Mental Health and Social Emotional Programming in Schools:

Missing Link or Misappropriation?

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Abstract

While differences of opinion exist on whether mental health services fall within the scope of public education, schools may represent the best opportunity to provide young people with necessary access to mental health care. Professional school counselors are uniquely qualified by training and experience to address the mental health and social emotional development needs of students, yet may be underutilized for this purpose, in part because school counselors may not be speaking the language of education, that is, academic achievement. The authors questioned whether school counseling is the missing link to advancing academic achievement or a misappropriation that deters schools from accomplishing their core mission. The literature relevant to the relationship between mental health programming and academic achievement was reviewed and recommended talking points for professional advocacy are discussed.

Mental Health and Social Emotional Programming in Schools: Missing Link or Misappropriation?

The prevalence of mental health challenges among school-aged youth continues to alarm policy makers and reformers alike. Public schools may be the most accessible institution in which advances in mental healthcare reform will be realized. According to the American School Counselor Association (ASCA, 2015), “School counselors acknowledge they may be the only counseling professional available to students and their families” (p. 57). Even so, the profession of school counseling continues to suffer from both internal and external limitations on the scope of practice and its rightful place among direct-service mental health professionals for ensuring student well-being and success (Corthell, 2014). Some argue that terms such as *therapeutic* or *clinical counseling* and *mental health intervention* or *specialist*—terms normally reserved for community-based professional counselors and school psychologists—are not appropriate to describe the scope of practice of professional school counselors (Eschenhauer & Chen-Hayes, 2005). And yet, national organizations and policy-makers continue to include school-based mental health as a critical component of addressing mental health service gaps, for example, the President’s New Freedom Commission (2003) and Hawkins et al. (2015).

In order to invite education policy makers to consider mental health prevention and intervention a critical component of education’s core business, advocates must engage in meaningful dialogue about the relationship between mental health programming to promote student well-being and academic achievement at the PK-12 level (Schellenberg, 2008). Simultaneously, the profession must advocate for full

utilization of professional school counselors to meet the growing demand on public schools to address mental health and ensure that all students succeed. In so doing, education policy makers must take a calculated risk to leverage resources for mental health prevention and intervention within the context of comprehensive educational and school counseling programming.

The purpose of this paper is to present a framework for advocacy that relies on a review of existing literature examining the relationships between education spending, mental health, student well-being, and direct academic achievement outcomes. The authors' position is that regardless of the degree of philosophical agreement about the rightful place of mental health programming in schools, schools and their professional school counselors present the most currently accessible option for delivering necessary mental health prevention, intervention and responsive services to students in need. However, it's not enough to rely on the indirect benefits of school counseling programming. Nor is it sufficient to expect academic achievement gains to result from partially-implemented school counseling programs. Rather, direct benefits to academic achievement of fully-implemented school counseling programs—for all students and particularly for those students most at-risk—must be shown to result from targeted and strategic use of professional school counselor's specialized training and expertise in mental health and social emotional programming.

The subsequent aim of this paper is to demonstrate that sufficient empirical evidence exists to document the relationship between fully-implemented school counseling programs and academic achievement gains. Furthermore, it can be shown that mental health programming and related responsive services, when properly utilized

as necessary conditions for change in PK-12 education, result in academic achievement gains where other expenditures fail. By reviewing these data and presenting them in this way, the reader is offered a concrete framework by which to advocate for full implementation (i.e., sufficient student-to-counselor ratios, allocation of time and duties, etc.) of professional school counseling that ensures student well-being and success by balancing academic and career guidance expertise with mental health/behavioral health specialty and intervention across the comprehensive developmental guidance program.

Method

The authors surveyed existing literature relevant to resource allocation in education and its' relationship with academic achievement gains, the relationship between mental health/wellness and academic achievement, the direct academic outcomes associated with the integration of mental health prevention and intervention in educational settings, and empirically-supported best practices. The authors organized this review of literature around the following questions:

1. To what extent does the literature describe a relationship between public education spending and academic achievement?
2. To what extent does the literature describe a relationship between students' mental health, social/emotional wellbeing and academic achievement?
3. To what extent does the literature describe a relationship between spending for mental health intervention and social emotional programming and academic achievement?

Relevant research concerning the relationship between education spending, mental health programming, and academic achievement was identified by querying computer-searchable and publically-accessible databases. Multiple searches using combinations

of both broad and focused search terms resulted in numerous publications indexed by the major subjects included in the present review. Publications were selected for further review if a) the purpose of the study was to examine the relationship between education spending and/or mental health/wellness factors and/or academic performance, and b) the dependent variable was operationalized as a direct academic achievement outcome (such as measurable gains in standardized test scores). Publications were excluded from further review if the primary dependent variable was operationalized as an indirect academic outcome variable (such as changes in daily rates of attendance/absenteeism). Publications were not specifically selected or deselected according to country of origin. Nonetheless, most of the literature and publically-accessible internet sites reviewed reported on data collected in the United States.

Education Spending and Academic Achievement

Across multiple education departments, organizations, and policy groups, the message is clear: learning, as measured by academic achievement gains, is education's core business. As educational leaders, professional school counselors are strategically positioned within the core mission of academic achievement (ASCA, 2012). While it is true that education reform discussions tend to enlarge the definition of successful and effective educational institutions to include such non-academic factors as school safety, access to post-secondary education, meaningful work, and citizenship, the current climate in educational policy-making remains motivated to increase the impact that public school has on a student's capacity to learn and the outcome of that capacity being measurable gains in achievement (Barna & Brott, 2013). So then, to position the profession of school counseling in-context of the discussion about how to

reach academic achievement gains, the authors first examined the relationship between education spending as a whole and academic achievement. While results are mixed across multiple studies, a general pattern emerges that raises questions about the relationship of education spending to gains in academic achievement.

At present, the average annual per-pupil expenditure in public PK-12 education in the United States was $11,841.00 (*Education Week*, 2016). For comparison, Lips, Watkins, and Fleming (2008) reported that in the 1970-71 school year, the average per-pupil expenditure was $4060.00 and $9266.00 in 2005-06. Federal spending on education has also increased substantially over time, reaching an inflation-adjusted increase of 138 percent between 1985 and 2007 (Lips et al., 2008). If inflation-adjusted increases in education spending do not result in comparable gains in academic achievement, a reasonable criticism can be made of the proposition that schools need more money to accomplish their core mission and purpose.

Some researchers noted that, at best, a moderate correlation exists between education spending and academic achievement. For example, Roper (1996, as cited in Jones & Slate, 2010) discovered that a relationship did not exist between increases in education spending and scores on the Stanford Achievement Test among fourth-, seventh-, and tenth-grade students. Rather, it was found that only mid-range expenditures approximated a positive linear relationship with academic achievement outcomes. Similarly, Turner (1999) discovered that the relationship between education spending per student and performance on the fifth-grade standardized reading test in one state was low-to-moderate. Interestingly, Turner advised that since increases in education spending could not be shown to measurably increase academic achievement,

districts should evaluate spending diagnostically in order to target specific programs that show promise for increasing academic achievement gains.

A policy recommendation of allocating 65% of district funds to instructional expenditures has been met with criticism from researchers who have reported this policy to be ineffective at increasing academic achievement. Seemingly in support of an expenditure ratio policy, Jones and Slate (2010) examined performance on subject-specific standardized measures across ethnic groups as a function of spending on instruction. Schools spending less than 60% saw the lowest pass-rate in core subject areas. This was generally consistent across ethnic groups as well. Schools that spent between 60-64.99% on instruction saw the highest pass-rates in core subject areas across ethnic groups, generally. Though statistically significant differences were found between expenditure groups, the effect size of instructional spending on academic achievement was small. Furthermore, the authors reported that there appeared to be no increased benefit of spending beyond the 65% ratio and the authors recommended a benchmark ratio of 60%.

Bracey (2006) noted that the 65% instructional spending policy has failed to return comparable and value-added academic achievement gains for the investment. Because the empirical evidence does not appear to support the proposition that increased spending results in achievement gains, Bracey recommended that school districts re-allocate funds toward programs and practices—especially non-instructional programs—that have been found to result in academic achievement gains rather than simply spending more on instruction.

Of particular interest to a discussion about education spending and academic achievement is the literature documenting historical patterns in both spending and academic achievement gains, at both the state and federal level. According to Lips, Watkins, and Fleming (2008) and Coulson (2014), U.S. and state-by-state education spending far exceeds the return on academic achievement gains. Specifically, Coulson illustrated that between 1970 and 2012, inflation-adjusted education spending has increased nearly three times while National Assessment of Educational Progress (NAEP) scores have remained relatively flat for all subject areas. Lips et al. (2008) reported that despite some improvements in academic achievement among ethnic minorities over time, substantial increases in spending over the same period has not resulted in closing the achievement gap between White and ethnic minority students.

Mental Health, Social and Emotional Well-being, and Academic Achievement

It is well-established that as many as one in five school-aged youth experience symptoms of a diagnosable mental or behavioral health condition (National Institute of Mental Health, 2016; U.S. Department of Health and Human Services, 1999; World Health Organization, 2004). Even more alarming is the estimate that only 20% of these students receive treatment necessary to alleviate symptoms and reduce functional impairment (U.S. Department of Health and Human Services, 2016). Among the many functional consequences of mental health and related social- emotional conditions, impairment in the school setting includes stress, absenteeism, behavior and discipline problems, poor concentration, disruptions to school climate, dropout, delays in learning, social skill deficits, and more (Armistead, 2008; Charvat, 2008; Erickson & Abel, 2013).

While it can be stated that indirect academic outcomes are essential to ensuring student success and well-being, the position of this paper is that the consequences of mental health conditions to direct academic outcomes must form the basis of advocacy efforts to ensure that professional school counselors are fully utilized with respect to their training and their rightful place within education's core business. So then, the literature was examined to identify the evidence for a relationship between mental health and social emotional conditions and measurable outcomes with academic achievement as the dependent variable. For example, Asarnow et al. (2005) reported that secondary school students with depression are at a higher risk for academic impairment and disrupted educational attainment. Similarly, Roeser, Eccles, and Strobel (1998) reported that both internalizing and externalizing mental health symptoms impaired students' academic performance and achievement.

To be more specific, Erickson and Abel (2013) cited Stoep, Weiss, Kuo, Cheney, and Cohen (2003) in stating that 46% of high school dropout is attributable to the effects of a mental health condition. In addition, Trout, Nordness, Pierce, and Epstein (2003) discovered that 91% of research studies on academic status of students with emotional and behavioral disorders between 1961-2000 identified these students as performing below grade level. Furthermore, in comparison to students without disorders, those with emotional and behavioral health disorders were found to have underperformed their peers in 65% of the relevant studies.

Gumora and Arsenio (2002) investigated the additive effects of disrupted or disordered emotion and affect on students' academic performance. Using a battery of self-report, teacher-report, grade-point averages, and standardized achievement tests

measures, the authors discovered that disrupted affect and emotion regulation contributed to the variance in GPA over and above the contributions of cognitive ability.

In consideration of social emotional development, the implications of these studies are, in part, that addressing mental health and social emotional factors is a critical component of educating the whole student toward academic success and achievement. As McLeod, Uemura, and Rohrman (2012) stated,

> Academic achievement is among the most thoroughly studied social consequences of mental health problems…These studies find that youth with mental health problems perform less well in school and attain lower levels of education than other youth. The association holds throughout the early life course—in elementary school, in middle and high school, and into the postsecondary years (p. 483).

Spending for Mental Health Programming and Academic Achievement

Despite the clear relationship between academic achievement, student well-being, and mental health, the foundations of knowledge on mental health programming and educational outcomes have largely developed in isolation from one another. It has only been in the last 20 years that research on mental health services in schools has emerged (Adelman & Taylor, 2006). Federal efforts to address the mental health needs of students have been implemented in school reform initiatives but in the past they have gained support from very few outside enterprises (Hoagwood et al., 2007). The Obama administration aimed to increase the support by releasing *A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act* (U.S. Department of Education, 2010). This document suggests providing grants to states that examine data to identify how to better create an environment for successful, safe, and healthy students. Strategies proposed by states must promote student's "physical and mental

health and well being" in order to ensure a healthy and supportive environment (p. 33). The purpose of *A Blueprint for Reform* is to build on significant reforms already made in four areas: (a) improving teacher and principal effectiveness, (b) providing information to families to help them evaluate and improve their children's schools, (c) implementing college- and career-ready standards, and (d) improving student learning and achievement in America's lowest-performing schools by providing intensive support and effective interventions (U.S. Department of Education, 2010). For the purpose of this article, the fourth area is of critical importance due to its prescription to focus on intensive support and effective interventions. Education leaders must examine empirical data pursuant to programming that attempts to increase academic achievement through mental health and social emotional programming. Doing so ensures that advancements in the knowledge base about mental health programming for student well-being and academic achievement becomes integrated rather than isolated.

If school counseling and related mental health and responsive services programming is going to be supported as both a necessary and sufficient non-instructional expenditure, it must be shown to contribute in meaningful ways to the core business of education, that is, academic achievement. While voluminous studies exist to document the relationship between school counseling programs and indirect academic benefits (i.e., daily rates of attendance, school environment factors), these studies are no longer adequate enough to establish the rightful place of professional school counseling in education. Furthermore, these studies, while useful and meaningful contributions to the larger discussion of professional school counseling, are limited in

their utility for demonstrating the impact that programming for mental health and student well-being has on academic achievement.

To answer the question, “To what extent does a relationship exist between spending for mental health intervention and responsive services programming and academic achievement?” the authors reviewed existing research that included measurable academic achievement gains as a dependent variable. According to Hatch (2014), direct academic achievement gains are measured in part by, but not limited to, standardized test scores, pass rates of exit exams, grade point averages, subject-matter exam scores and pass rates, and SAT and ACT scores.

Results are mixed with respect to expenditures for school-based mental health and behavioral health programming and its contribution to academic achievement. Using academic year 1994-95 performance on the Iowa Test of Basic Skills (ITBS) as the dependent variable, Jacques and Brorsen (2002) reported that broad student support expenditures (guidance, social work, health services, speech pathology) actually resulted in a negative/inverse effect on student achievement test scores. Reback (2010) identified that simply adding school counselors did not, by default, increase performance on standardized tests even though doing so appeared to benefit indirect academic outcomes such as school behavior problems (See also Carrell & Carrell, 2006). Similarly, Hoagwood, Olin, Kerker, Kratochwill, Crowe, and Saka (2007) identified through meta-analysis that initial measurable gains in academic achievement resulting from mental health interventions were modest and did not hold over time. Finally, Howe (2009) was unable to document a statistically significant effect of ongoing individual or group counseling and academic achievement. The results were

inconclusive; some students displayed increased academic achievement as measured by core subject matter tests and grade point averages over one school year, while others' academic performance declined or remained stable.

The American School Counselor Association (ASCA, 2016) summarized key research to support the contributions of professional school counseling on academic achievement. For example, Carrell and Hoekstra (2014) found a one-percentile-point increase in elementary boys' math and reading test scores (Stanford 9, ITBS) with the addition of one full-time equivalent (FTE) school counselor. Carey and Dimmitt (2012) found that complete implementation of the ASCA National Model in the Wisconsin school counseling program led to a higher percentage of students passing the state math achievement tests. More specifically, the *management system* was correlated with higher passing rates on the state reading tests and the *foundation* was correlated with higher retention rates. A similar study in Utah found that comprehensive implementation of the ASCA National Model was associated with higher ACT test scores and increased student achievement as measured by state standardized tests (Carey, Harrington, Martin, & Stevenson, 2012).

A growing number of school counseling professionals are keeping documentation that allows for research on comprehensive, data-driven counseling programs. Wilkerson, Perusse, and Hughes (2013) conducted a study designed to address the limited body of research on academic achievement outcomes of students participating in a comprehensive school-counseling program. The academic gains of students participating in a recognized ASCA model program (RAMP) versus the academic achievement outcomes of students in non-RAMP programs were evaluated. This

longitudinal study revealed a significant difference in both ELA and Math proficiency assessments. School-wide proficiency scores in ELA in elementary schools with RAMP programs exceeded non-RAMP programs by 6.4%. School-wide proficiency scores in Math in elementary schools with RAMP programs exceeded non-RAMP programs by 6.2%. Similarly, secondary schools with RAMP programs exceeded non-RAMP schools on the ELA assessment by 3.2% and on the Math assessment by 4.6% (Wilkerson, Perusse, & Hughes, 2013).

This research illustrated that partial implementation of the ASCA National Model does not lead to fully realizing academic achievement gains. Rather, with full implementation (i.e., sufficient student-to-counselor ratios, strategic utilization of school counselor time and duties, and intervention fidelity), professional school counseling and related programming for mental health intervention for ensuring student well-being and success holds promise as an effective and empirically-validated expenditure.

Summary

According to Armistead (2008),

> Efforts to address inadequacies in the children's mental health system have coincided with growing evidence of the effectiveness of school-based services…Major studies…recommend taking a public health approach to mental health – with a strong focus on prevention, wellness promotion, and universal access – and providing services in schools (p. 2).

Similarly, according to Desrochers (2015),

> There is no magic bullet, and it requires hard work. But when a school provides its students with comprehensive, integrated, and authentic mental health services, performance improves significantly across the board. Supporting students' mental wellness creates significant improvements in school climate,

> student behavior, and academic performance. It can also help prevent mental illness—and change children's and families' lives (p. 50).

Where broad increases in education spending do not appear to result in meaningful gains in academic achievement, more purposeful and strategic allocations of resources do appear to make a difference. One such program strategy, school-based mental health intervention and prevention services, holds promise as an effective use of resources while contributing to education's core purpose. The following key strategies identified in the literature serve as a guide for school counselors who choose to advocate for increasing mental health intervention for ensuring student well-being and academic achievement.

- Strategic allocation of existing resources (not necessarily increasing expenditures) results in academic achievement gains (Armistead, 2008; Carey & Harrington, 2010, 2010b; Desrochers, 2015).
- Implementation is the key. Aligning school counseling programs with the ASCA National Model (2012), including adequate student-to-counselor ratios and recommended allocations of counselor time and duty, is necessary for reaching educational outcomes equivalent to what are reported in the literature (Carey & Harrington, 2010, 2010b).
- Effective school-based mental health prevention services are comprehensive, integrated, and authentic (Desrochers, 2015) and include prevention, intervention, and educational/training services to students, families, and school staff across the educational program spectrum.

Promising Mental Health Program Strategies for Ensuring Student Well Being, Success, and Academic Achievement

There is a solid and growing empirical base that indicates that well-designed, fully implemented, mental health and social-emotional intervention programs can

positively influence academic outcomes. Evidence shows that fragmented programming or programming that is not well implemented does not effectively produce significant academic gains. Additionally, research suggests that designing programs to integrate mental health across the educational program and simultaneously improve students' social emotional development as well as academic achievement is most effective (Greenberg et. al., 2003). According to Armistead (2008), "Opponents of school mental health initiatives argue that mental health services fall outside of the mandate of public education. Just the opposite is true. Schools form the essential construct of society's commitment to help children become productive citizens" (para. 17).

Focused research on school counseling interventions has shown that specific mental health interventions and programs such as mental health assessment and resource referral counseling, small group counseling, family partnering and parent education, and social emotional programming have a positive effect on student achievement.

Mental health assessment and referral/resource counseling. In schools where comprehensive mental health services are made available to all students, the evidence points to increased academic achievement gains as a reliable outcome (Armistead, 2008; Desrochers, 2015; Guzman et al., 2011). The continuum of these services includes mental health assessment and necessary follow-up and referral counseling as part of comprehensive, universal prevention and secondary intervention programming. Grier, Morris, and Taylor (2001) described mental health assessment in schools as an efficient means of identifying both student strengths and risk factors in order to assign students to the most appropriate interventions available to them.

Erickson and Abel (2013) described one such program that provided school-wide mental health screening for depression pursuant to coordinated referral practices. Although these authors did not specifically endorse follow-up mental health counseling delivered by the school counselor, the necessity of early identification and support for mental health needs by the professional school counselor was evident.

Gruman, Marston, and Koon (2013) described an innovative approach to mental health assessment and tracking student risk factors that resulted in improved availability of school counselors to provide direct services. The authors illustrated the improvements that were made on one campus by reducing counselor activity across cumbersome and ineffective tasks while increasing time spent providing direct support for students identified as displaying social-emotional and mental health needs. The authors reported an increase of standardized test scores following program reform and both regional and national recognition for academic achievement gains.

Armistead (2008) and Adelman and Taylor (2006) described mental health assessment (i.e., depression screening) as a direct service along the continuum of school-based mental health programming necessary for promoting academic achievement and student success. Clearly aligned with RTI tiers and the ASCA National Model, both Armistead and Desrochers (2015) advocated for expanding the scope of necessary universal (Tier 1) mental health programming by adding individual and small group counseling (Tier 2) and intensive mental health support services (Tier 3) to the continuum of school-based mental health services. These authors advocated for a collaborative approach involving school counselors, school psychologists, and other school-based mental health professionals.

Small group counseling. While research on the effectiveness of individual versus group counseling in schools is mixed (Whiston & Quinby, 2009), there is evidence that small group counseling is a positive, efficient, and effective way to provide academic support to students (Mason, 2016). Group work in schools consists of a small number of students working on shared tasks and developing supportive relationships. Berger (2013) identified that if given the time with underachieving students, school counselors can effectively assist underachieving students through small group counseling. Specifically, Berger noted that small groups should focus on organizational skills, time management, and self-motivation. According to Whiston, Tai, Rahardja, and Eder (2011), effect sizes for school counseling interventions on academic achievement outcomes were small but significant. Of particular note is the finding that responsive services, generally, produced one of the largest overall effect sizes, with small group counseling and peer-mediated interventions accounting for much of this.

Family partnering and parent education. According to Unger, McLeod, Brown, and Tressel (2000), students are influenced at school by family and home dynamics, and are more likely to hold positive attitudes toward school and earn better grades when parents are involved and supportive of academic undertakings. In addition, conflict within the family or between parents has been shown to be a risk-factor that predisposes students to academic underachievement. Students that experience hostile and unresolved familial or parental conflict may experience maladaptive problems in both behavior and academic performance (Ghazarian & Buehler, 2010). Students that experience familial conflicts also exhibit higher levels of anxiety, stress, aggression, and impaired academic achievement (Harold, Aitken, & Shelton, 2007; Unger et al., 2000).

In reciprocal fashion, “issues related to school, such as homework and school performance, were among the most frequent and intense areas of conflict between adolescents and their parents” (Dotterer et al., 2008, p. 763).

Academic gains resulting from family involvement in school counseling procedures and/or activities has been well documented. Through the use of family therapy techniques, the school counselor can support the family in addressing negative experiences that affect the student’s behavioral and academic performance (Unger, McLeod, Brown, & Tressell, 2000). Desrochers (2015) described the use of parent education groups as a critical component of comprehensive mental health programming in schools. Dotterer & Wherspann (2016) investigated links between parental involvement in education and academic achievement as measured by students’ official grade point averages (GPA) among a diverse population of middle school students. It was found that parental involvement in education through a comprehensive school counseling program was positively correlated to higher academic achievement. Henderson and Mapp (2002) reported findings from 51 studies that highlighted the positive relationship between family involvement in school counseling and other school services and student academic achievement. The authors also reported that higher performing schools focused on building collaborative relationships between school personnel, family members, and teachers, so that the power and responsibility of a student’s education are shared.

Social emotional programming. Recent developments in educational and mental health literature point to a reciprocal relationship between academic achievement and mental health programming in schools. Social emotional learning

(SEL) has emerged within the research as programming that focuses on learning in the context of healthy relationships that allow for students to acquire and effectively apply skills for self-management, self-awareness, relationships skills, and responsible decision making (Weissberg & Cascarino, 2013). According to the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2016), social emotional learning (SEL) "is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions" (para.1). Embedded within this definition and related literature is the idea that mental health is specifically and intrinsically linked with social and emotional learning (CASEL, 2008). While it may be packaged differently, social emotional programming for student success is nothing new to the professional school counselor who, through training and expertise, remains uniquely positioned to lead school-wide efforts to effect academic achievement through responsive services and personal-social development supports.

A meta-analysis of 213 school-based SEL programs showed that students attained average standardized achievement test scores that were 11 percentile points higher than students who did not participate in SEL programming (Durlak et al., 2011; Weissberg & Cascarino, 2013). According to Belfield et al. (2015), the average return on a school's investment in social emotional programming for ensuring student success and well-being is 11:1, meaning that "for every dollar invested across the six SEL interventions, there is a return of eleven dollars" (p.5). The six SEL interventions described in this report include specific programs to reduce aggression and violence,

promote positive self-concept, reduce substance use, improve problem solving and emotional self-regulation, implement responsive classrooms, and support student development of cognitive and social-emotional competency.

Conclusion

The core business of education—even for those institutions that adopt a comprehensive, whole-child model—is academics. We expect all children to learn. We expect the institution of education to maximize resources so that all children can learn. So then, in this age of accountability and data-driven decision-making, some key questions emerge within the dialogue about what all students need in order to achieve academically, how educational resources are leveraged, what works in education, and what education can do with what it has been given to accomplish its charge. Within this conversation, mental health and related social emotional programming have resurfaced as necessary, viable components of ensuring student well-being and success.

The purpose of this article was to consider the relationship between various educational inputs and academic achievement as the primary outcome against which all educational inputs are to be measured. One category of inputs—mental health and social emotional programming—emerged as a promising program strategy by which professional school counselors contribute to advancing academic achievement. Even so, whether these programs and the professional school counselors who deliver them are ultimately categorized as a missing link or misappropriation is largely up to the school counseling profession itself. School counselors, then, are encouraged to embrace data-driven advocacy for full implementation of school counseling programs, educational leadership to collaboratively develop and implement strategic mental health

and social emotional programming, and the willingness to risk measurement of these programs against academic achievement objectives.

References

Adelman, H. S., & Taylor, L. (2006). Mental health in schools and public health. *Public Health Reports, 121*(3), 294-298.

American School Counselor Association (2016). *Empirical research studies supporting the value of school counseling*. Alexandria, VA. Retrieved from www.schoolcounselor.org

American School Counselor Association (2015). *The school counselor and student mental health.* Retrieved from www.schoolcounselor.org

American School Counselor Association (2012). *The ASCA National Model: A framework for school counseling programs* (3rd ed.). Alexandria, VA.

Armistead, R. J. (2008, March). *School-based mental health services promote academic success*. School Board News "Viewpoint." Bethesda, MD: National Association of School Psychologists.

Asarnow, J. R., Jaycox, L. H., Duan, N., LaBorde, A. P., Rea, M. M., Tang, L.,… Weels, K. (2005). Depression and role impairment among adolescents in primary care clinics. *Journal of Adolescent Health, 37*, 477-483.

Barna, J. S., & Brott, P. E. (2013). Making the grade: The importance of academic enablers in the elementary school counseling program. *Professional School Counseling, 17*(1), 97-110.

Belfield, C., Bowden, B., Klapp, A., Levin, H., Shand, R., & Zander, S. (2015). *The economic value of social and emotional learning*. Center for Benefit-Cost Studies in Education. Retrieved from www.cbcse.org

Berger, C. (2013). Bring out the brilliance: A counseling intervention for underachieving students. *Professional School Counseling*, *17*(1), 86-96.

Bracey, G. W. (2006). *A policy maker's guide to "The 65% Solution" proposals.* Tempe, AZ: Education Policy Research Unit.

Carey, J., & Dimmitt, C. (2012). School counseling and student outcomes: Summary of six statewide studies. *Professional School Counseling, 16*(2), 146-153.

Carey, J., & Harrington, K. M. (2010). *Nebraska school counseling evaluation report*. Amherst, MA: Center for School Counseling Outcome Research and Evaluation.

Carey, J., & Harrington, K. M.(2010b). *Utah school counseling evaluation report*. Amherst, MA: Center for School Counseling Outcome Research and Evaluation.

Carey, J., Harrington, K., Martin, I., & Stevenson, D. (2012). A statewide evaluation of the outcomes of the implementation of ASCA National Model school counseling programs in Utah high schools. *Professional School Counseling, 16*(2), 89-99.

Carrell, S. E., & Carrell, S. A. (2006). Do lower student to counselor ratios reduce school disciplinary problems? *Contributions to Economic Analysis & Policy, 5*(1), Article 11.

Carrell, S. E., & Hoekstra, M. (2014). Are school counselors an effective education input? *Economics Letters*, *125*(1), 66-69. doi:10.1016/j.econlet.2014.07.020

Charvat, J. L. (2008, December). *Research on the relationship between mental health and academic achievement*. Bethesda, MD: National Association of School Psychologists. Retrieved from www.nasponline.org

Collaborative for Academic, Social, and Emotional Learning (CASEL, 2008). *Connecting social and emotional learning with mental health*. A report prepared for the

National Center for Mental Health Promotion and Youth Violence Prevention. University of Illinois at Chicago. Retrieved from www.promoteprevent.org

Collaborative for Academic, Social, and Emotional Learning (CASEL, 2016). *What is SEL*? Retrieved from www.casel.org

Corthell, K. K. (2014). *The role of mental health counselors in public schools*. Ph.D. Dissertation. Georgia State University. Retrieved from www.scholarworks.gsu.edu

Coulson, A. J. (2014, March). *State education trends: Academic performance and spending over the past 40 years*. (Policy Analysis #746). Washington, D.C.: Cato Institute Center for Educational Freedom.

Desrochers, J. E. (2015, October). RX for mental health. *Educational Leadership, 73*(2), 46-50.

Dotterer, A. M., Hoffman, L., Crouter, A. C., & McHale, S. M., (2008, June). A longitudinal examination of the bidirectional links between academic achievement and parent-adolescent conflict. *Journal of Family Issues, 29*(6), 762-780.

Dotterer, A. M., & Wehrspann, E. (2016, January). Parent involvement and academic outcomes among urban adolescents: Examining the role of school engagement. *Educational Psychology*, *36*(4), 812-830.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432.

Education Week (2016, April). *Map: How per-pupil spending compares across U.S. school districts*. *Education Week, 35*(28), page 5. Retrieved from edweek.org

Erickson, A., & Abel, N. R. (2013). A high school counselor's leadership in providing school-wide screenings for depression and enhancing suicide awareness. *Professional School Counseling, 16*(5), 283-289.

Eschenhauer, R., & Chen-Hayes, S. F. (2005). The transformative individual school counseling model: An accountability model for urban school counselors. *Professional School Counseling, 8*(3), 244-248.

Ghazarian, S., & Buehler, C. (2010). Interparental conflict and academic achievement: An examination of mediating and moderating factors. *Journal of Youth and Adolescence*, *39*, 23-35.

Greenberg, M. T., Weissberg, R. P., O'Brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003, June-July). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist, 58*(6-7), 466-474. doi:10.1037/0003-066X.58.6-7.466

Grier, R., Morris, L., & Taylor, L. (2001). Assessment strategies for school-based mental health counseling. *Journal of School Health, 71*(9), 467-469.

Gruman, D. H., Marston, T., & Koon, H. (2013). Bringing mental health needs into focus through school counseling program transformation. *Professional School Counseling, 16*(5), 333-341.

Gumora G., & Arsenio W. F. (2002). Emotionality, emotion regulation, and school performance in middle school children. *Journal of School Psychology*, *40*, 395-413.

Guzman, M. P., Jellinek, M., George, M., Hartley, M., Squicciarini, A. M., Canenguez, K. M., & ... Murphy, J. M. (2011). Mental health matters in elementary school: First-grade screening predicts fourth grade achievement test scores. *European Child & Adolescent Psychiatry*, *20*(8), 401-411. doi:10.1007/s00787-011-0191-3

Harold, G. T., Aitken, J. J., & Shelton, K. H. (2007, December). Inter-parental conflict and children's academic attainment: A longitudinal analysis. *Journal of Child Psychology and Psychiatry*, *48*, 1223-1232. http://dx.doi.org/10.1111/j.1469-7610.2007.01793.x

Hatch, T. (2014). *The use of data in school counseling: Hatching results for students, programs, and the profession*. Thousand Oaks, CA: Corwin.

Hawkins, J. D., Jenson, J. M., Catalano, R., Fraser, M. W., Botvin, G. J., Shapiro, V., ... Stone, S. (2015). *Unleashing the power of prevention* (Discussion Paper). Washington, DC: Institute of Medicine and National Research Council. Retrieved from www.nam.edu

Henderson, A. T., & Mapp, K., L. (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement. Annual synthesis 2002. *National Center for Family and Community Connections with Schools*, 1-241. Retrieved from http://files.eric.ed.gov/fulltext/ED536946.pdf

Hoagwood, K. E., Olin, S. S., Kerker, B. D., Kratochwill, T. R., Crowe, M., & Saka, N. (2007). Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional and Behavioral Disorders, 15*(2), 66-92.

Howe, S. A. (2009). School counseling services and academic success. *Counselor Education Master's Theses*. Paper 54. Retrieved from www.digitalcommons.brockport.edu

Jacques, C., & Brorsen, B. W. (2003). Relationship between types of school district expenditures and student performance. *Applied Economics Letters, 9*, 997-1002.

Jones, T. B., & Slate, J. R. (2010). The 65% instructional expenditure ratio and student achievement: Does money matter? *Current Issues in Education, 13*(4). Retrieved from www.cie.asu.edu

Lips, D., Watkins, S. L., & Fleming, J. (2008). *Does spending more on education improve academic achievement?* (Backgrounder Report # 2179). The Heritage Foundation. Washington, D.C.

Mason, C. P. (2016). Using reality therapy trained group counselors in comprehensive school counseling programs to decrease the academic achievement. *International Journal of Choice Theory & Reality Therapy*, *35*(2), 14-24.

McLeod, J. D., Uemura, R., & Rohrman, S. (2012). Adolescent mental health, behavior problems, and academic achievement. *Journal of Health and Social Behavior, 53*(4), 482-497.

National Institute of Mental Health (NIMH, 2016). *Prevalence of any disorder among children*. Retrieved from www.nimh.nih.gov

President's New Freedom Commission on Mental Health. (2003). *Achieving the promise: Transforming mental health care in America*. U.S. Department of Health and Human Services (Pub. No. SMA-03-3832). Rockville, MD: Author.

Reback, R. (2010). Non-instructional spending improves non-cognitive outcomes: Discontinuity evidence from a unique school counselor financing system. *Education, 5*(2), 105-137.

Roeser, R. W., Eccles, J. S., & Strobel, K. R. (1998). Linking the study of schooling and mental health: Selected issues and empirical illustrations at the level of the individual. *Educational Psychologist, 33*(4), 153-176.

Roper, D. M. (1996). *Alabama public school expenditures as correlates of student academic achievement*. Ed.D. dissertation, The University of Alabama, AL: US. ProQuest Digital Dissertations database. (Publication No. AAT 9633936).

Schellenberg, R. (2008). *The new school counselor: Strategies for universal academic achievement*. Lanham, MD: Rowman and Littlefield Education.

Stoep, A. V., Weiss, N. S., Kuo, E. S., Cheney, D., & Cohen, P. (2003). What proportion of failure to complete secondary school in the US population is attributable to adolescent psychiatric disorder? *Journal of Behavioral Health Services and Research, 30*, 119-124.

Trout, A. L., Nordness, P. D., Pierce, C. D., & Epstein, M. H. (2003). Research on the academic status of children with emotional and behavioral disorders: A review of the literature from 1961 to 2000. *Journal of Emotional and Behavioral Disorders, 11*(4), 198-210.

Turner, Y. M. (1999). *The relationship between student achievement, per-pupil expenditure, and other factors in selected Georgia public schools.* Ed.D. Dissertation, University of Sarasota, FL: US. ProQuest Digital Dissertations database. (Publication No. AAT 9938767).

Unger, D. G., McLeod, L. E., Brown, M. B., & Tressell, P. A. (2000, June). The role of family support in interparental conflict and adolescent academic achievement. *Journal of Child and Family Studies*, *9*, 191-202. http://dx.doi.org/1062-1024/00/0600-0191$18.00/0

U.S. Department of Education. (2010). *A blueprint for reform: The reauthorization of the elementary and secondary education act*. Washington, DC: Author.

U.S. Department of Health and Human Services (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: Author.

U.S. Department of Health and Human Services (2016). *Mental health myths and facts*. Rockville, MD: Author. Retrieved from www.mentalhealth.gov

Weissberg, R. P., & Cascarino, J. (2013, October). Academic learning + social-emotional learning = national priority. *Phi Delta Kappan, 95*(2), 8-13.

Whiston, S. C., & Quinby, R. F. (2009). Review of school counseling outcome research. *Psychology in the Schools*, *46*(3), 267-272.

Whiston, S. C., Tai, W. L., Rahardja, D., & Eder, K. (2011). School counseling outcome: A meta-analytic examination of interventions. *Journal of Counseling & Development*, *89*(1), 37-55.

Wilkerson, K., Perusse, R., & Hughes, A. (2013). Comprehensive school counseling programs and student achievement outcomes: A comparative analysis of RAMP

versus non-RAMP schools. *Professional School Counseling*, *16*(3), 172-184. doi:10.5330/psc.n.2013-16.172

World Health Organization (2004). *Prevention of mental disorders: Effective interventions and policy options.* Summary Report. Geneva, Switzerland: Author.