Results connect the implementation of the college and career counseling components of a comprehensive school counseling program and lower student-to-school-counselor ratios to a reduction in suspension rates and disciplinary incidents for Connecticut high school students. Principal ratings of college and career counseling services provided in their school extended benefits for students to include better attendance and graduation rates, as well as lower disciplinary incidents and suspension rates. This article highlights the importance of college and career counseling services and smaller ratios for promoting student success.
ers collected data for this study, the overall graduation rate for all high school seniors in Connecticut was 79%, but was only 58% for Hispanic students and 66% for African American students. In addition, Connecticut school counselors working in financially poorer districts have, on average, higher student-to-school-counselor ratios (i.e., these counselors are likely to be responsible for assisting more students than counselors who work in more affluent districts).

**Purpose of the Study**
The purpose of the present study was to examine the relationship between the implementation of Connecticut’s comprehensive school counseling program model at the high school level and its role in enhancing key outcome markers of student success (i.e., each high school’s attendance, graduation, and discipline rates). In the process of moving school counseling from a marginal role to one that is central to each school’s primary mission (Sprinthall, 1981), the structure of a comprehensive counseling program was intentionally designed to affect measurable gains in such critical indicators of student academic success (ASCA, 2012). This was and is the overarching strategy that the Connecticut School Counselor Association and the Connecticut State Department of Education have used in their attempt to create and then implement a comprehensive model across all high schools in their state.

Researchers collected two types of data to explore the relationship between gains in important outcomes for high school students and the implementation of the Connecticut comprehensive school counseling program model. First, the authors gathered student outcome data (e.g., suspension rates) and school-level demographic data (e.g., per-pupil expenditures, the percentage of students receiving free or reduced-price lunch, and student-to-school counselor ratios) for each high school participating in this study from the Connecticut Department of Education website. Second, an estimate of the extent to which the Connecticut comprehensive school counseling program was being implemented in each high school participating in this study was obtained through an online survey completed by school counselors and principals. The unit of analysis used in this study was at the level of the school building. School counselors and principals rated what services school counselors were providing to their students and the characteristics of the school counseling program being delivered in their school building. The researchers then used these ratings to test for benefits for students attending high schools with more fully implemented comprehensive school counseling programs.

**Research Questions.** This study examined the following three research questions.

1. Are school counselor and principal ratings of the extent to which school counselors provide key services in their school building as identified in the Connecticut model (i.e., college and career counseling services and responsive services to meet students’ social and emotional needs) related to critical student outcomes (i.e., attendance, graduation rates, suspension rates, and discipline incidents)?

2. After statistically controlling for differences in Connecticut high schools related to key demographic factors (e.g., per-pupil dollar expenditures, the percentage of students receiving free or reduced-price lunch in each high school, and enrollment size), do smaller student-to-school-counselor ratios and greater implementation of key elements of Connecticut’s comprehensive school counseling program model (i.e., college and career counseling and responsive services) predict crucial outcomes for high school students?

3. How do Connecticut school counselors spend their work time? To what extent is school counselor work time encumbered by the performance of job tasks not related to the implementation of the adopted Connecticut state model and what consequences does this have for high school students?

**METHOD**

**Procedures and Participants**
The authors used two types of data to examine the relationship between implementation of the Connecticut comprehensive model and student outcomes. First, school-level student outcome and demographic data were obtained from the Connecticut Department of Education website. Second, information about each high school’s school counseling program was obtained through the “Principal and Counselor Survey” (Lapan & Carey, 2007) that has been used in previous state-level school counseling evaluations, supplemented with items specific to the state of Connecticut that were developed in consultation with members of the Connecticut School Counselors Association. This online survey was sent to principals and school counselors at all Connecticut public high schools. A total of 96 schools participated in the study and 72 school counselors, 24 guidance directors, and 35 principals responded to the survey. Researchers analyzed all...
Variables
School-level student outcome variables. For each high school participating in this study, the authors gathered data on four student outcome variables from the Connecticut Department of Education website. The outcome measures included (a) yearly suspension rates per 100 students \((M = 14 \text{ suspensions}, SD = 9)\), (b) total disciplinary incidents per year for each high school \((M = 469 \text{ disciplinary incidents}, SD = 530)\), (c) average daily attendance \((M = 94.87\% \text{ attendance}, SD = 2.08\%)\), and (d) high school graduation rates \((M = 95.26\% \text{ graduated}, SD = 4.37\%)\).

School-level student demographic variables. The authors also gathered data on three demographic variables for each high school participating in this study from the Connecticut Department of Education website. The demographic measures included (a) the percentage of students receiving free or reduced-price lunch \((M = 16\% \text{ receiving free or reduced-price lunch}, SD = 17\%)\), (b) the per-pupil expenditures \((M = \$12,130 \text{ per student}, SD = \$1,856)\), and (c) the student enrollment size for each high school \((M = 1016 \text{ students}, SD = 509)\).

School-level school counseling variables. The authors selected three school counseling variables for use in the correlation and regression analyses: (a) student-to-school counselor ratios, (b) college and career counseling services provided to students, and (c) responsive services provided to students. Given the relatively small sample size, the number of demographic and dependent variables to be examined, and results from prior research (e.g., Lapan & Harrington, 2009), the authors decided to focus on those items on the online survey that assessed the extent to which school counselors were implementing the college and career counseling and responsive services components of the Connecticut model. Data on student-to-school-counselor ratios were collected from the Connecticut State Department of Education website \((M = 205 \text{ students for every 1 school counselor}; SD = 47 \text{ students})\).

Eleven items on the online survey asked counselors and principals to rate the extent to which college and career counseling services were being fully implemented in each high school. Each item represented an important aspect of the responsive services component recommended in the Connecticut state model, such as counselors provide effective college counseling services to all students. These items demonstrated reliable and strong internal consistency, with Cronbach’s alpha = .89. The mean on this 5-point implementation scale for responsive services was 4.01 for school counselors \((SD = .79)\) and 3.78 for principals \((SD = .90)\).

Table 1 reports the correlations between ratios, counseling program implementation, and student outcomes. Three key findings are evident. First, high schools where school counselors have smaller numbers of students to care for also have statistically signifi-

<table>
<thead>
<tr>
<th>Measures</th>
<th>Suspend</th>
<th>Disc Inc</th>
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<th>Graduation</th>
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</thead>
<tbody>
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<td>1. Ratios</td>
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<td>.30**</td>
<td>.02</td>
<td>.01</td>
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<tr>
<td>2. Coll/Career (SC)</td>
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<td>.23</td>
<td>.14</td>
<td>.19</td>
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<tr>
<td>3. Resp Serv (SC)</td>
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<td>.24*</td>
<td>.16</td>
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<td>4. Coll/Career (PR)</td>
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<td>-.33</td>
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<tr>
<td>5. Resp Serv (PR)</td>
<td>-.16</td>
<td>-.29</td>
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Note. Ratios = Student-to-school-counselor ratios in each high school. Coll/Career (SC) = school counselor ratings of the extent to which they are implementing college and career counseling services in their high school. Resp Serv (SC) = school counselor ratings of the extent to which they are implementing responsive services in their high school. Coll/Career (PR) = principal ratings of the extent to which school counselors are implementing college and career counseling services in their school building. Resp Serv (PR) = principal ratings of the extent to which school counselors are implementing responsive services in their high school. Suspend = the suspension rates per 100 students reported for each high school. Disc Inc = the total number of disciplinary incidents reported for each high school. Attendance = the average daily attendance reported for each high school. Graduation = the percentage of students graduating from each high school.

N = 96 school counselors and 35 principals. Due to the smaller number of principals completing the survey, strong correlations for principals from .28 to .33 approach statistical significance at the \(p < .05\) level but don’t quite reach it. *\(p < .05\), **\(p < .01\).

RESULTS

Research Question 1
Table 1 reports the correlations between ratios, counseling program implementation, and student outcomes. Three key findings are evident. First, high schools where school counselors have smaller numbers of students to care for also have statistically signifi-
cant lower rates of student suspensions and fewer disciplinary incidents. Sec-
ond, in high schools in which school counselors described providing greater
levels of college and career counseling services to students, lower suspension
rates were reported. In addition, when counselors indicated that they were
providing greater levels of responsive services to students, lower suspen-
sion rates and disciplinary incidents also were found. And third, principal
ratings support findings from counselor ratings. In high schools where
principals reported greater levels of college and career counseling services
provided to students, attendance and graduation rates were higher. Only
the small sample size (n = 35) prevents the relationship between suspension
rates and disciplinary incidents and college and career counseling (and the
relationship between responsive services and total number of disciplinary
incidents) from also reaching statistical significance for the principals’ ratings
(i.e., at the p < .05 level).

Of concern was the clear finding in this sample that, as per pupil expendi-
tures decreased, the student-to-school-counselor ratios significantly increased
(r = -.46, p < .001). Connecticut high
schools that spent less money for each student in attendance were also very
likely to have substantially higher ratios of students to school counselors.
In these schools, students attempt-
ing to succeed in school and move
forward with their educational and
career plans are likely to be served by
school counselors in the very difficult
position of trying to meet the needs of
very large numbers of students.

Research Question 2
Table 2 reports multiple regression
analyses predicting suspension rates and
disciplinary incidents based on student-to-school-counselor ratios
and counselor ratings of the extent
to which college and career counsel-
ing services and responsive services
were being implemented in each high
school. Although the researchers
found statistically significant cor-
rrelations, such relationships could
be merely an artifact of underlying
differences between Connecticut high
schools related to such potent influ-
ences as the percentage of students re-
ceiving free or reduced-price lunch, the
per-pupil expenditures made by each
school, and the school enrollment size.

Multiple regression analyses statisti-
cally controlled for these potentially
confounding factors. Due to the small
number of principals responding to the
survey, however, multiple regression
analyses could not be completed using
principal ratings.
Student-to-school-counselor ratios and college and career counseling services each predicted unique variance in suspension rates. After controlling for the effects of free or reduced-price lunch, per-pupil expenditures, and enrollment size, ratios explained an additional 6% and college and career counseling services predicted 3% more of the variance in suspension rates. Together, student-to-school-counselor ratios and college and career counseling services explained an additional 9% of the variance in suspension rates (after controlling for the effects of free or reduced-price lunch, per-pupil expenditure, and enrollment size). Responsive services did not explain additional portions of the variance in suspension rates after the effects for ratios and college and career counseling were removed.

Figure 1 graphs the very strong relationship found between student-to-school-counselor ratios and suspension rates. On average, high schools in this study’s sample reported 14 suspensions for every 100 students. Schools with 158 to 204 students per school counselor had 12 suspensions for every 100 students. Schools with 205 to 251 students per counselor had 15 suspensions. Schools with 252 to 297 students per counselor had 18 suspensions and schools with more than 298 students per counselor had 26 suspensions for every 100 students.

College and career counseling services uniquely predicted 3% to 4% of the variance in total disciplinary incidents after the effects of free or reduced-price lunch, per-pupil expenditures, enrollment size, and student-to-school-counselor ratios were removed. Providing students with college and career counseling services appeared to have a positive impact in reducing the total number of disciplinary incidents in Connecticut high schools. Student-to-school-counselor ratios and responsive services did not explain unique variance after the effects of these other factors were taken into account.

**Research Question 3**

School counselors reported spending approximately one third of their work time carrying out college and career counseling job tasks as specified in the Connecticut’s Comprehensive School Counseling Program (CSCA, 2000). However, only 57% of school counselors and 51% of principals said that it was either very accurate or extremely accurate to say, “The education and career planning process (currently being carried out by school counselors) involves collaboration with students and parents/guardians to assist students in developing a four-year plan.” School counselors estimated that 11% of their work time is encumbered by tasks unrelated to the four program components of the state model. However, 25% of the school counselors indicated that between 15% and 50% of their work time was spent performing non-counseling related job tasks. As counselors spent more of their time performing non-counseling tasks, they were much less likely to report that at least 80% of their work time was being used in ways that were of direct benefit to students ($r = -.53, p < .001$).

High schools where school counselors reported using data for accountability and program improvement purposes had fewer suspensions ($r = -.25, p < .05$) and higher graduation rates ($r = .29, p < .02$). Fifty percent of the counselors said it was extremely accurate, very accurate, or accurate to say, “The school counseling department uses data from student results reports to evaluate program effectiveness.” However, the remaining 50% of the counselors indicated that using data to evaluate program effectiveness was something they did not do. Counselor use of data was highly correlated with overall implementation of the Connecticut model (e.g., implementing the individual planning and responsive services components).

Finally, 25% of the counselors reported that their high school was either not attempting to implement the Connecticut model or had only started implementation in the past 1 or 2 years (42% said their schools had been implementing the model for more than 7 years and 33% indicated implementation had been in progress over the past 3 to 7 years). The longer high schools had been working to implement the state model, the more likely it was that counselors were more fully implementing college and career counseling ($r = .35, p < .002$) and
Ratios matter and what counselors do with their work time is very important to the success of Connecticut high school students. After statistically controlling for critical differences among Connecticut high schools (i.e., in the percentages of students receiving free or reduced-price lunch, per-pupil dollar expenditures, and enrollment size), this study showed that high schools that gave school counselors the opportunity to work with smaller numbers of students and where counselors used their work time to more fully provide college and career counseling services build meaningful and personalized relationships with students to motivate the development of self-constructed possible college and career futures (Flum & Blustein, 2000; Lapan, 2004; Markus & Nurius, 1986).

Strongly supporting findings from this study are results from current research (Whiston et al., 2010; Whiston & Quinby, 2009). For example, in a comprehensive meta-analysis of school counseling outcome research, Whiston et al. (2010) highlighted how school counseling interventions significantly reduce student behavioral problems. In particular, the authors pointed out that the effect of school counseling interventions on reducing disciplinary problems was “quite large” (p. 47).

In a statewide study examining the relationship between comprehensive counseling program implementation and student academic achievement in Missouri schools, researchers found some of the very strongest relationships in the reduction of suspension rates and disciplinary incidents at both the middle/junior high and high school levels (Lapan, Gysbers, & Kayson, 2006). Further, in a sample of almost 23,000 seventh-graders, across 184 middle schools, and using the ratings of close to 5,000 middle school teachers, implementation of comprehensive counseling programs was clearly connected to helping seventh-graders feel safer in their schools and have better relationships with the educators in their building (Lapan, Gysbers, & Petroski, 2001). Reductions in discipline problems and increasing students’ feelings of safety in school would eliminate many classroom disruptions and the enormous waste of teacher and administrator time required to deal with these incidents. Comprehensive school counseling programs are proving themselves to be important school-wide strategies to promote student academic achievement.

Providing all students effective college and career counseling services is a cornerstone to the individual planning component of the ASCA National Model and state models such as Connecticut’s that build off of this foundation (Gysbers & Henderson, 2012). Research from many different sources has argued for the importance of early educational and career planning, for which comprehensive counseling programs advocate. For example, in a longitudinal study following Michigan sixth-graders through to 2 years after high school graduation, Eccles, Vida, and Barber (2004) found that early college planning was an important predictor of high school course enrollment, academic performance, and successful full-time college attendance. In a recent study examining the implementation of comprehensive counseling programs in Chicago public high schools, Lapan and Harrington (2009) linked college and career counseling services to higher numbers of students taking Advanced Placement courses and higher scores on standardized achievement tests. When school counselors effectively implement the individual planning component of a comprehensive program, students experience a very positive difference in how they plan, prepare for, search, and apply to college and postsecondary training.

The critical role principals perform in supporting school counselors to implement comprehensive programs has received increased attention in recent years (e.g., Leuwerke, Walker, & Shi, 2009). In the present study, principal perceptions of the roles and responsibilities carried out by the school counselors in their building corroborated the link to lower suspension rates and discipline incidents (and extended the connection to better attendance and graduation rates). These correlations closely replicate findings from the 2006 statewide study in Missouri (Lapan, Gysbers, & Kayson, 2006).
RESULTS FROM THIS STUDY DEMONSTRATE WHAT IS POSSIBLE WHEN SCHOOL COUNSELORS HAVE CASELOADS IN LINE WITH ASCA’S RECOMMENDED RATIO OF 250 STUDENTS FOR EVERY 1 SCHOOL COUNSELOR AND USE THEIR TIME TO PROVIDE NEEDED COLLEGE AND CAREER COUNSELING SERVICES

Limitations
While the use of critical student outcomes (e.g., suspension rates) is a clear strength of this study, affecting these measurements is very difficult. Using school-level counselor self-report ratings as a predictor likely underestimates the true relationship between implementing comprehensive programs and making a positive impact on such student outcomes. Professionals in any field have a very real incentive to push their self-estimates in an overly positive direction when their work is being evaluated. With Likert ratings, this can lead to endorsement of values at the very high end of the scale, thus creating a restriction in range that makes correlations smaller. Some of this clearly is at work in this study and can be seen in the rating differences between school counselors and their principals. For example, school counselors’ mean rating of the extent to which college and career counseling services and responsive services were being implemented in their school was 3.36 and 4.01 respectively. However, principals’ mean ratings were 3.28 for college and career counseling and 3.78 for responsive services. The very high mean rating (4 on a 5-point scale) that school counselors reported for responsive services likely reduced the correlation and thus the impact reported in this study on the relationship of responsive services to student outcomes. Studies that use more discriminating measurement techniques (e.g., observational recordings) would collect data less susceptible to such restriction of range problems and allow for a fairer evaluation of the full impact of the work of professional school counselors.

Finally, although this study statistically controlled for several potent factors that confound any understanding of the relationship between comprehensive counseling programs and student outcomes, taking all potential confounds into account is not possible. For example, the state of Connecticut has made a serious attempt to implement School-wide Positive Behavioral Interventions and Supports (SWPBIS; Horner, Sugai, Todd, & Lewis-Palmer, 2005). These interventions are intended to reduce discipline problems in schools. One alternative explanation of the findings reported in this study could be that some of the reductions in discipline and suspension rates are due to these interventions and not to comprehensive counseling. However, for this to be true, the implementation of SWPBIS models in Connecticut would have to closely covary with the variability in student-to-school counselor ratios and the provision of college and career counseling services across high schools. To the authors’ knowledge, no attempt was made in Connecticut to coordinate these efforts. The authors hypothesize that, if SWPBIS data were included in this study’s regression analyses, it would make a unique and value-added contribution to explaining the variance in discipline incidents and suspension rates. The percent of variance explained would increase as the unique effects of SWPBIS interventions and comprehensive counseling programs were taken into account. Ample evidence from well-established research (e.g., Whiston et al., 2010) supports the findings connecting counseling program implementation and resulting benefits for students. Including the effects of additional potent interventions would
not eliminate the findings reported in this study. More likely, such additions would increase understanding of how to enhance such critical student outcomes that are so very difficult to impact. Further research is needed to address these issues.

**Recommendations**

Five major recommendations identify actions school counselors, school leaders, and policymakers can take immediately so that the benefits of comprehensive school counseling services reach all students.

1. Keep student-to-school counselor ratios at the high school at or below the ASCA recommended 250-to-1 levels. Cutting school counselor positions would increase ratios and have very negative consequences for students. In addition, more school counselors are needed in those Connecticut high schools where lower levels of per-pupil funding exist. As ratios increase, school counselors’ abilities diminish to build the kind of relationships with their students that motivate and facilitate academic achievement.

2. Close the implementation gap between Connecticut high schools in delivering to all students well-designed and well-thought-out comprehensive school counseling programs.

3. Reduce the amount of time school counselors spend carrying out job duties that are not aligned with the scope and sequence of the approved Connecticut comprehensive counseling program model.

4. Hold Connecticut high school counselors accountable for providing intensive, 21st-century college and career counseling services to all students.

5. Teach and then require Connecticut high school counselors to effectively use data throughout the program design and implementation phases, and during the program improvement and evaluation processes.

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**REFERENCES**


