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The impact of school counseling on student educational outcomes in high schools: What can we learn about effectiveness from statewide evaluations of school counseling practice in Nebraska and Utah?

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# Introduction

A critical factor in establishing public credibility and trust for a profession is the degree to which rigorous research indicates that the work of the profession has value and worth. Research evidence of this type in school counseling is difficult to find for several reasons. The outcomes of school counseling are somewhat less easily defined and measureable than those of other professions. Few rigorous, large-scale studies of the benefits of school counseling have been conducted, although these studies have typically found that school counseling is very beneficial to students (see Lapan, Gysbers, & Sun, 1997; Sink, Akos, Turnbull & Mvududu, 2008; Sink & Stroh, 2003). Good research is expensive and unfortunately few foundations or federal agencies have been interested in supporting research in school counseling.

In March 2010, Public Agenda released a research report on school counseling effectiveness, funded by The Bill and Melinda Gates Foundation. This report documents widespread dissatisfaction of students and parents with the availability, quality and comprehensiveness of school counseling services related to successful college placement and transitions. While the Public Agenda research report clearly documents some serious concerns, it does not address the origins of these problems. Consequently, the report provided little guidance in how to make school counseling services more effective.

The first step in creating stronger school counseling programs is to determine the characteristics and conditions that lead to effectiveness. This past year, CSCORE partnered with state departments of education and state school counseling associations in five different states, including Connecticut, Missouri, Nebraska, Rhode Island and Utah, to conduct rigorous statewide studies of the effectiveness of school counseling. The Nebraska and Utah studies are now completed and are being prepared for public dissemination. The results from these studies are compelling and provide valuable information about school counseling program features and practices that lead to more effective programs and more favorable student outcomes.

# Methods

CSCORE used the same research methods for both the Nebraska and Utah statewide studies.

#### Measures and Instruments

Principals and counselors from every public high school in both states were invited to complete an extensive on-line survey that asked participants about the characteristics of their school counseling programs, the ways in which school counseling services are delivered, and the nature of the work of school counselors. The survey consisted of three parts: *The School Counseling Program Implementation Survey (SCPIS)* (Carey & Elsner, 2005; Clemens, Carey & Harrington, 2010); a standardized measure of program implementation comprised of items used in previous state-level evaluations (Lapan, Gysbers, & Sun, 1997); and items specific to either Nebraska or Utah that were developed in consultation with personnel at each state department of education. The SCPIS was designed to reflect the degree of implementation of ASCA National Model program characteristics. Factor analysis of the SCPIS indicates that separate (but related) subscales can be created to reflect implementation of management practices, delivery system practices and data use endorsed by the National Model.

CSCORE also collected data from state department of education databases on a wide range of student educational outcomes (e.g., graduation rates, discipline rates, attendance rates, ACT completion rates, achievement test scores, and Perkins program completion). From these databases, we also collected information on school demographic variables that are known to influence student outcomes (e.g., percentage of low-income students in the school, yearly per pupil expenditures of the school). We were therefore able to determine if characteristics of the school counseling program and the nature of the work of school counselors were related to improved student outcomes after controlling for differences between schools on demographic factors known to influence these outcomes.

# Data Analysis

Stepwise hierarchical linear regression and simple regression procedures were used to study the relationships between characteristics of school counseling practice in high schools and student outcomes. In the stepwise linear regression, demographic variables (e.g., per pupil expenditures, percentage of low-income students in the district) that predict a given student outcome measure (e.g., attendance rate) were entered first into the model. Then, measures of school counseling program characteristics (e.g., student-to-counselor ratio) were entered into the model to determine if these characteristics accounted for additional variability in the student outcome measure over and above that related to demographic characteristics. Thus it was possible to identify characteristics of school counseling prographic characteristics of school counseling prographic characteristics.

# Results

While the findings are intricate and complex, the Nebraska and Utah studies provide clear and consistent evidence of four important sets of results:

# (1) School counseling in high schools contributes to important educational student outcomes.

Across the two states, school counseling was shown to be related to a range of important student outcomes including increased Math proficiency levels, increased Reading proficiency levels, lower suspension rates, lower disciplinary rates, increased attendance rates, higher graduation rates, higher Perkins program completion rates, greater percentages of students taking the ACT and higher average ACT scores. These results show clearly that after schools are equated for differences in student outcomes due to demographic factors, school counseling adds value to the education of students and enhances their engagement and performance.

# (2) Student-to-counselor ratios in high schools matter.

In both states, the ratio of students-to-counselors in a school was strongly related to its student outcomes. In Nebraska more favorable ratios were associated with improved attendance rates, enhanced technical proficiency in Perkins programs, and increased completion rates in Perkins programs. Similarly, in Utah more favorable ratios were associated with both increased attendance rates and decreased discipline incident rates. These associations are robust. In Utah, for example, the student-to-counselor ratio accounted for an additional 12% of the variability in the attendance rate after controlling for demographic differences among schools. In order for a school counseling program to be effective there must be a sufficient number of counselors to address student needs.

# (3) How the school counseling program is organized matters.

Results from Utah, which has been implementing the Comprehensive Developmental Guidance model for over 25 years, indicate that the longer a school has been implementing this model, the better are its educational outcomes. Results from both Utah and Nebraska indicate that organizing the school counseling program according to ASCA National Model principles has positive effects on student outcomes. In Utah, National Model management practices appear somewhat more important than other factors. For example, the Program subscale of the SCPIS accounted for 11% of the variability in average ACT scores after controlling for demographic differences among schools. In Nebraska, delivery system practices were found to be more important than management practices. The Delivery System subscale of the SCPIS accounted for an additional 6% of the variability in mathematics proficiency and an additional 3% of the variability in reading proficiency after controlling for demographic differences among schools. In sum, these results suggest that more strongly organized programs are better able to produce positive outcomes for students.

# 4) What counselors choose to do matters.

Both the Nebraska and Utah results indicate that career development-focused interventions seem to be particularly important in producing positive academic outcomes

with students. In both states, items that reflect a strong career development component of the school counseling program (e.g., career goals are used to construct student schedules) were positively related to a wide range of beneficial student outcomes including improved attendance, lower disciplinary rates, higher Perkins program completion rates, and increased scores on state achievement tests. Hopefully, in the near future CSCORE will be able to provide additional research-based guidance on which school counseling activities are most effective in terms of being most strongly associated with specific positive student outcomes.

# Implications

In sum, these studies produced some very intriguing results that need to be examined across other states. In the next few months, CSCORE will complete the analyses with the remaining three states and will disseminate the results from all of the statewide studies on the CSCORE website and in professional journals. In addition, we will be rescaling the outcome measures from the three states with the most similar data matrices (i.e., Missouri, Nebraska and Utah) so that they can be analyzed together. We expect these results to help to clearly establish the positive impact of school counseling and to provide guidance for how school counseling can be made even more effective.

We also hope that these studies will pave the way for a comprehensive national policy study of school counseling effectiveness that is needed to guide and support effective practice. Such a large-scale study to identify effective practices will be costly and will therefore need the support of either private foundations or the federal government.

Meanwhile, we can conclude that if a high school wants to improve its educational outcomes, school leaders should hire enough counselors to satisfy the needs of students and parents, support the counselors as they establish a well-organized program that serves all students, and focus on implementing more effective interventions and discontinuing ineffective interventions.

# Critical Perspectives

The major limitation of these (and all previous) statewide studies of school counseling effectiveness stems from the fact that the studies are designed as cross sectional rather than as longitudinal research. The studies measure characteristics of school counseling programs that vary across schools within a state in order to see which characteristics are most strongly related to student outcomes. This cross sectional approach is frequently used in policy research and often yields accurate and useful information. However, given the complexity of the programs and the student outcomes being measured, it is likely that additional variables are impacting the results. For example, schools vary in their ability to implement programs in general, due for example to effective school leadership practices, as well as multiple contextual factors. Schools that do well implementing their school counseling program might also have strong implementation of other programs (e.g., math instruction, or truancy prevention). The

observed associations between student outcomes and counseling program implementation thus is mediated, to some unknown degree, by other factors.

It is therefore necessary to conduct "longitudinal" evaluation of school counseling practices that measure student outcomes before and after planned changes in school counseling practice to see if improvements in student outcomes follow from improvements in school counseling practice. At present, Massachusetts offers an important opportunity for such work. Massachusetts has recently received *Race to the Top* funding from the Federal Department of Education. Under the state's proposal, districts can use these funds to improve school counseling programs and practices. Focused longitudinal evaluations of the impact of such improvements could be extremely valuable in not only documenting that school counseling is effective but also in identifying how specific improvements in practice are related to correlated specific improvements in student outcomes.

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