School Building Administrator Reports of Screening Practices across Academic, Behavioral, and

Health Domains

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Abstract

Research conducted to date provides a limited understanding of the landscape of school-based screening practices across academic, behavioral, and health domains, thus providing impetus for the current survey study. A total of 475 K-12 school building administrators representing 409 unique school districts across the United States completed an online survey, which assessed current school-based screening practices across domains from the point of data collection to intervention selection. Whereas 70% to 81% of respondents reported the use of universal screening across health and academic domains respectively, only 9% of respondents endorsed the use of universal social, emotional, and behavioral screening. Additionally, discrepancies were identified across domains with regard to such factors as (a) who reviews screening data, (b) how screening data are used to determine student risk, and (c) how interventions are designed for those students demonstrating risk. The lack of consensus in practice calls for dissemination concerning best practices in the implementation of social, emotional, and behavioral screening, risk identification, and Tier 1 intervention.

Keywords: universal screening; social, emotional, and behavioral; student risk identification; survey, school administrator

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Epidemiological studies have suggested that whereas one in six students exhibit emotional or behavioral symptoms that meet criteria for a diagnosable disorder (Danielson et al., 2020), only 20% of these youth receive needed services (Burns et al., 1995). In recent decades, schools have helped to narrow this service delivery gap by providing both preventive programs and targeted interventions designed to support students' social, emotional, and behavioral (SEB) functioning (Ali et al., 2019). As a result, nearly 3.2 million adolescents now access SEB services within the school setting (Lipari et al., 2016). There are many factors that may have contributed to this trend, starting with the legal obligation in Public Law 94-142 to educate children with emotional and behavioral disorders in the least restrictive setting, and culminating in more recent concerns regarding school violence and the need to identify at-risk students early in these trajectories (Bushman et al., 2016). In addition, the link between social-emotional health and academic success is now better understood, with many studies documenting the link between SEB concerns and decreased academic achievement (e.g., Humensky et al., 2010; Zins et al., 2004).

Increasingly widespread implementation of a "core curriculum" for behavior in school settings represents a huge step forward in terms of addressing the needs of the whole child. A range of positive effects have been documented for those schools implementing positive behavior interventions and supports (PBIS) at the universal, or Tier 1, level (e.g., explicitly teaching and reinforcing behavioral expectations for all students; Sugai & Horner, 2002), including both reductions in disciplinary incidents and gains in academic achievement (e.g., Bradshaw et al., 2010). Furthermore, meta-analytic results have demonstrated that students who

received classroom-based instruction in social-emotional learning (SEL) not only demonstrated stronger social-emotional skills and fewer behavior concerns, but also performed 13 percentile points higher on measures of academic achievement at a 3-year follow-up (Taylor et al., 2017). Despite these demonstrated positive effects, however, the relatively low intensity of Tier 1 supports means that they will be insufficient for some students. The question, therefore, becomes one of how schools can best identify those students who require additional SEB intervention, whether at the secondary (i.e., targeted, or Tier 2) or tertiary (i.e., intensive, Tier 3) levels.

Traditionally, schools have relied on a referral-based system of service delivery, in which teachers refer students to a problem-solving team once their behavior has exceeded a threshold of tolerability (Chalfant et al., 1979). Multidisciplinary problem-solving teams have been shown to facilitate improved student outcomes (e.g., Burns & Symington, 2002); however, there are also drawbacks to a referral-based approach. For one, the system is inherently reactive, in that students often do not come to the attention of the problem-solving team until concerns have significantly escalated. Given that behavior concerns can become more challenging to address over time, delaying intervention may therefore mean that increasingly intensive efforts are necessary (Bradley et al., 2008). Additionally, studies have consistently found that teachers are less likely to refer students with internalizing (e.g., anxiety, depression) than externalizing concerns (e.g., aggression, hyperactivity) (Papandrea & Winefield, 2011). Teacher referral has also been cited as a reason for disproportionality in special education services, with Black males overrepresented within the category of emotional disturbance (Skiba et al., 2006) and females underrepresented in special education overall (Wehmeyer & Schwartz, 2001). Finally, traditional referral methods are inefficient because conversations tend to focus on problem solving around

individual students. Given prevalence estimates, it is highly unlikely that schools would be able to provide timely supports for all students who need them.

One alternative approach to identifying and providing students with appropriate supports that has the potential to address the limitations of teacher referral is universal screening. Universal screening involves conducting brief assessment(s) of all individuals in a population to identify those students with some level of risk. In recent decades, the use of universal screening has become typical within the academic domain (Mellard et al., 2009). This is due in large part to increased emphasis on implementation of tiered systems of support and the assessment of student response to intervention (RTI) through law (e.g., IDEA, 2004) and policy (e.g., National Association of State Directors of Special Education, 2005). Within tiered systems of support, universal screening is a critical component that facilitates the identification of students for targeted supports (Lane et al., 2010). A majority of schools conduct benchmark assessments of the reading skills of all students at the elementary (Mellard et al., 2009) and middle school (Prewett et al., 2012) and research has shown that early identification of reading difficulties through screening can lead to improved student outcomes (e.g., Speece et al., 2003; VanDerHeyden et al., 2003).

In contrast, it appears that universal screening for SEB concerns is less common. In surveying school personnel representing 454 schools across the United States, Bruhn et al. (2014) found that more than 75% of respondents indicated that some type of screening tool was used to identify students with academic or hearing problems, whereas only 12.6% of respondents indicated use of SEB screening. Similarly, Lane et al. (2015a) surveyed 365 school-building administrators in the state of Tennessee and found that whereas 73% of respondents reported

conducting academic screening three times per year, only 12% of respondents indicated that this type of screening was fully implemented for the SEB domain.

Purpose of Study

Preliminary evidence suggests that use of universal SEB screening has lagged behind that of academic screening in school settings. Unfortunately, however, the research conducted to date provides a limited understanding of the landscape of school-based screening practices. One of the most significant limitations is that prior research has largely approached universal screening as a binary construct—noting that it either occurs or does not—rather than providing a picture of what assessment and related intervention practices look like across different domains. For example, although both prior surveys (Bruhn et al., 2014; Lane et al., 2015a) asked respondents about the frequency of universal screening, results were not disaggregated by screening target (e.g., reading vs. math; social skills vs. externalizing behaviors) or level (i.e., elementary versus secondary). The purpose of the current study was therefore to describe the national landscape with regard to implementation of school-based screening practices across academic, behavioral, and health domains. Specifically, we sought to answer the following research questions:

1. What is the current prevalence of academic, health, and SEB screening within U.S. schools? For those schools implementing universal screening, what do practices look like from the point of data collection to intervention selection?

2. What is the current prevalence of universal SEB programs within U.S schools? For those schools implementing universal SEB programs, what do they entail?

3. To what extent do prevalence estimates, as well as screening and intervention practices, differ across elementary and secondary settings?

Method

The data reported within the current study were gathered within the context of a larger

survey project. The research team randomly sampled school districts from the Common Core of

Data Local Education Agency Universe Survey (National Center for Education Statistics, 2013-

14) in increments of 2,000 until a total of 12,132 invitations for study participation had been sent

to eligible districts (e.g., non-charter, special education districts). A total of 1,330 district

administrators agreed to participate. The research team then randomly-selected one school

building at the elementary level and one at the secondary level within each of these consenting

districts, excluding any ineligible (i.e. charter, virtual, preschools) buildings. Invitations to

complete an online survey were sent to these two school building administrators (BAs; e.g.,

principal, assistant principal). All BAs received one initial email invitation, up to four reminder

emails, and one phone call before being deemed unresponsive. As an incentive for participation,

all respondents were entered into a drawing to win one of eight $100 gift cards. All surveys were

completed between February and December of 2016.

A total of 495 BAs responded to the overall survey; however, the 20 respondents who did

not answer the questions regarding current school practices were excluded from this study. This

resulted in a final sample of 475 BAs representing 409 unique school districts (i.e., BAs at both

the elementary and secondary levels responded within 66 school districts). The majority of

respondents were principals (91%), White (91%), held a Master's degree or higher (98%), and

had 20 or more years of experience in education (58%) (see Table 1). The sample was equally

split with regard to gender. The demographics of the sample were largely consistent with the

national population of public school principals (i.e., 52% female, 80% White, 98% Master's

degree or higher, $M = 7.2$ years of experience as principal, $M = 12.2$ years teaching experience;

Hill et al., 2016); however, the percentage of White respondents was noted to be somewhat

higher. With regard to building characteristics, BAs represented schools in which roughly 25%

of students were non-White, which was noted to be lower than national estimates (i.e. 52%).

Compared to national statistics (i.e., National Center on Education Statistics, 2018), there was a

greater percentage of school buildings in the Northeast (30% vs. 20% nationally) and a smaller

percentage in the West (14% vs. 25% nationally), whereas percentages were more consistent in

the Midwest (36% vs. 37% nationally) and South (20% vs. 25% nationally). The percentage of

students eligible for free and reduced lunch was also consistent with national estimates (49% vs.

53% nationally).

Materials

The research team developed the survey measure to explore both current school-based

screening practices. Initial feedback regarding the item content and wording was first obtained

from an Advisory Board comprised of six individuals with expertise in school-based assessment,

educational policy, implementation science, and youth mental health. Advisory Board members

were asked to respond via email to specific questions regarding the degree to which (a) each

section addressed its intended content, (b) individual items were appropriate and relevant to the

section, and (c) items were understandable for the intended respondent(s). Space was also

available to provide additional feedback (e.g., overall impressions, other things that should be

considered). Feedback was then summarized across responses and reviewed by the research team

to identify potential revisions. Subsequent to making changes to the measure based on the

Advisory Board feedback, cognitive testing was conducted to ensure that the items were

understood in the manner intended by the research team. Specifically, interviews were conducted

with four BAs (two elementary, two secondary) either in person or over the phone to identify any

questions, response options, or language that were potentially confusing or unclear. This

feedback was again used to make necessary changes to the measure. The final survey consisted

of 152 items across four sections and took approximately 15-20 min to complete.

The first section of the survey consisted of two parts. First, BAs were asked about the

academic, health, and SEB screening practices utilized within their school building. Within each

of these domains, respondents were first provided with a definition of screening (i.e. a brief

assessment conducted to identify students who may be at-risk) and asked whether they

conducted academic, health, and SEB screening within their school. If BAs indicated yes, they

were asked to specify whether screening was universal (i.e., applied in the same way for the

majority of students in a given population, such as all students in a grade or building) or targeted

(i.e., applied only for those students identified as at-risk or already having difficulties). Those

BAs endorsing universal screening were asked (a) what subjects or concerns were assessed, (b)

with whom screenings were conducted, (c) what type of screening data were used, (d) how and

by whom data were reviewed, (e) how risk was determined, (f) how interventions were

developed, (g) how successfully screening was believed to be used by school staff, and (h) how

effective screening was believed to be in identifying concerns. If respondents indicated no, they

were asked to describe the procedures used to address the needs of students believed to be at risk.

Second, BAs were asked about the universal SEB programs used within their buildings.

Similar to the assessment sections, the following definition was provided: program used with a

majority of students in a grade or building. BAs endorsing use were asked (a) what program(s)

was used, (b) how staff were trained in use of the program, (c) with whom the program was used,

(d) how successfully the program was believed to be used by school staff, and (e) how effective

the program was believed to be in identifying concerns. The final section of the survey solicited

demographic information regarding the respondent. For more information regarding the

instrument development and sampling procedures, please see Authors (2018).

Data Analysis

In addition to conducting descriptive analyses to identify the overall proportion of BAs

who endorsed a particular response, chi-square analyses were conducted to determine whether

these proportions varied significantly across grade levels. A grouping variable was therefore

created to classify respondents according to the grade level(s) served. Respondents were

classified as serving "elementary only" if they reported working with students from PreK

through grade 6 and were classified as "secondary only" if they reported working with students

from grade 5 through 12. If respondents reported working with both elementary and secondary

students (e.g., K-8, 4-8), they were categorized as "both levels" and excluded from the chi-

square analyses to draw meaningful comparisons between grade levels.

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Results

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Academic Screening Practices

Whereas the overwhelming majority of respondents (81%; $n = 387$) reported use of

universal academic screening assessments, 10% ($n = 46$) reported the use of targeted academic

screening in which assessments are only conducted for those students already identified at-risk,

and 6% ($n = 28$) reported that no academic screening assessments were conducted at all (see

Table 2). Results of chi-square analysis revealed a statistically significant difference between

elementary and secondary buildings, $\chi^2(2, n = 415) = 48.86$, $p < .001$. Specifically, a greater

proportion of BAs at the elementary (94%) than the secondary level (68%) indicated use of

universal academic screenings than would be expected by chance, $p < .001$. Nearly all of the BAs

who endorsed use of universal screening indicated that their buildings assessed reading (99%; n

= 382) and math (88%; n = 339), whereas assessments of written language were less common

(29%; n = 111) (see Table 3). Although the rates of universal reading screening were similar

across grade levels, a greater proportion of secondary BAs reported screening for both math

(92% secondary vs. 83% elementary; $\chi^2(1, n = 347) = 6.00, p < .05$]) and written language (36%

secondary vs. 23% elementary; $\chi^2(1, n = 347) = 7.32, p < .05$].

When asked what types of measures were employed in universal screening, 21% (n = 83)

reported use of general outcome measures (GOMs), such as AIMSweb or DIBELS, 14% (n = 54)

reported use of diagnostic assessments of strengths and weaknesses (e.g., running records,

reading inventories), and 8% (n = 30) reported used of global summative assessments (e.g.,

statewide standardized assessments, end of unit assessments). The majority of respondents (53%;

n = 205), however, reported that their buildings utilized two or more of these types of measures

in combination. Results of chi-square analysis revealed a statistically significant difference

between elementary and secondary buildings, $\chi^2(2, n = 332)=18.12, p <.001$. Specifically,

significantly lower proportions of elementary BAs reported using global summative assessments

(3% vs. 15%) and significantly higher proportions of elementary BAs reported using multiple

screening measures (61%) than at the secondary level (45%), $p <.001$.

Respondents were next asked how data were reviewed following universal academic

screenings. Results of chi-square analysis revealed a statistically significant difference between

elementary and secondary buildings, $\chi^2(1, n = 344) = 13.11, p <.001$. Whereas elementary BAs

were more likely to indicate that universal screening data were reviewed by a team (73%; n =

148) than by individual teachers and staff (27%; n = 56), responses were more split from

secondary BAs (i.e., individual teachers or staff = 45%, n = 65; teams = 52%, n = 75), $p <.001$.

Slightly more respondents indicated that the determination of student risk was made based on

specific cut-off scores (54%; *n* = 207) than that this determination was a teacher or team decision (43%; *n* = 165). No significant differences were identified across grade levels, *p* = .81.

When asked how interventions are typically developed for students identified through academic screening assessments, 70% (*n* = 269) of respondents indicated that individualized interventions are developed based on the review of student data whereas 26% (*n* = 100) reported the use of standard protocol interventions (i.e., all students struggling with a similar problem receive the same intervention). Only 1% of respondents indicated that parents were informed of the screening results without school-based follow-up. No significant differences were identified across grade levels, *p* = .10. The overwhelming majority of respondents (71%, *n* = 274) indicated that decisions regarding which interventions to use with students identified through academic screening are made through both reviewing research-based recommendations for the identified problem and considering recommendations made by school staff based on past practices. Again, no differences were identified across grade levels, *p* = .21.

Finally, respondents reporting use of universal academic screening procedures were asked their beliefs regarding the use and effectiveness of these procedures. Elementary BAs perceived that universal screening was being used by staff in their buildings more successfully (*M* = 3.98) than secondary BAs (*M* = 3.44), *t*(338) = 6.71, *p* < .001. Elementary BAs also reported that they felt universal screening was more effective at identifying student concerns (*M* = 3.93) than secondary BAs (*M* = 3.52), *t*(338) = 5.46, *p* < .001.

Health Screening Practices

Of the 475 respondents, 70% (*n* = 331) reported use of universal health screening assessments that included all students whereas 1% of respondents (*n* = 7) indicated the use of targeted health screenings focused only on those students demonstrating some level of risk (see

Table 2). Results of chi-square analysis revealed that these proportions were similar across

elementary and secondary buildings, $p = .09$. Those respondents who reported use of universal

health screenings most commonly indicated that screenings were conducted for vision (98%),

hearing (95%), body mass index (44%), postural problems (43%), and oral health (33%).

After universal screening data are collected, 85% ($n = 282$) of respondents indicated that

data are reviewed by individual professionals, most often the school nurse (95% of the time).

Additionally, 4% ($n = 14$) of the time data were reported to be reviewed by groups of individuals

(most typically the school nurse, student support staff, administrators) and 3% ($n = 10$) of the

time they were not reviewed at all. When asked how interventions are typically developed for

students identified through health screening, 56% ($n = 186$) of respondents indicated that parents

are informed of the concern without school-based follow-up, whereas 30% ($n = 99$) of

respondents indicated that student-specific interventions are developed based on review of data.

Regarding perceived use and effectiveness, those respondents reporting use of universal

health screening indicated that they were being used successfully and that they were effective in

identifying health concerns. BAs perceived that universal screening was being used by staff in

their buildings with similar levels of success at both the elementary ($M = 3.87$) and secondary

(3.72) levels; $t(113) = 1.08$, $p = .28$. BAs also reported that they felt universal screening was

similarly effective at identifying student concerns at both the elementary ($M = 3.82$) and

secondary (3.91) levels; $t(113) = -.54$, $p = .59$.

Social, Emotional, and Behavioral Screening Practices

The greatest percentage of respondents reported that they did not use SEB screening

assessments (61%; $n = 288$), followed by use of targeted SEB screening assessments focused

only on those students already identified as at-risk (22%; $n = 105$), and finally use of universal

SEB screening assessments that include all students (9%; $n = 45$) (see Table 2). Results of a chi-square analysis revealed that these proportions were similar across elementary and secondary buildings, $p = .07$. For the 288 respondents who indicated that SEB screening assessments were not used, nearly all reported that struggling students were referred to an internal support team for intervention assistance (88%; $n = 252$); however, 7% of respondents ($n = 20$) reported that students who are exhibiting concerns are referred to an outside consultant or agency.

The 45 respondents who reported use of universal SEB screening were subsequently asked a series of questions to better understand how screening procedures were carried out. Chi-square analyses were not conducted to assess differences across grade levels due to the small size of this sample. When universal SEB screening was reported, BAs indicated that a brief measure was completed for all students to identify those at risk or in need of supports (58%; $n = 26$) or that teachers first nominated students for whom they have concerns and then conducted additional screening for those students (38%; $n = 17$). The most common informants within the screening process were teachers (60%; $n = 27$) and student support staff (44%; $n = 20$), with fewer respondents indicating students (27%; $n = 12$), parents (24%; $n = 11$), or other school staff (22%; $n = 10$). The majority of respondents indicated that universal SEB screening occurred once per year (40%; $n = 18$). Other frequencies included three times per year (20%; $n = 9$), two times per year (16%; $n = 7$) and "other" (i.e., as needed, every other year; 24%; $n = 11$).

More than half of respondents reported universal screening for social skills (82%; $n = 37$), general behavioral risk (73%; $n = 33$), self-esteem or self-concept (67%; $n = 30$); anxiety (58%; $n = 26$), aggression (56%; $n = 25$), depression (53%; $n = 24$), and misconduct (53%; $n = 24$), with many screening across more than one area. Other endorsed areas included threat to harm others, inattention, traumatic events, suicide, and substance use. Although significance tests

were not conducted across grade levels due to the small sample size, a higher proportion of elementary BAs endorsed screening for social skills (96% vs. 71%) and general behavioral risk (81% vs. 59%), whereas a higher proportion of secondary BAs endorsed screening for suicide risk (47% vs. 15%) and substance use (47% vs. 4%).

With the exception of one respondent who reported being unsure, all respondents described how screening data were reviewed within their schools. After universal SEB screening data are collected, 60% ($n = 27$) of respondents indicated that data are reviewed by individual school staff (most commonly student support staff, administrators, or teachers, in that order), and 38% ($n = 17$) indicated that data are reviewed by a team of professionals. Again, the school-based teams most commonly consisting of student support staff, school administrators, and individual teachers. A substantially larger proportion of respondents indicated that the determination of student risk was a teacher or team decision (73%; $n = 32$) than that it was made based on specific cut-off scores (27%; $n = 12$). When asked how interventions are typically developed for students identified through SEB screening assessments, 89% ($n = 40$) of respondents indicated that individualized interventions are developed based on the review of student data whereas 7% ($n = 3$) reported that all students struggling with a similar problem receive the same intervention. Over half of respondents (59%; $n = 26$) indicated that interventions were typically chosen through a combination of recommendations based on past practices and a review of research-based options for the identified problem. Overall, BAs who reported use of universal SEB screening assessments felt that they were being used successfully ($M = 3.31$) and were effective in identifying concerns ($M = 3.48$), with no significant differences across grade levels, $p = .53-.79$.

Social, Emotional, and Behavioral Intervention Practices

Of the 475 respondents, 49% ($n = 231$) reported use of a universal program(s) for addressing SEB well-being. The association between grade level and use of a universal SEB program(s) was significant, χ^2(1, $n = 410$)=9.23, $p < .01$. Post hoc tests revealed that significantly more elementary (58%; $n = 126$) and fewer secondary BAs (41%; $n = 85$) indicated that their schools currently use a universal program(s) for addressing SEB well-being, $p = .01$. When asked to indicate which programs were most commonly used, the most frequent endorsements were of PBIS (81%; $n = 187$), Second Step (23%; $n = 52$), Responsive Classroom (18%; $n = 41$), or a locally-developed program (17%; $n = 40$) (see Table 4). Roughly 20% of respondents ($n = 46$) indicated "Other." Examples of programs reported at the elementary level included Capturing Kids Hearts (flippengroup.com/education/capturing-kids-hearts-1/), Conscious Discipline (consciousdiscipline.com), MindUp (mindup.org), Social Thinking (socialthinking.com), and Tribes Learning Communities (tribes.com). Examples of programs reported at the secondary level included Building Assets, Reducing Risks (barrcenter.org), Character Counts (charactercounts.org), Leader in Me (leaderinme.org), and School-Connect (school-connect.net). The majority of BAs indicated universal SEB programs were implemented school-wide (55%; $n = 126$), with 37% of respondents reporting use grade-wide ($n = 85$). When BAs did not have universal SEB programs in place, they were most likely to indicate that they provided individualized interventions for students with specific needs (72%; $n = 163$).

When asked how well the universal SEB program(s) was being used by staff, elementary BAs rated the universal SEB program as significantly more successful ($M = 3.75$) than secondary BAs ($M = 3.51$), t(208) $= 2.26$, $p = .03$. When asked how effective the universal SEB program(s) was at addressing student concerns, BAs indicated that it was similarly effective at the elementary ($M = 3.63$) and secondary ($M = 3.51$) levels, t(208) $= 1.12$, $p = .25$.

Finally, a significant relationship was identified between the implementation of universal SEB programs and universal SEB screening, $\chi^2(1, n = 430)=17.71, p < .01$. Whereas the greatest percentage of respondents reported having neither universal SEB screening nor intervention in place ($n = 162$; 38%), schools were significantly more likely to implement universal SEB screening if a universal SEB program was in place ($n = 94$; 22%) than if one was not ($n = 52$; 12%).

Discussion

Recent years have brought increased interest in, and use of, tiered systems designed to support the whole student. Although screening serves as the critical entry path into a multi-tiered model of service delivery, we have had a limited understanding of what screening looks like in U.S. public schools, particularly when considered across academic, health, and SEB domains. The purpose of the current study was therefore to examine the national landscape of screening practices in the U.S. to bolster our understanding both with regard to quantitative (i.e., how often does it occur?) and qualitative (i.e., what do these practices look like?) aspects.

Most striking were the discrepancies found in screening implementation rates across domains of functioning. That is, whereas universal screening was endorsed by 81% of respondents in the academic domain and by 70% with regard to health, only 9% of respondents endorsed the use of universal SEB screening. Although somewhat disheartening given the calls made to conduct SEB screening in recent decades (e.g., New Freedom Commission on Mental Health, 2003; U.S. Public Health Service, 2000), such results are consistent with results of surveys by Bruhn et al. (2014) and Lane et al. (2015a), both of which found that substantially larger proportions of administrators reported the use of academic (i.e., 73-81%) than SEB (i.e., 12%) screening. Within the current study, respondents overwhelmingly reported that students

demonstrating SEB concerns were referred to an internal, school-based support team. This

finding is unsurprising given the presence, and documented success, of multidisciplinary

consultation teams in schools over the past several decades (Chalfant et al., 1979). It does,

however, raise questions regarding why SEB screening implementation remains so low in

comparison to academic screening, with several potential explanations. For one, whereas all

states have clear curricular standards for academics, a recent review found that only 11 states had

social-emotional learning standards at the K-12 level (Eklund et al., 2018). Consequently,

educators have a much clearer sense of what academic skills students should be able to

demonstrate at a particular grade level than is true for social-emotional skills or behavior.

Additionally, it is notable that the assessment burden falls squarely on teachers when completing

SEB screeners whereas academic screening can be conducted by a wide range of school

personnel (e.g., classroom teachers, special educators, classroom aides). As such, SEB screening

may represent a greater intrusion to the typical classroom. Finally, many schools may not have

the resources available (i.e., trained clinicians) to provide follow-up SEB services (NASEM,

2019). For example, federal data suggest that the recommended ratios from the American School

Counselor Association (i.e., 250:1), National Association of School Psychologists (i.e., 500-

700:1), and School Social Work Association of America (i.e., 250:1) are far from achieved in

U.S. schools with actual ratios of 444:1, 1526:1, and 2106:1, respectively (Whitaker et al., 2019).

One interesting finding in comparing screening practices across domains was that

academic screening data were much more likely to be reviewed by a team of professionals

(63%), whereas health and SEB screening data were much more likely to be reviewed by one

individual (85% and 60%, respectively). This may not be a concern in the health domain,

wherein screening criteria tend to be strictly defined and the school nurse may be the only one

trained to make recommendations based on assessments of vision, hearing, or body mass index.

Within the SEB domain, however, decision making is often more nuanced, thus requiring the

input of multiple stakeholders. Although one person may be charged with overseeing the

screening process, the use of multidisciplinary teams to review data and make intervention

recommendations has generally been endorsed within MTSS (Briesch et al., 2017).

A second finding of interest related to the ways in which BAs reported making decisions

regarding student risk. When considering academic screening data, slightly more respondents

indicated using cut-off scores to identify students at risk (54%) than basing decisions on teacher

or team judgments (43%). In contrast, when reflecting on the interpretation of SEB data,

substantially more respondents indicated that the identification of student risk was based on

teacher or team decision (73%) than cut-off scores (27%). Although respondents were not asked

about the specific SEB screening measures used in their buildings, it is worth noting that the

most popular measures employ cut scores to aid in the identification of those students

demonstrating risk (e.g., BASC-3 Behavioral and Emotional Screening System; Kamphaus &

Reynolds, 2015; Student Risk Screening Scale for Internalizing and Externalizing Behaviors,

Lane et al., 2015b). Further exploration is therefore warranted to understand the ways in which

schools may be using multiple sources of information to inform SEB screening decisions.

Also interesting were the ways in which participants reported using screening data to

inform intervention decisions. Whereas health concerns identified through screening were

typically not addressed directly in schools (only 30% of respondents indicated school follow-up),

BAs predominately reported using data to design individualized interventions across both

academic (70%) and SEB domains (89%). Such a finding raises the question of whether the

resources being directed toward Tier 2 intervention development are sustainable. That is, the use

of standard interventions and group problem-solving enhances feasibility, given that the same

intervention is used with multiple students. In contrast, the development of individualized

interventions requires more intensive data collection and problem solving and is therefore

typically recommended at Tier 3 (Tilly, 2008). Although roughly 25% of respondents indicated

that standardized protocol interventions were used to address Tier 2 academic concerns, only 7%

of BAs reported using this approach to address SEB concerns. Although the reasons for this were

not explored in the current study, one possible explanation may be that school teams are less

familiar with options for standardized protocol interventions within the SEB domain.

One additional area explored in the survey results was the degree to which assessment

and intervention practices were consistent across elementary and secondary levels.

Understanding potential differences across levels was of interest given the challenges that have

been identified with implementing collaborative processes in middle and high schools (Dulaney

et al., 2013). Research has found that secondary level principals perceive the use of tiered

systems of support to be less of a priority, and therefore implementation rates tend to be much

lower than in elementary buildings (Swindlehurst et al., 2015). Within the current study, we

found that whereas reported rates of use were highly consistent for both health and SEB

domains, universal academic screening was much more likely to occur at the elementary level

(94%) than the secondary level (68%). Furthermore, secondary-level BAs were more likely to

report (a) screening for math and written language and (b) that universal academic screening data

were reviewed by individual teachers or staff than respondents at the elementary level. Finally,

significantly greater proportions of elementary BAs reported the use of universal SEB programs

than secondary BAs. Although the most common endorsements were made of curricular

programs (e.g., Open Circle, Second Step) or non-curricular frameworks (e.g., Conscious

Discipline, PBIS) with demonstrated empirical support, the extent to which empirical support

exists across programs appears to vary substantially (Jones et al., 2019).

Limitations and Directions for Future Research

Although the results of this study serve to further our understanding of the current state of

academic, health, and SEB screening practices in U.S. public schools, this work is not without its

limitations. First, whereas a nationally representative sample of 1,330 district administrators

provided consent for their districts to participate in the survey, completed responses were only

received from 475 BAs. Although this represents a robust national sample produced via

probability methods, we caution against generalizing these findings to the larger population of all

regular U.S. public schools. There are gaps between some of the sample demographics and the

corresponding population parameters. For example, there were substantially larger percentages

of respondents from the Northeast (30%) than would have been predicted by the Common Core

of Data (20%) and the percentage of students who were non-White was much lower than at the

national level (i.e. 25% vs. 52%). It is worth noting, however, that results of the current study

(e.g., high rates of internal referral, low rates of screening) parallel trends identified in a

nationally representative survey of district administrators (Authors, 2020). Similarly, related to

sample size, a very small number of BAs reported that universal SEB screening was utilized in

their schools. Given that one of our primary interests was to explore what universal SEB

screening practices looked like in school settings, we chose to report these descriptive data for

the 45 respondents; however, caution is warranted in generalizing these findings given the small

size of the sample.

Additionally, limitations of the measure should also be noted. Given the desire to

maximize feasibility and to ensure a sufficient response rate, respondents were asked to provide

their answers in response to multiple choice questions. Although respondents were able to

choose "other," they did not have the opportunity to clarify their answers or to provide additional

detail. As such, study procedures did not allow us to probe to understand the specifics of

implementation. The use of follow-up interviews or focus groups would allow for a more

detailed understanding of these factors. Finally, as with any self-report measure, there is the

potential for both inaccuracy in recollection as well as social desirability bias in the responses. It

is possible that some BAs may have been less familiar with specific screening practices carried

out in their schools or felt compelled to respond in particular ways in order to appear in line with

best practices. As such, respondents' reports may not be an exact reflection of actual practice.

Conclusions and Implications for Practice

Screening for health conditions has long been a part of school-based practice (Cross,

1985); however, such use of proactive assessments to identify those students at-risk for academic

and SEB concerns has a relatively shorter history. Although some prior work has been conducted

to estimate implementation of school-based screening efforts, the current study extends the

literature by providing a direct comparison across domains and exploring the ways in which

screening data are used to inform subsequent decision-making. Obtaining a better understanding

of what screening practices look like in both elementary and secondary schools across the U.S.

may be beneficial for those administrators looking to introduce or modify such practices locally.

At the same time, however, the degree of variability found in participants' responses was

notable, both within and across academic and SEB domains. That is, responses reflected a lack of

consensus concerning such factors as how screening data should be reviewed and how student

risk should be identified. Such findings highlight the needs that exist for educators around

professional development and coaching focused on universal screening. For those schools not

currently implementing universal screening, this training may be focused on developing a fundamental understanding of what this type of assessment entails and why it is important. Support also appears warranted, however, for those schools in which collection of screening data is routine but there may be less confidence regarding use of data to inform intervention. In addition to necessary leadership and system supports, training and coaching to build implementer skill has been identified as one of the three key implementation drivers believed to impact the successful and sustained use of evidence-based practices (Smolkowski et al., 2019). Therefore, ensuring that educators in general—and MTSS teams in particular—have sufficient knowledge and skill to carry out universal screening procedures appears to be an important priority.

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Table 1.

Demographic Characteristics

Demographic Items	Elementary N (%)	Secondary N (%)	Both Levels N (%)	Overall N (%)
Gender				
Male	73 (34.5)	134 (66)	22 (47)	229 (50)
Female	138 (65)	68 (33.5)	25 (53)	231 (50)
Other	1 (.5)	1 (.5)	0 (0)	2 (0)
Age				
25-34	9 (4.4)	9 (4.7)	0 (0)	18 (4.1)
35-44	62 (30.4)	75 (39.1)	9 (20)	146 (33)
45-54	88 (43.1)	69 (35.9)	21 (46.7)	179 (40.5)
55-64	41 (20.1)	36 (17.1)	14 (31.1)	91 (20.6)
65 +	4 (2)	3 (1.6)	1 (2.2)	8 (1.8)
Race				
American Indian or Alaskan Native	2 (1)	0 (0)	0 (0)	3 (.7)
Black or African-American	10 (4.8)	9 (4.5)	0 (0)	19 (4.2)
Native Hawaiian/ Other Pacific Islander	0 (0)	0 (0)	1 (2.2)	1 (.2)
White	190 (91.3)	184 (92.9)	40 (87)	414 (91.4)
Multi-Race	3 (1.4)	4 (2)	4 (8.7)	11 (2.4)
Other/Unspecified	3 (1.4)	2 (1)	1 (2.2)	5 (1.1)
Geographic Region				
Northeast	62 (28)	66 (31)	14 (30)	142 (30%)
Midwest	84 (39)	69 (33)	18 (38)	171 (36%)
South	45 (21)	48 (23)	5 (11)	98 (21%)
West	27 (12)	27 (13)	10 (21)	65 (14%)
Position				

Principal	199 (94)	183 (90)	40 (85)	422 (91)
Assistant Principal	5 (2)	9 (4)	1 (2)	15 (3)
Other	8 (4)	11 (5)	6 (13)	25 (6)
Years Experience				
Less than 4 years	0 (0)	1 (.5)	0 (0)	1 (.2)
4-9	6 (2.8)	3 (1.5)	1 (2.1)	10 (2.2)
10-14	28 (13.1)	30 (14.8)	3 (6.4)	61 (13.1)
15-19	55 (25.8)	58 (28.6)	9 (19.1)	122 (26.3)
20-29	89 (41.8)	82 (40.4)	22 (46.8)	193 (41.8)
30+	35 (16.4)	29 (14.3)	12 (25.5)	76 (16.4)
Highest Degree				
Bachelor's degree	2 (1)	3 (2)	1 (2)	6 (1)
Master's degree	78 (37)	68 (33)	17 (36)	163 (35)
Master's Plus, Certificate of Advanced Graduate Study, or equivalent	109 (51)	118 (57.5)	24 (51)	251 (54)
Doctoral degree (PhD, EdD, PsyD)	22 (10)	15 (7)	4 (9)	41 (9)
Other/Unspecified	2 (1)	1 (.5)	1 (2)	4 (1)

Note. Elementary refers to administrators in building serving students K-5

Table 2.

Percentage of School Building Administrators Reporting Types of Screening across Domains

		Elementary (N = 218)	Secondary (N = 210)	Both Levels (N = 47)	Combined (N = 475)
Academic	universal screening	94%	68%	85%	81%
	select screening	4%	16%	11%	10%
	no screening	<1%	12%	2%	6%
	don't know/ no response	2%	4%	2%	3%
Health	universal screening	77%	63%	68%	70%
	select screening	2%	1%	0%	1%
	no screening	18%	25%	28%	22%
	don't know/ no response	4%	11%	4%	7%
Social, Emotional, Behavioral (SEB)	universal screening	12%	8%	4%	9%
	select screening	20%	27%	11%	22%
	no screening	63%	53%	81%	61%
	don't know/ no response	5%	11%	4%	8%

Note. Universal screening = screening of all students. Select screening = screening of nominated students. Both levels = respondents indicated working with both elementary and secondary students

Table 3.

Academic Universal Screening: Subjects Reported

	Elementary	Secondary	Both Levels	Combined
	(N = 204)	(N = 143)	(N = 40)	(N = 387)
Reading	99.5%	97%	100%	99%
Math	83%	92%	93%	88%
Written Language	23%	36%	30%	29%
Science	3%	16%	5%	8%
Social Studies	1%	6%	0%	3%
Other or Unspecified	3%	2%	0%	3%

Note. Respondents were able to select more than one option. Both levels = respondents indicated working with both elementary and secondary students

Table 4.

Universal Social, Emotional, and Behavioral Programs: Reported Use

	Elementary	Secondary	Both Levels	Combined
	N = 126	N = 85	N = 20	N = 231
Schoolwide Programs				
Positive Behavioral Interventions and Supports (PBIS)	82%	84%	65%	81%
Safe and Civil Schools	7%	9%	0%	7%
Classroom Programs				
Good Behavior Game	5%	4%	5%	4%
Open Circle	3%	0%	0%	2%
PATHS®	2%	4%	5%	3%
Responsive Classroom	23%	9%	20%	18%
Second Step	30%	11%	25%	23%
Other				
Locally-developed program	15%	24%	5%	17%
Other	25%	13%	15%	20%

Note. Respondents were able to select more than one option. Both levels = respondents indicated working with both elementary and secondary students.