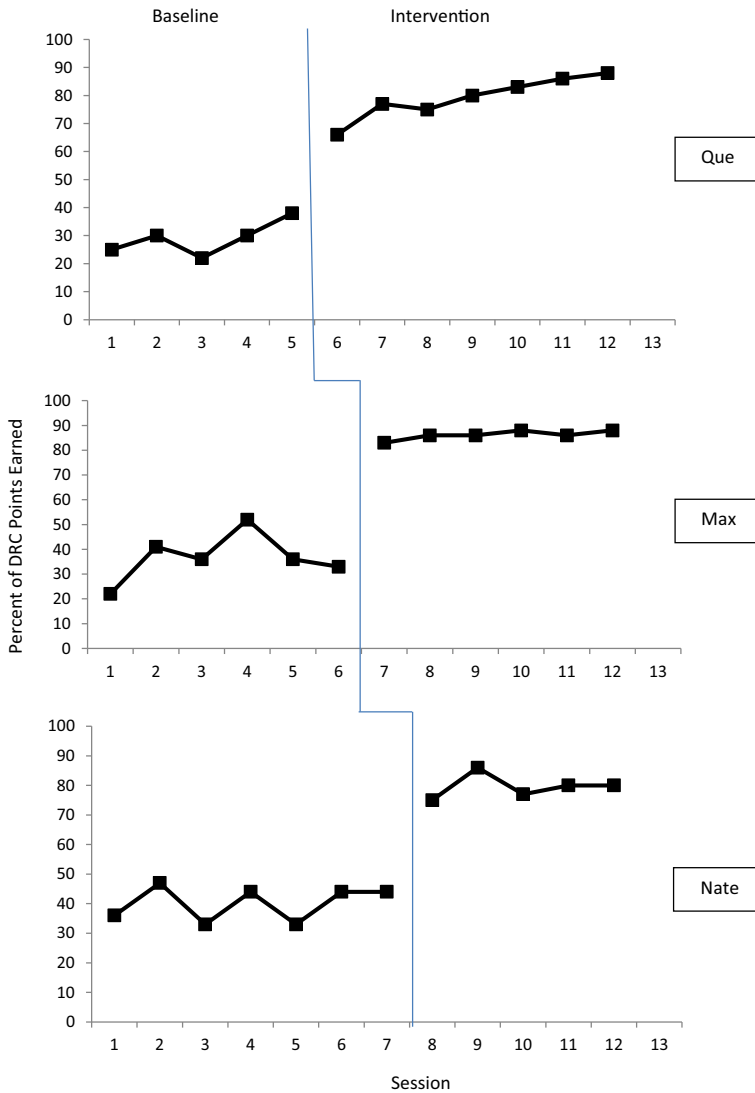
- teacher recommendations;
- review of school records;
- classification of EBD by the school system; and
- a minimum of five office referrals for disruptive behavior (ranging from non-compliance to aggressive behavior) the current or previous year.

The students were self-identified as African-American male, attended the same school, were in the ninth grade and had the parents' informed consent to participate in the study.

Two content area teachers were chosen to verify each student's at-risk status by completing the *Social Skills Improvement System Rating Scales* Teacher Form (SSIS; Gresham and Elliott, 2008). The SSIS is an individually administered, standardized procedure measuring three subscales: *Social Skills*, *Competing Problem Behaviors* and *Academic Competence*. Only students receiving "Below Average" levels or lower on two or more of the of the seven *Social Skills* subscales (indicating that they exhibit fewer than the average number of social skills for individuals in their norm group) or "Above Average" level or higher on two or more of the five *Competing Problem Behaviors* subscales were eligible for participation in this study.

*Que.* Que (pseudonyms are used to identify students), a 15-year-old, ninth-grade African-American male student with EBD demonstrated in class; a) a lack of focus; b) inappropriate communications; c) aggressive and disruptive behavior; and d) inappropriate language. He had numerous suspensions and used controlled substances. According to Que's current Individualized Education Program (IEP), he had a good attendance record but demonstrated academic difficulties. At the time of the study, he was performing in the low range in all of his core classes, earning Fs on his last report card.

*Max.* Max, a 15-year-old, ninth-grade African-American male with EBD with a mild intellectual disability, demonstrated noncompliance, physical aggressive behavior in class and disruptive verbal behavior. The previous year, he had several out of school suspensions.



**Figure 2.**  
Per cent of Daily  
Report Card (DRC)  
points earned

Max was: a) failing three out of four classes; b) not making progress towards his IEP goals; and c) could not consistently organize academic task.

*Nate.* Nate, a 15-year-old, ninth-grade African-American male with EBD, demonstrated several in inappropriate behaviors such as:

- being off-task and withdrawn;
- refusal to complete classroom assignments;
- poor planning and organization of task;

- poor peer relationships; and
- failure in four courses.

His psychologist also diagnosed Nate with Major Depressive Disorder.

### *Setting*

The study was conducted in a large, urban, Southeastern school district. The school had an enrollment of 2,050 students that was 48.4 per cent African American, 38.4 per cent Caucasian, 15.5 per cent Hispanic, 2.5 per cent Asian, 0.9 per cent American Indian and 1.2 per cent multi-racial. In all, 21 per cent of students received special education services and 58 per cent received free or reduced lunch. The intervention and mentor training occurred in the mentor's classroom.

### *Experimental design and procedures*

The study used a concurrent multiple baseline across participants design to determine the effect of the CICO mentoring program. CICO was combined with academic planning and social skills training to determine the effect on the DRC scores and the student's educational success skills. The study included three phases: baseline, intervention (which included academic planning, social skills training and CICO) and maintenance.

*FBA process.* Before beginning the baseline conditions, FBAs were conducted for all participants. There were no mentoring sessions during that time. The FBA process included:

- conducting interviews of students, teachers and parents;
- conducting observations in the classroom; and
- completing antecedent, behavior, consequence assessments.

The teacher-directed functional assessment interview form, functional assessment observation form, and competing behavior model form were borrowed from the *Functional Assessment and Program Development for Problem Behavior* handbook (O'Neill *et al.*, 1997).

During the student interview, participants were asked questions about their inappropriate behaviors such as, when the behavior generally occurred, and what they gained or avoided by displaying the behaviors. Parents and teachers were asked similar questions in relation to the environments where they saw the participants. Antecedent, behavior, consequence assessments were conducted for each participant, in two separate settings (e.g. math, English, history), each lasting a 90-minute class period.

*Baseline (A).* During the baseline phase, participants were asked to perform important daily academic tasks by the mentor (e.g. checking their binder for assignments, bringing materials to class, discussing behavioral issues appropriately) but were not given any instruction on how to perform these daily tasks. Each of the student's four classroom teachers completed daily report card scores at the end of every class period; however, the students did not see their scores. Based on the baseline data, the participant with the lowest and most stable level of performance entered the intervention phase first. The second participant for intervention implementation was selected using the same method.

*Intervention (B).* The researcher and mentor analyzed the data from the FBAs to determine the likely function of challenging behavior and to develop social skills goals for each participant. Based on this, the mentor implemented the intervention, which consisted of academic planning and social skills instruction. Detailed information is provided below.

*Mentor/teacher training.* The mentor, selected by the school administrator because of his positive interaction with students, was a 30 year old, African-American male teacher and

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basketball coach. At the time of the study, the district had employed him for three years. The mentor was trained by the researcher to audio record the sessions and to implement the CICO with fidelity. Fidelity included:

- appropriately following the steps of the checklist;
- assisting students with setting daily goals;
- completing the DRC; and
- conducting mini social skills activities based on FBA data.

The researcher trained the mentor and teachers using role-play, discussion and modeling. Classroom teachers were shown how to complete the DRC. The researcher demonstrated to the teachers the method of using the behavior rating and reminded them that the interactions between teacher and student were to be positive when acknowledging behaviors.

*Social skills instruction.* Once the possible function of each participant's disruptive behavior was determined using the FBAs, the researcher and mentor developed social skill activities and goals for each participant. Social skill activities were modified from *Skill-Streaming the Adolescent: New Strategies and Perspectives for Teaching Prosocial Skills* handbook (McGinnis, 2011) for their daily sessions:

- based on FBA results;
- according to the applicable setting; and
- for one-on-one instruction.

FBA data analysis showed that Que's disruptive classroom behaviors (e.g. talking, laughing and playing) was an attempt to avoid completing assignments and usually occurred during independent assignments that he did not understand; the result being removal from class. The mentor used the "Asking for Help" activity (McGinnis, 2011) for remediation. The mentor and Que collaborated on the four steps in the activity:

- defining the problem;
- determining if assistance is needed;
- choosing a person to assist (e.g. classroom teacher, classroom assistant, or peer); and
- informing them of the problem and ask for assistance.

The activity included discussion, role-playing and checking for comprehension of the solution. During the afternoon sessions, both mentor and student discussed the success of the intervention.

An analysis of FBA data determined that Max's off-task/non-compliant behavior was to avoid completing classroom assignments and was more likely to occur when he was required to complete a non-preferred task. The mentor used the "Following Instructions" activity (McGinnis, 2011) which consisted of four steps:

- (1) listen carefully for instructions;
- (2) ask questions to get clarity;
- (3) repeat the instructions for clarity; and
- (4) perform what is required.

The FBA analysis of Nate's data revealed his non-compliance behavior (refusal to complete classroom assignments) was to avoid classwork. The behavior usually occurred when he



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was required to work in a group. The mentor used the “Joining In” activity (McGinnis, 2011) that consisted of four steps:

- (1) determine participation in the activity;
- (2) find a suitable way to join in;
- (3) choose the best time to join in; and
- (4) join the activity.

*CICO Intervention.* Participants were provided the CICO intervention for ten, 15-min CICO sessions per week (at the beginning and the end of the day). The mentor explained the CICO procedure during the first morning check-in. Check-ins created a positive beginning for the day and they included:

- engaging the student in a brief chat;
- determining the completion of homework;
- giving the DRC to the student;
- checking for necessary supplies;
- collecting the DRC that had been signed by the parent; and
- positively affirming the student (e.g. have a good day).

Participants were required to:

- state the assignments they had to complete for each of their four classes;
- produce the handouts or materials required to complete the assignment(s);
- state a behavior problem to address in their class(es); and
- state strategies to address these problems (based on FBA results).

Using the DRC, general education classroom teachers rated the behavior of the students throughout the day at the end of each class period. Teachers were also encouraged to remind participants of alternatives to disruptive or inappropriate behavior. At the end of each day, the mentor:

- encouraged each participant to review the day;
- inquired about homework assignments and the materials needed to complete them;
- discussed any behavior issues that may have occurred that day and the strategies used; and
- totaled the points earned and gave appropriate reinforcements (e.g. snacks, pencils).

Participants were required to:

- state problem behaviors that day;
- state the strategy they used to address the problem;
- show their written assignment(s) for each class in their planner; and
- provide materials needed to complete the assignment(s).

Students were provided with a planner to write daily assignments. Students’ performance of task were during mentoring sessions were graphed daily (skills needed for educational success). The mentor used a procedural fidelity checklist provided by the researcher during CICO.

*Maintenance (C).* Two weeks after the intervention ended, maintenance data were collected. One probe point occurred two weeks after intervention was terminated and then one week later. During the maintenance phase, participants did not participate in daily check-ins or social skills training. Maintenance data were collected only for the skills needed for educational success. Maintenance data were collected during end-of-course exams (non-school day schedule); therefore, DRC data were not gathered.

## Data collection

### *Dependent variables*

The two dependent variables included the participants' performance of skills needed for educational success and the DRCs. The primary dependent variable was the skills needed for educational success and were based on points earned during the mentoring sessions as stated earlier in the article (i.e. a) state what assignments they had to complete; b) produce materials required to complete the assignment(s) etc.) For each task, the student could earn 0 (no performance of the skill), 1 (minimal performance of the skill) or 2 (correct performance of the skill). The mentor recorded the skills for education success during morning and afternoon sessions. The secondary dependent variable was the points earned on the DRC. Teachers rated each participant's behavior daily up to 180 points maximum. Teachers rated students on five items related to:

- following directions;
- completing assignment (s);
- talking at appropriate times; and
- displaying appropriate behaviors.

Students could earn 1-9 points per item based on a Likert scale (1-3, seldom/never, 4-6, sometimes and 7-9, often/always). They had to earn 80 per cent possible points to receive a reward (i.e. candy, snacks, pencils, etc.).

Once the first participant displayed an increase during mentoring sessions and in DRC scores; another baseline data probe was administered to the remaining participants to determine if levels of performance remained stable before the next participant was introduced to the intervention. Once all participants reached a criterion of 80 per cent during mentoring sessions and DRC scoring, the intervention was terminated. The criterion was set at 80 per cent based on the low levels of baseline data of two of the participants. Also, in an educational setting, 80 per cent is considered a B average. The researcher also wanted participants to feel the goal was attainable in an effort to avoid attrition.

### *Dependent variables and inter-rater agreement*

Mentoring sessions were audio recorded to evaluate inter-rater reliability (IRR). (Live observation and video recording were rejected, as they were too intrusive). The researcher trained two outside doctoral students on the data collection process. The raters practiced scoring a mentoring session for each participant and reached 100 per cent agreement. IRR data for the dependent measure of execution of skills needed for educational success were collected for 33 per cent of the sessions across all conditions using the "Student's Checklist for Check-in Check-out" form. The raters listened to a total of 30 digitally audio-recorded sessions and scored participants' responses using the checklist. An item-by-item (26 items) analysis was used to calculate percentage of agreement by dividing number of agreed items by total number of applicable items on the checklist and multiplying by 100. During baseline, IRR was as follows: 94 per cent with a range of 92-96 per cent for Que; 96

per cent with a range of 92-100 per cent for Max; 95 per cent with a range of 92-100 per cent for Nate. During intervention, IRR was as follows: 92 per cent with a range of 85-96 per cent for Que; 95 per cent with a range of 92-96 per cent for Max; 96 per cent with a range of 92-100 per cent for Nate. IRR data were not collected for DRC data, as it was not possible to audio record the teachers completing the DRC checklists.

#### *Procedural fidelity and inter-rater reliability*

Treatment fidelity data were collected using a 14-item “*Procedural Checklist for Check-in Check-out*” to measure the degree to which the interventions were implemented as planned. One of the trained raters listened to 33 per cent of the audio-recorded mentoring sessions. The rater then circled either a “YES” or “NO” for each item on the checklist to determine fidelity regarding the mentor’s implementation of the components of CICO. The percentage of procedural fidelity was calculated by dividing the number of correctly performed steps by the number of total steps (14) and multiplied by 100. Overall, procedural fidelity ranged from 85 to 100 per cent with a mean of 92 per cent. The steps that were not always conducted included the mentor:

- totaling points earned;
- asking for the signed DRC; and
- providing the reward if earned.

Inter-rater agreement was calculated for 50 per cent of the instructional sessions on which procedural fidelity data were collected. During baseline, inter-rater reliability was as follows: 95 per cent for Que; 98 per cent for Max; and 100 per cent for Nate. During intervention, inter-rater reliability was as follows: 100 per cent for Que; 95 per cent for Max; and 95 per cent for Nate.

#### *Social validity*

At the conclusion of the study, the researcher interviewed the participants, students and mentor. The interviews took approximately 20-30 min to complete and measured their satisfaction regarding the acceptability, benefits, practicality and effectiveness of the interventions. The same teachers who completed the SSIS inventory for the participants were asked to complete the social validity questionnaire. Teachers were asked to complete a six-item questionnaire using a four-point Likert rating scale (e.g. 1 = no improvement, 2 = slight improvement, 3 = moderate improvement or 4 = a lot of improvement) that addressed:

- degree of improvement in the target behaviors;
- appropriateness, effectiveness and practicality of the interventions used; and
- changes in perceptions and likelihood of continued uses. It took teachers approximately 5 min to complete the questionnaire.

## **Results**

The results are as follows. They include the dependent variables: a) skills need for educational success; b) DRC points; and c) social validity.

#### *Skills needed for educational success*

Que had a mean percentage of 1.7 per cent with a range of 0-10 per cent during baseline. During the intervention phase, he scored a mean percentage of 69.3 per cent with a range of 30-80 per cent with an increasing trend. Maintenance probes for Que were 60 and 91 per cent with a mean

of 75.5 per cent. Even though there was a drop-in percentage from intervention to maintenance, the mean during maintenance was higher than the mean during intervention, suggesting success with short-term maintenance of skills.

Max had a mean percentage of 9.2 per cent with a range of 0-30 per cent during baseline. His data remained at 0 per cent during baseline when Que entered the intervention phase. During the intervention phase, he had a mean percentage of 77.9 per cent with a range of 75-80 per cent and no trend (zero slope). Maintenance probes for Max were 85 and 96 per cent with a mean of 90.5 per cent. The mean during maintenance was higher than the mean during intervention suggesting success with short-term maintenance of skills.

Nate had a mean percentage of 18.3 per cent with a range of 0-35 per cent during baseline. His data showed an increasing trend when Que entered intervention phase, but at 25 per cent, he was still below his highest baseline point. During the intervention phase, he had a mean percentage of 72.5 per cent with a range of 35-90 per cent and an increasing trend. Maintenance probes for Nate were 97 and 100 per cent with a mean of 98.5 per cent. The mean during maintenance was higher than the mean during intervention suggesting success with short-term maintenance of skills.

*DRC points.* Que had a mean percentage of 29 per cent with a range of 22-38 per cent during baseline. During the intervention phase, he had a mean percentage of 79.3 per cent with a range of 66-88 per cent. There was a distinct level change from baseline to intervention, suggesting the intervention was highly effective for improving DRC scores.

Max had a mean percentage of 36.7 per cent with a range of 22-52 per cent during baseline. His data remained stable when Que began intervention. During the intervention phase, he had a mean percentage of 86.2 per cent with a range of 83-88 per cent. There was a distinct-level change from baseline to intervention, suggesting the intervention was highly effective for improving DRC scores.

Nate had a mean percentage of 40.1 per cent with a range of 33-47 per cent during baseline. His data remained stable when Max began intervention. During the intervention phase, he had a mean percentage of 79.6 per cent with a range 75-86 per cent. There was a distinct level change from baseline to intervention, suggesting the intervention was highly effective for improving DRC scores.

### *Social validity*

Overall, interviews with the participants indicated positive perceptions of the strategies, benefits and interactions of mentoring intervention package. All of the participants could recall a time when meeting with the mentor circumvented conflict or had a positive impact on their day. When questioned about what could be changed to make the mentoring program better, there were no suggestions. When questioned about what they liked most about the program, common responses were:

- meeting with the mentor;
- getting feedback from teachers every day; and
- the rewards they earned for making points on their DRCs.

Results of the interviews completed by the participants' mothers indicated that they liked being informed often of their students' performance and stated a perceived improved status of their child's grades, behavior and organization abilities.

The mentor was questioned regarding training. He stated:

The checklist was very helpful in understanding what to do and allowed me to know what the goals were. The program had a positive impact on the participants. Even if they did get into trouble, this program created some accountability, because many times the parents have no idea what's going on at the school. I like getting to see the kids, getting to know them, watching them start out shaky and then improve.

The mentor hypothesized that meeting with him daily deterred some of the behavior issues because students wanted a good report. Four of the six teachers rated student's behavioral improvement as (3 = moderate or 4 = a lot of improvement), five of the six teachers rated the intervention's effectiveness on students' success in the classroom as (4 = slightly effective or 5 = effective) and three of the six teachers rated the practicality of the intervention as (3 = practical or 4 = very practical). Four of the six teachers rated students' academic improvement as (2 = slight or 3 = moderate improvement).

### Discussion

The purpose of this study was to investigate the effects of CICO combined with the academic planning and social skills instruction for African-American males with EBD in an urban high school setting. Findings from this study indicated a likely functional relationship between the mentoring intervention and improvement in academic planning and appropriate social skills, as measured by an increase of DRC scores. Participants' percentage of correct responses of completion of task during mentoring sessions averaged 12.3 per cent during the baseline condition and 77.1 per cent during intervention.

This study also contributes to the notion of incorporating academic planning, social skills instruction of CICO for students (Hawken *et al.*, 2011; Owens *et al.*, 2012; Vannest, *et al.*, 2010). Each of the participants were able to complete the planning checklist, state the steps of social skills that would benefit them in the classroom and school environment and improved on their DRC scores. Previous researchers have had positive results by targeting social behaviors (Reinke *et al.*, 2013) and disruptive behaviors (Lam *et al.*, 1994).

Social validity outcomes from students, parents and classroom teachers who participated in the study were positive. Although social validity measures do not add to data for our dependent variables it is important to consider perceptions from our stakeholders. Students indicated that they found daily mentoring sessions helpful and beneficial. Based on student perceptions and performance and teacher feedback, components of CICO were effective in reducing disruptive behavior of African-American males at the high school level and are consistent with the results of previous studies (Todd *et al.*, 2008) that found that CICO increased appropriate behaviors (i.e. talking at appropriate times in class, following directions).

### Limitations and implications for future research

This study has several limitations. First, the study was conducted in an urban setting; therefore, it cannot be generalized to other geographical populations such as rural or suburban students. Second, the study is not generalizable to self-contained settings, resource rooms or other school environments. Third, a single case research design study generally has limited or no external validity because of small sample size and lack of randomization. Further replications with more participants and more sophisticated designs are needed.

The study presents several implications for future studies. First, researchers could investigate different service-level settings (e.g. self-contained or resource) and different settings (e.g. suburban or rural). Second, researchers could focus on varied populations that are targeted for inappropriate behavior or academic difficulties such as English Language Learners. Third,

the researchers could investigate if the sex or ethnicity of the mentor adds to the effectiveness of the mentoring. Researchers could also examine the effects of tutoring with CICO and investigate if mentoring is generalizable to community settings.

## Conclusion

Exclusionary practices significantly affect African Americans, particularly males and those with a disability are at an even greater risk (Losen and Martinez, 2013; Losen and Gillespie, 2012; Losen *et al.*, 2015; US Department of Education, 2014). The current study makes two important contributions to research literature. First, the results of the study support previous research (Lampley and Johnson, 2010) that CICO positively influences academic planning and behavior. Second, the study supports the combination of social skill instruction, academic planning and the CICO mentoring program as viable interventions to improve academic planning and behavior for African-American students (Campbell and Anderson, 2008; Cheney *et al.*, 2009; Crone *et al.*, 2004; Owens *et al.*, 2012; Sinclair *et al.*, 2005; Todd *et al.*, 2008; Vannest *et al.*, 2010). Finally, this study gives credence to mentoring programs and PBIS strategies (e.g. social skill instruction) and their positive effects on the behavior and academic achievement of African-American males.

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