# Does Student Success Skills have an impact on school connectedness and self-regulation of inner-city, African-American elementary students?

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## Introduction

Student Success Skills (SSS) is a school counseling intervention that supports student academic achievement by helping students develop the necessary skills for success (Brigman & Campbell, 2003). SSS focuses on teaching cognitive, metacognitive, self-management, and social skills, building positive attitudes, and creating a caring classroom environment (Villares, Lemberger, Brigman, & Webb, 2011). In this study by Lemberger and Clemens, the researchers examined how the small-group counseling component of the SSS intervention affects the development of executive functioning, metacognition, and feelings of connectedness in African – American elementary school students in an inner-city school district. Although previous research on SSS has found increases in academic achievement for students who participated in the intervention, no research to date has focused on the intermediate constructs, such as connectedness to school and self-regulation, which might result from participation in SSS.

School connectedness and self-regulation together "represent the manner in which a student experiences his or her environment and how that student thinks and behaves in response to the environment" (p. 450). Feelings of school connectedness are described as a sense of safety and belonging to the school community and being more engaged in learning (Witherspoon, Schotland, Way, & Hughes, 2009). Students who feel more connected to their school environment are more academically motivated and less likely to engage in antisocial behaviors.

Self-regulation, which includes aspects of executive functioning (attention, intentional behavior, emotional control, and so on) and metacognition, is a reflection of students' ability to motivate and direct themselves as well as the ability to reflect on thoughts and behaviors in useful and intentional ways (Zimmerman & Schunk, 1989). Self-regulation impacts both social-emotional skills and academic success in school contexts and is hence an important set of behaviors to impact.

The authors explain that they chose to study inner-city, African American students identified by their teachers as at-risk academically and behaviorally because relative to their peers, this group has been found to be less connected to school environments (Furlong, O'Brennan & You, 2011) and to commonly experience disadvantages in terms of academic opportunities. Evidence-based interventions can be especially useful in supporting the personal, social, and

learning needs of at-risk students, and previous research has found that students of lower socioeconomic status who have access to and are able to internalize social supports may have more success overcoming the impact of poverty and improving academic performance (Malecki & Demaray, 2006).

## Method

Three research questions were posed to evaluate if the SSS intervention impacts: (a) students' perceptions of connectedness to school; (b) students' perceptions of their metacognitive skills; and (c) teacher reports of students' executive functioning. The authors hypothesized that positive gains would be reported post-intervention for all three research questions.

Four schools in an inner-city district in the Midwest were selected to participate in the study based on three criteria: low performance on state achievement tests, high percentage of students receiving free or reduced lunch, and school-level commitment to the program. Teachers identified students in grades 4 and 5 as potential participants for this study, based on low academic performance and disruptive behavior in the classroom. A total of 120 students were selected and randomly distributed between control and treatment groups. The final sample of students was 38 fourth grade students and 62 fifth grade students. All students participating in the study identified as Black or African-American, matching the schools' demographics, and the sample was approximately evenly distributed by gender.

Four counseling graduate student interns participated in one day of training on SSS, delivered small-group counseling sessions, and participated in weekly supervision sessions during the intervention. The SSS program typically includes five classroom lessons and eight small-group counseling sessions, but for this study, only the small-group counseling component was used. The eight small-group counseling sessions focused on different SSS strategies, including models for peer-coaching and social-problem-solving. Only students who attended at least six of the eight treatment sessions were included in data collection to ensure treatment fidelity. Students in the control group received SSS during the second part of the year, but data were not collected on those outcomes.

Three instruments were used to measure the effectiveness of the intervention; two student self-report inventories and one rating scale completed by a teacher. *The Child and Adolescent Social Support Scale* (CASSS; Malecki, Demaray, & Elliott, 2000) measures students' perceptions of social support with five separate, 12-question subscales. For this study, the researchers only used the People In My School subscale of the CASSS. *The Junior Meta-Cognition Awareness Inventory* (Jr. MAI; Sperling, Howard, Miller, & Murphy, 2002), a 12-item student self-report inventory that measures third through fifth graders' likelihood to think about one's

thoughts in a given circumstance, was also administered to participating students. Teachers assessed students' executive functioning using *The Behavior Rating Inventory of Executive Function* (BRIEF; Gioia, Isquith, Guy, & Kenworthy, 2000). The teacher form of the BRIEF includes 86 descriptions of student behavior that are separated into eight subscales (Inhibit, Shift, Emotional Control, Initiate, Working Memory, Plan/Organize, Organization of Materials, and Monitor). Teachers rated each behavior as *never*, *sometimes* or *often* occurring.

## Results

The results of this research "provide support for each of the three research hypotheses, namely, that an offering of the small-group counseling component of the SSS program can influence the development of self-reported connectedness to school and metacognitive skill, in addition to teacher-reported changes in select executive functioning behaviors in inner-city African American elementary school students" (p. 454) . Sink and Stroh's (2006) guidelines were used for determining the effectiveness of a school counseling intervention: $\eta_p^2$, .01 = small, .06 = medium, and .14 = large. Hypothesis 1 was supported with a statistically significant increase in students' self-reporting of school connectedness in the treatment group ($p = .04$) with a small effect size ($\eta_p^2 = .04$). For Hypothesis 2, students in the treatment group reported significantly higher levels of metacognitive skills than those in the control group ($p \leq .01$), with a large effect size ($\eta_p^2 = .19$). For Hypothesis 3, there was a significant difference found in teacher reports of students' executive functioning between the treatment and control groups ($p = .03$, $\eta_p^2 = .17$). When the executive functioning subscales of the BRIEF were separated, the subscales of Working Memory ($p = .03$, $\eta_p^2 = .05$), Plan/Organize ($p = .04$, $\eta_p^2 = .04$), and Organization of Materials ($p \leq .01$, $\eta_p^2 = .12$) were all statistically significant, but the remaining subscales on the BRIEF were not.

## Critical Perspective

This study examined whether students' feelings of school connectedness and ability to self-regulate were impacted by participation in the SSS small-group counseling intervention. The students in the study were all low income, urban, African American elementary students identified as academically and behaviorally at-risk by their teachers. The findings indicate that the intervention had a significant and sometimes powerful impact on these critical student outcomes.

As with most studies conducted in schools, some limitations of these findings exist. This study included only one school district, had a small sample size, and examined the impact of the intervention on a single, homogenous ethnic group. Although measures used were selected based on evidence of being culturally appropriate, there was varying degrees of information to support the cultural

appropriateness of the instruments or of the intervention itself. There was also no information about confounding factors such as life events or other experiences that may have happened outside of the classroom. In addition, because the study did not look at persistence of effect, observed gains may be short-term and should be studied longitudinally to ensure long-term effectiveness.

## Implications

School counselors are crucial members of school-wide efforts to develop connected learning communities and to directly teach practical skills for managing academic and social behaviors in the classroom. Current reforms call for evidence-based interventions in our work, and many studies, including this one, have found the Student Success Skills intervention to be effective and beneficial to students of various backgrounds.

This current study builds on previous research on Student Success Skills, and indicates that the small group component of the intervention is effective in increasing feelings of connectedness and executive functioning skills with at-risk, low-income, urban, African-American elementary-level students. Five previous research studies have supported the efficacy of the SSS program in impacting academic outcomes students from varying demographic contexts, including a study which specifically examined the effects of a culturally translated version of SSS on the reading and math achievement of fourth and fifth grade Hispanic students (León, Villares, Brigman, Webb, & Peluso, 2011).

This study is also important because it demonstrates the impact of a school counseling intervention on key academic achievement indicators. Determining the short-term impact of interventions on factors such as self-regulation and connectedness which then influence broader academic outcomes can help school counselors map the links between their interventions and important school-wide accountability measures. As we come to better understand which student skills and behaviors most impact academic achievement and other important educational outcomes, school counselors can focus classroom and small group interventions on these factors.

"Evidence-based efforts can neutralize certain inequities experienced by some children" (p.450). As such, school counseling interventions such as Student Success Skills support efforts towards advocacy and equity by working to eliminate the barriers that can impede school success. As Lemberger and Clemens point out, this study provides educators with some grounds for optimism because it demonstrates that when students are provided information about how to maximize skills and develop relationships shown to be essential in classrooms, they will take advantage of and benefit from those opportunities.

Erin Wetherell, Darleen M. Hostetler, Karen Harrington, & Carey Dimmitt
University of Massachusetts, Amherst, CSCORE

*References*

Brigman, G., & Campbell, C. (2003). Helping students improve academic achievement and school success behavior. *Professional School Counseling, 7*, 91–98.

Furlong, M.J., O'Brennan, L. M., & You, S. (2011). Psychometric properties of the ADD Health School Connectedness Scale for 18 sociocultural groups. *Psychology in the Schools, 48*, 986-997.

Gioia, G. A., Isquith, P. K., Guy, S. C., & Kenworthy, L. (2000). *Behavior Rating Inventory of Executive Function*. Odessa, FL: Psychological Assessment Resources.

León, A., Villares, E., Brigman, G., Webb, L., & Peluso, P. (2011). Closing the achievement gap of Hispanic students: A school counseling response. *Counseling Outcome Research and Evaluation, 2*, 73-86.

Malecki, C. K. & Demaray, M. K. (2006). Social support as a buffer in the relationship between socioeconomic status and academic performance. *School Psychology Quarterly, 21*, 375-395.

Malecki, C. K., Demaray, M. K., & Elliott, S. N. (2000). *The Child and Adolescent Social Support Scale.* DeKalb: Northern Illinois University.

Sperling, R. A., Howard, B. C., Miller, L. A., & Murphy, C. (2002). Measures of children's knowledge and regulation of cognition. *Contemporary Educational Psychology, 27,* 51–79.

Villares, E., Lemberger, M., Brigman, G., & Webb, L. (2011). Student Success Skills: An evidence-based school counseling program grounded in humanistic theory. *The Journal of Humanistic Counseling, Education and Development, 50*, 42–55.

Witherspoon, D. W., Schotland, M., Way, N., & Hughes, D. (2009). Connecting the dots: How connectedness to multiple contexts influences the psychological and academic adjustment of urban youth. *Applied Developmental Science, 13*, 199–216.

Zimmerman, B. J., & Schunk, D. H. (Eds.). (1989). *Self-regulated learning and academic achievement: Theory, research, and practice.* New York, NY: Springer-Verlag.