School Counseling Research Brief 2.3, April 15, 2004 Center for School Counseling Outcome Research

Does Implementing a Research-Based School Counseling Curriculum Enhance Student Achievement?

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

Increasingly school counselors are being called upon to demonstrate that they contribute to students' academic achievement. *No Child Left Behind* (*NCLB*) has led to an intense focus on the use of standardized test scores in measuring academic achievement and on educator accountability for producing measurable achievement gains. *NCLB* also calls for all educators to use interventions that have been demonstrated to be effective through empirically-based research. The ASCA National Model (2003) calls for increased attention to the documentation of impact through "results data" that include standardized measures of achievement.

In an exceptionally well designed study, Brigman and Campbell (2003) examined whether the combination of curriculum-based and group-based interventions with a focus on cognitive and metacognitive skills, social skills, and self-management skills known to be related to school success would have a measurable impact on students' test scores on a standardized state achievement test.

Method

Research Design:

Brigman and Campbell (2003) used a quasi-experimental, pre-post test design to answer their research question: "Do certain school counselor-led interventions impact student achievement and behavior?" The researchers used the Math and Reading Scores of the Florida Comprehensive Assessment Test (FCAT) as their dependent measure. The performance of the treatment group on the FCAT was contrasted with a control group that was matched for achievement level. Treatment and control group students were randomly selected from schools with equivalent racial composition and socioeconomic levels. An analysis of covariance was used to statistically control for pre-existing differences between the experimental and control groups.

Participants:

The treatment group included 185 students who were randomly selected from schools that implemented the study's counselor-led interventions. The control group included 185 students who were randomly selected from schools that did not implement the interventions. Only student who initially scored between the 25^{th} and 50^{th} percentiles on the FCAT were included in this study. Treatment and control groups were from schools that were matched on geographic proximity, race, and socioeconomic level. Students from the 5^{th} , 6^{th} , 8^{th} and 9^{th} grade participated in the study.

Instruments:

The state's norm-referenced achievement test was used as the measure of student achievement. Scores on the reading and math sections of the FCAT were used as dependent measures.

Interventions:

In the treatment schools, school counselors implemented *Academic and Social Skills Support: Student Success Skills Curriculum* (Brigman & Goodman, 2001) in both classroombased and small group formats. Classroom and group interventions focused on cognitive, social and self-management skills that have been demonstrated by research to be related to gains in academic achievement. Both interventions are documented in sufficient detail so that they could be replicated reliably across settings. The researchers in this study also employed several methods to ensure the fidelity of the treatment across schools and time. These methods included training sessions, peer coaching sessions, and the monitoring of counselor use of prescribed materials.

Results

The Analysis of Covariance detected highly significant differences between the treatment and control groups on both the reading (p. < .003) and math (p. < .0001) scores. In both cases the treatment group means were significantly higher than the control group means. Unfortunately, the researchers did not report the effect sizes for these differences. Inspection of the group means and standard deviations would suggest that the effect sizes are considerable.

Implications:

These results clearly indicate that school counseling interventions that focus on the development of cognitive, social and self-management skills can result in sizable gains in students' academic achievement. These small group and classroom-based school counseling interventions resulted in significant score improvements on state achievement tests.

It should be noted that the students who participated in this study had scored below average on the state test. Further research needs to document whether these interventions also improve the achievement of the higher scoring students.

The Academic and Social Skills Support: Student Success Skills Curriculum shows promise as a replicable and effective approach to improving students' academic achievement. Further implementation and evaluation of this curriculum is clearly desirable.

Editorial Remarks

The Brigman and Campbell (2003) study is a very rigorous piece of outcome research that reflects an important sea change in school counseling research. Much of the earlier school counseling research seemed to be dominated by the search for evidence that school counselors are effective. Often, this research involved weak designs that evaluate poorly documented and nonreplicable interventions. In contrast, Brigman and Campbell's study evaluates a standardized curriculum that is based upon research on skills related to academic achievement.

The new focus for school counseling research should be "What school counseling **interventions** are effective in which circumstances?" Answering this question will require the development, implementation and rigorous evaluation of standardized, "manualized" interventions. The school counseling profession needs to move toward wide use of standardized approaches (akin to the Second Step Violence Prevention Curriculum) and away from counselor-generated interventions in order to develop a research base, identify best practices, and assure effectiveness. Towards this end, school counseling practitioners ought to be paying much more attention to the identification of research-based practices and the use of evidence-based interventions. Standardized interventions should replace "home-made" interventions. School counselor educators ought to focus on teaching standardized interventions that reflect evidence-based practices and on teaching prospective school counselors how to identify research-based interventions.

The profession also needs a mechanism to continuously evaluate the degree to which interventions are supported by research. Toward this end, the Center for School Counseling Outcome Research has organized the National Panel for Evidence-Based School Counseling Practice. The Panel has developed a process for determining the degree to which a practice is supported by scientific evidence and is now beginning to evaluate the school counseling research literature. The Panel will be disseminating periodic reviews in order to summarize the current status of evidence-based practices and to facilitate needed outcome research.

The study conducted by Brigman and Campbell (2003) was the result of a researchfocused collaboration between university-based counselor educators and public school-based practitioners. This collaboration facilitated both the rigorous research design and the ecological validity of the interventions. Furthermore, this collaboration was endorsed and supported by the district. The development of university-public school research partnerships is crucial to the profession's development of its research base. Both counselor educators and school counseling practitioners need to recognize the importance of research partnerships and to commit to developing them. ASCA and ACES ought to champion and support research partnerships as mechanisms critical to the health and vitality of the school counseling profession. National model programs should commit to engaging in research partnerships.

Finally, since effect size is a very important way to measure and compare the impact of interventions, school counseling journals ought to revise their editorial policies to require that all outcome studies report effect sizes.

References

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- Brigman, G., & Goodman, B.E. (2001). Academic and social skills support: Student success skills. In G. Brigman & B. E. Goodman, *Group counseling for school counselors: A* practical guide (pp. 106-131). Portland, MA: J. Weston Walch.

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