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# Barriers and Facilitators to Sustaining School Health Teams in Coordinated School Health Programs

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## Abstract

Coordinated school health (CSH) programs address multiple factors related to students' overall health, thereby increasing their physical and mental readiness to learn. A formative evaluation of three school districts in 2010–2011 examined strategies for sustaining the school health teams (SHT) that lead CSH efforts. Qualitative data from 39 interviews and 13 focus groups revealed facilitators and barriers for sustaining SHTs. Quantitative data from 68 questionnaires completed by SHT members and school principals examined factors associated with having more active school health teams and district and school characteristics SHT members believed to be important to their schools' efforts to implement CSH. Facilitators of sustaining SHTs included administrative support, staff engagement in the SHT, and shared goals and responsibility. Barriers to sustaining SHTs included limited time and competing priorities, budget and funding constraints, and staff turnover. Findings provide valuable insight into challenges and potential solutions for improving the sustainability of SHTs to enable them to better support CSH efforts.

### Keywords

coordinated school health; school health teams; parent engagement; staff engagement

Children must be physically and emotionally healthy in order to learn (Dunkle, Nash, & Saunders, 1991; Novello, Degraw, & Kleinman, 1992); quite simply, healthier students are better learners (Basch, 2011; Harper & Lynch, 2007; Symons, Cinelli, James, & Groff, 1997; Vernez, Krop, & Rydell, 1999). Health and education professionals have long recognized the positive effects school health programs have on improved academic performance, reduced health risk behaviors, and improved health outcomes (American Association of School Administrators, 2013; ASCD, 2012; Basch, 2010; Centers for Disease Control and Prevention, 2010; National School Boards Association, 2013). School health programs can improve students' health knowledge, attitudes, and skills (Kolbe, 2002) and help prevent or reduce risk behaviors (Centers for Disease Control and Prevention, 2013a). This is an important aim because risky health-related behaviors such as early sexual initiation, violence, unhealthy eating, and physical inactivity are linked to poor grades and

test scores, as well as lower academic success (Carlson et al., 2008; Florence, Asbridge, & Veugelers, 2008; Spriggs & Hapern, 2008; Srabstein & Piazza, 2008).

For many years, CDC has promoted a specific model to support student health within schools; this model, based on the work of Allensworth and Kolbe (1987), introduced eight components of a coordinated school health (CSH) program (Allensworth & Kolbe, 1987). This eight-component approach became a foundational framework for school health in the U.S. CSH is the systematic coordination of polices, practices, and components for improving students' health and learning in our nation's schools (Centers for Disease Control and Prevention, 2014). Although new frameworks such as the Whole School, Whole Community, Whole Child (WSCC) model (ASCD, 2012) are expanding what it means to support students, the foundational tenants of CSH appear in the WSCC model and remain a mainstay in school health. The WSCC model expands on the CSH components to emphasize both the psychosocial and physical environment as well as the growing roles that community agencies, families, and students must play in promoting health. As "the WSCC approach combines and builds on the elements of the Whole Child model and the CSH approach to create a unified model that supports a systematic, integrated, and collaborative approach to health and learning," (Lewallen, Hunt, Potts-Datema, Zaza, S, Giles, 2015), it is critical to reflect on how CSH is implemented in schools. In particular, school staff, parents, students, and community members should examine the role of school health teams in aligning, developing, and implementing practices to create optimal learning environments that support the whole child (Murray, Hurley, Ahmed, 2015). Further, several structural elements and processes have proved useful for implementing CSH and a whole child approach in schools, including use of school health coordinators; school health teams; systematic assessment and planning; strong leadership and administrative support, particularly from school principals; integration of health-related goals into school improvement plans; and strong community collaborations (Rasberry, Slade, Lohrmann, Valois, 2015)—all factors that are discussed in this article.

School health teams are well positioned to help establish a collaborative approach to learning and health. To learn more about the elements and processes essential to successful coordinated school health efforts, CDC and ICF International (a research and evaluation firm) provided evaluation support to explore CSH implementation in three school districts: Charlotte-Mecklenburg Schools in Charlotte, North Carolina; Gibson County Special School District in Dyer, Tennessee; and Jackson Public Schools in Jackson, Michigan. The study was intended to help the districts and CDC better understand how strong CSH initiatives functioned and could be improved.

As part of a larger evaluation exploring concepts of coordination and integration in a broader framework for CSH (Pitt Barnes et al., 2011), one area of interest was the formation and function of school health teams (SHTs), referred to as healthy school teams, wellness committees, or health leadership teams. Comprising representatives from school, home, and community—such as principals, school nurses, social workers, teachers, parents, students, and community partners serving children and youth—SHTs are charged with improving health within schools by planning, monitoring, and implementing CSH. SHTs typically identify health problems and concerns, set priorities, and develop solutions through action

plans incorporated into schools' overall improvement plans to link health with learning outcomes (Centers for Disease Control and Prevention, 2013b).

Little has been systematically documented about the role of SHTs and how they affect health outcomes. The few studies that have been conducted have examined whether adequate resources for CSH will lead to desired outcomes (Weiler, Pigg Jr, & McDermott, 2003), confirming the connection between CSH and improved academic performance (Basch, 2011; Murray, Low, Hollis, Cross, & Davis, 2007; Rosas, Case, & Tholstrup, 2009; Vinciullo & Bradley, 2009), or focusing on specific roles played by certain types of school staff, such as nurses (Bradley, 1997) and school counselors (Henry, McNab, & Coker, 2005), in CSH activities. Engagement of key stakeholders on SHTs is believed important for achieving health and academic outcomes, but additional research is needed to understand the mechanics of successful SHTs and CSH. In this study, we explored barriers and facilitators to sustaining SHTs in high-functioning CSH programs in three school districts. Some of the criteria used to determine a district had a high-functioning CSH program included: presence of a full-time district CSH coordinator; convening of a district CSH advisory council or similar group; a dedicated budget for implementing school health efforts and/or facilitating coordination of health efforts; evidence of data collection and use of data to inform decision-making; implementation of initiatives that were student focused and encompassed more than one component of the CDC CSH model; and use of multiple strategies to address any one topic/content area. We specifically answer the question, "What are the barriers and facilitators to sustaining school health teams in high-functioning CSH programs across three school districts?"

## Methods

To understand the context and nature of barriers and facilitators of sustaining a SHT, we used qualitative and quantitative methods. Representatives from a total of 13 elementary, 4 middle, and 4 high schools from the 3 districts participated in this study. Among other criteria, we selected a range of schools from each district that had SHTs who met regularly, identified CSH activities for the year, and had broad representation in its membership (including from health services, nutrition services, physical education, family/community). Each district's CSH coordinator assisted with the planning and design of the study, including identifying and recruiting participants for the interviews and focus groups. We conducted semi-structured interviews with 22 SHT leads (school staff appointed to lead SHTs) and 17 school principals. We also conducted 13 focus groups with 51 SHT members. The topics of inquiry in interviews and focus groups differed slightly by target audience as they addressed our overarching evaluation examining coordination and integration in a broader framework for CSH, but questions about barriers and facilitators to sustaining a SHT were similar in both interviews and focus groups. Interviews and focus groups were conducted in person by trained data collectors with qualitative data collection experience.

Interview and focus group data were summarized and analyzed using a thematic approach, systematic coding, and qualitative analysis software (ATLAS.ti). The evaluation team approached the analysis using a detailed process that entailed (1) data capture, (2) codebook development, (3) intercoder reliability assessment, (4) code application and coding

guidelines developed specifically for this study, and (5) detailed documentation of themes by district and by respondent categories of interest (Miles & Huberman, 1994). The team used both thematic and content analyses, which allowed identifying and labeling of themes, patterns, relationships, and differences in the data as they related to facilitators and barriers to sustaining SHTs.

Quantitative data were collected through a questionnaire we developed to explore elements of CSH coordination. The questionnaire, administered online to district- and school-level staff and partners, provided evaluation data for a larger study, but findings presented here include only data from respondents asked to provide input on SHTs and CSH at the school level; these respondents included SHT leads, SHT members, and school principals. The questionnaire examined constructs such as leadership, parent engagement, community engagement, funding, district and school administrative support, and skills of the district CSH coordinators and SHT leads. These constructs captured a broad perspective on the critical elements of CSH coordination that reflected our hypothesized model of CSH coordination and integration for the larger study. We selected a subset of constructs that were most directly relevant to school health teams.

A total of 106 school-level staff from 21 elementary, middle, and high schools were invited to participate across all three districts. Respondents who did not complete the questionnaire by the initial due date or who expressed a desire for a paper copy of the questionnaire received a printed version. Sixty-eight school-level staff from 17 schools completed the questionnaire, resulting in a response rate of 65.2% (district-specific response rates ranged from 58.1% to 79.7%). Data collection occurred in spring and summer 2010. ICF International's Institutional Review Board approved the study.

Quantitative data were used to explore some of the concepts emerging from qualitative interviews and focus groups. Correlation and logistic regression analyses examined factors associated with having more active SHTs, defined by participants' reports that their teams "often implement[ed] programs and services that meet the needs of students" (as opposed to "never," "seldom," "sometimes," or "I don't know"). Analyses examined two sets of characteristics: (1) SHT and district characteristics, and (2) skills of the SHT lead. Additional frequency distributions were examined to identify district and school characteristics SHT members believed to be important to their schools' efforts in implementing CSH. Analyses were conducted using SPSS version 21.0.

## Results

### Qualitative Findings

#### Facilitators of sustaining school health teams

**Administrative support.:** Qualitative data from interviews and focus groups were analyzed together to identify facilitators and barriers to sustaining SHTs. Across the three districts, SHT members often referenced administrative support as a key facilitator for sustaining SHTs. At one site, district leadership provided informational meetings to guide school staff tasked with forming a SHT and to demonstrate implementation of CSH components. In addition to hosting SHT informational meetings, district representatives visited select

schools throughout the year. A SHT member recalled a district representative helping her revise her SHT's goals and better understand the whole process.

At the school level, leadership of both school-level administrators and the SHT lead was important. Leadership of school administrators, particularly the principal, ensured student health was prioritized along with academic outcomes, and in some cases, that leadership was a driving force behind the formation and support of SHTs. School administration support was cited as very important to SHT success in interviews and focus groups, and principals played a key role in staff engagement in the SHT. Furthermore, the lack of administrator-level investment and leadership for CSH was cited as a potential major barrier. "*If your administrator doesn't agree with some of the things that you're doing*," said a SHT lead, "*then it won't get done*." In addition, SHT leads were often noted as vital to the development and sustainability of their schools' SHTs because they organized the team and led the development of activities and initiatives.

**Staff engagement in the SHT.:** Another primary facilitator for sustaining a SHT was staff engagement in the work of SHTs. Having passionate staff and resourceful SHT members was reported as vital to the success of SHTs in all three districts. SHT members noted that concern for students was instrumental in maintaining team activity despite competing demands on members' time. SHT members indicated it was deep commitment to the work—not just staff involvement—that sustained the team. Several respondents reported that passion for CSH and commitment to wellness were the most important facilitators of continued staff engagement on the SHT.

Staff who remained active on their SHTs got along well with other team members, had leaders who encouraged their efforts, and enjoyed seeing the positive effects of their work, particularly on students' health. For example, members of one SHT proudly cited working with their city to influence the development of a park across the street from the school. Several respondents maintained their positions on the SHTs because they believed they made a difference in students' health. One SHT member stated that being a role model was important, as was seeing the students learn about health and watching their actions change as a result of SHT initiatives. Visible positive impact of SHT efforts facilitated buy-in and participation.

> These are people who are invested in the well-being of kids or they wouldn't be here. And it is easy for people to get sidetracked at the end of the day because you are tired…they show up because they value what happens in the group.
>
> —SHT member

In addition, broad staff representation on the SHT facilitated sharing information and ideas on how to meet the school's health needs; thus, having a larger SHT with diverse staff was helpful because it allowed for both the delegation of tasks and also matching tasks to staff members' skills and resources.

**Shared goals, responsibility, and work.:** The concept of shared goals, responsibility, and work was another facilitator of staff engagement. SHT members indicated that having a purpose or a goal for the school year, such as completing the School Health Index (CDC,

2013b) or planning for an event, facilitated staff engagement. Planning for and implementing concrete health-related activities enabled SHTs to work toward goals and helped members feel productive. Sharing the workload also ensured every member had a responsibility and felt accountable.

### Barriers to sustaining school health teams

**Limited time and competing priorities.:** In all three school districts, SHT members described limited time as a barrier to sustaining school health teams for two reasons: (1) staff often did not have enough time to add SHT to their duties, and (2) scheduling SHT meetings was difficult. One SHT member mentioned that involvement on multiple school-related committees made SHT participation more difficult; teachers often served on other school committees and could feel *"committee-ed out."* In terms of scheduling, finding common meeting times that did not interfere with members' other commitments was challenging. Scheduling was particularly difficult for after school meetings in one rural school district where school and home were often many miles apart.

Another time-related challenge involved inclusion of part-time staff. Because some part-time staff were at school for limited hours, they were sometimes absent when meetings were held or they had limited free time to attend SHT meetings. This was particularly problematic in one district where budget cuts required more part-time staff who, because of working limited hours, could rarely fit SHT meetings into their schedules.

SHTs convening during the school day faced additional challenges with staff involvement because teachers were needed for instructional time. As one SHT lead explained, *"We don't have a classroom teacher … we just never pulled a teacher out of the classroom, away from instruction."* Similar tensions existed in another district where formal meetings waned after the district and school administration emphasized the importance of instructional time during a teacher in-service training.

> We're still doing all of our work, we just were not coming to the table as a group. Instruction time is sacred. If you think about a small school with a staff of 10 or 12 people and six of them are on the healthy school team, that's a lot of instructional time.
>
> —SHT member

**Budget and funding constraints.:** In addition to time constraints, budget considerations also emerged as a barrier to sustaining strong and active SHTs. Specifically, budget cuts threatened to terminate the positions of some school health team members. At one district, school nurses were assigned to be the SHT leads, but due to budget constraints, school nurse positions—and therefore the SHT leads—were in jeopardy. At another district, physical education teachers were cut from the staff and therefore no longer able to participate in the SHT. Further, SHT members were often unsure if a dedicated budget existed for CSH activities. Sometimes, multiple funding streams were reported, but delays in securing funding, the effort required to submit grant applications, and the threat of budget-related staff cuts were all seen as hindrances to CSH efforts.

**Staff turnover.:** Staff turnover also was recognized as a threat to sustaining a SHT. Staff turnover, including attrition, position termination, retirement, within-district transfers, and committee changes, often affected the momentum of SHT activities. The absence of a member of the team was acutely felt and often resulted in a slowdown or halt in SHT activities.

### Quantitative Findings

Quantitative data were used to further explore concepts that emerged in the qualitative data. Based on existing CSH literature, a number of key variables of interest were identified from the questionnaires (see Table 1). Of the 10 characteristics examined, 5 were significantly correlated with more active teams: SHT met 4 or more times during the current academic year (r=.26); involvement of a principal representative in the SHT (r=.28); SHT has a written mission, vision, or goals (r=.29); SHT members are willing to make the necessary time commitment to support CSH (r=.44); and school uses data to make decisions about CSH programs (r=.44). When these factors were entered into a single logistic regression model, two were found to be significant predictors of being a more active team: “SHT members are willing to make the necessary time commitment to support CSH” and “School uses data to make decisions about CSH programs” (see Table 2).

In addition, we examined the data to identify skills of SHT leads associated with having more active teams. Of the 14 skills assessed on the questionnaire, 12 were significantly correlated with active teams; these included written communication (r=.32), oral communication (r=.41), group facilitation (r=.32), interpersonal communication (r=.35), problem solving (r=.51), managing multiple responsibilities (r=.49), identification of funding opportunities (r=.41), consensus building (r=.40), marketing of CSH (r=.56), motivating individuals or groups to advocate for or support CSH (r=.55), providing necessary resources (r=.48), and knowledge about CSH (r=.52) (see Table 3). We attempted to enter these variables into a logistic regression model to identify predictors of being a more active team, but discovered that due to pervasive multicollinearity among these variables, we could not produce a stable model.

Finally, basic descriptive statistics were analyzed for participants’ responses to questions about the importance of various characteristics for schools’ efforts to implement CSH. Of the 14 characteristics examined, the 5 rated most important based on mean scores were (in order of importance) having an effective team lead, having an effective district school health coordinator, the presence of a functional school health team, school staff engagement, and the district leadership’s dedication to health (see Table 4).

## Discussion

This study’s findings help document processes, barriers, and facilitators experienced by school staff implementing CSH initiatives. The combination of the quantitative and qualitative data collected in this evaluation provides a rich picture of the factors related to the success and challenges related to implementing and sustaining SHTs. Respondents viewed SHTs as effective and desirable for helping students become healthier and more ready to learn. Participation in SHTs can empower school staff, parents, students, and

community members by increasing their awareness and knowledge of existing school health policies and programs, providing opportunities for ownership and commitment, leveraging resources, and involving them in decision making. The team structure with broad representation was reported as both helpful and necessary, and the presence of a school health team emerged as one of the factors identified by respondents as most important in schools' efforts to implement CSH.

Garnering support and leadership endorsement of principals was a key facilitator reported by respondents, and although quantitative data revealed principal involvement in the SHT was not an independent predictor of having a more active team when controlling for other factors, the data did reveal that principal involvement was significantly associated with having a more active team. In addition, engaging staff that were committed and passionate about students' health and wellness was a critical facilitator of the SHT's success. Team members noted that concern for students and deep commitment of staff was instrumental in maintaining team activity despite competing demands. This was also evident in the quantitative data where having SHT members who were willing to make the necessary time commitment to support CSH was a significant predictor of having a more active SHT. In addition, having a clear purpose and seeing achievement of goals, programs, or activities was noted as motivational for SHTs to continue their work despite challenges, and the use of data for making decisions about CSH programs was predictive of having a more active SHT. Facilitators of SHTs that emerged in this study were often characteristics specific to the team or school-level staff or infrastructure, but the quantitative data also revealed a couple of key district-level supports for CSH. In particular, the district leadership's dedication to health and an effective district-level school health coordinator were two factors participants rated as among the most important characteristics in schools' efforts to implement CSH, and this critical role of district-level leaderships also was supported by qualitative data.

Most of the barriers to the work of SHTs were logistical (e.g., scheduling of meetings, identifying staff to serve as members). Having time to participate and the timing of participation were key barriers. The time required to be a member seemed to depend on the staff role of potential SHT members such that part-time staff could not always participate in meetings. In addition, finding time to have meetings and plan activities was described as a barrier when/if it encroached on instructional time—an increasing concern for school staff being held ever more accountable for student academic success.

The issue of resources and budget cuts also sometimes limited the effectiveness of SHTs and diminished members' motivation to sustain momentum. Interestingly, budget-related characteristics (such as the school having a dedicated budget for CSH) and SHT lead skills (such as grant writing and fundraising) were not associated with having more active teams, but qualitative findings revealed budget constraints could have indirect impacts such as cuts to nursing and other allied health or professional staff, key members of SHTs who may no longer be present or accessible.

This study does, however, have important limitations. First, the study was limited to three school districts, and though these districts were selected because they have reputations for strong CSH programs, they may not reflect what strong CSH, or a strong SHT, looks like in

other districts. In addition, the response rate from the questionnaire used to provide information on the types of participants in, and activities of, SHTs was 65.2%; although a higher response rate would strengthen the validity of our quantitative findings, we used multiple qualitative data sources (interviews and focus groups) to supplement and expand on our quantitative findings. In addition, the quantitative analysis is limited by missing data for certain items and the infeasibility of accounting for nesting of respondents within schools.

Despite these limitations, our findings have important implications for practice. Based on this study, we suggest district and school staff may consider several strategies for sustaining SHTs. One strategy is to obtain administrative support and buy-in for the SHTs and their activities. Another strategy is to designate a lead staff member within the SHT to take responsibility for ensuring the team supports school-level CSH activities. In addition, using data-driven decision-making and then articulating clear purpose and shared goals can help sustain SHTs, as this common purpose and movement towards goals was a factor many participants credited with strengthening their SHTs. To this end, the use of clearly defined and concrete activities (e.g., completion of the *School Health Index*) can promote progress or highlight accomplishments and may help SHTs stay focused and motivated. One last, but important, strategy is to think creatively about ways to overcome barriers such as scheduling challenges, budget reductions, and staff turnover (e.g., meeting via conference calls or streaming video, preparing and sharing meeting notes with new members). Although no barrier has clear and easy solutions, awareness of the challenges may better position SHTs to reduce such barriers.

This study contributes to building a broader understanding of the barriers and facilitators of SHTs. To our knowledge, this is the first study examining the function of sustainability of SHTs, which are an important mechanism for creating systemic change around health promotion within schools. Working with current staff, parents and families, students, and community organizations, schools can play a critical role in influencing social and physical environments and providing resources and practical strategies to help students adopt healthy lifestyles. l (Centers for Disease Control and Prevention, 2013b). Still, barriers to developing and sustaining SHTs must be addressed. Respondents in our study offered insight into challenges and potential solutions from CSH activities in three school districts.

School health teams are not restricted just to CSH programming; they are also relevant to other health promotion frameworks such as the WSCC model. The WSCC model highlights greater alignment, integration, and collaboration between education and health to improve each child’s cognitive, physical, social, and emotional development (ASDC, 2012). It incorporates the components of a coordinated school health program with an ecological approach that is directed at the whole school, with the school in turn drawing its resources and influences from the whole community—such as through the formation of a SHT—and serving to address the needs of the whole child. Findings provide useful directions for optimizing the success of SHTs as vital supports for CSH or WSCC and implementation of health promotion efforts in schools.

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**Table 1**

Associations Between School Activities or Characteristics and More Active School Health Teams (SHTs)

| | Descriptive Statistics | | | Pearson's correlation | | |
|---|---|---|---|---|---|---|
| **Characteristic** | **n** | **Mean** | **SD** | **n** | **r** | **p-value** |
| SHT "often" implements programs and services to meet the needs of students[a] | 67 | 0.55 | .50 | -- | -- | -- |
| SHT met 4 or more times during the current academic year[b] | 67 | 0.72 | .45 | 66 | .26 | .034* |
| The school has a health goal in its school improvement plan[c] | 50 | 1.30 | .46 | 50 | −.21 | .150 |
| Involvement of the "principal representative" in the SHT[d] | 67 | 3.33 | .84 | 66 | .28 | .024* |
| SHT has a written mission, vision, or goals[e] | 65 | 4.26 | 1.05 | 65 | .29 | .022* |
| SHT members are willing to make the necessary time commitment to support CSH[e] | 66 | 4.36 | .87 | 65 | .44 | .000* |
| SHT engages in ongoing professional development related to CSH and health[e] | 67 | 3.87 | 1.09 | 66 | .21 | .089 |
| School has a dedicated budget for CSH[c] | 46 | 1.70 | .47 | 46 | −.17 | .256 |
| School routinely monitors and documents CSH program implementation[c] | 49 | 1.20 | .41 | 49 | −.12 | .425 |
| School uses data to make decisions about CSH programs[e] | 65 | 4.18 | .81 | 65 | .44 | .000* |

*Note*. More active SHTs were those for whom participants reported the team "often implement[ed] programs and services that meet the needs of students." Calculations for descriptive statistics and correlations excluded missing data and any "don't know" responses.

[a]Data were coded as: never, seldom, or sometimes=0; often=1

[b]Data were coded as: 1–3 times=0; 4 or more times =1

[c]Data were coded as: 1=yes; 2=no

[d]Data were coded as: 0=not a member; 1=not at all involved; 2=somewhat involved; 3=involved; 4=very involved

[e]Data were coded as: 1=strongly disagree; 2=somewhat disagree; 3=neither agree nor disagree; 4=somewhat agree; 5=strongly agree

**Table 2**

Logistic Regression Analysis Identifying Predictors of More Active School Health Teams

| School health team (SHT)/district characteristics (n=59) | B | S.E. | Wald | Sig. | Exp(B) | 95% | CI |
|---|---|---|---|---|---|---|---|
| SHT met 4 or more times during the current academic year | −.346 | .895 | .150 | .699 | .707 | .122 | 4.089 |
| Involvement of the “principal representative” in the SHT | .107 | .468 | .052 | .820 | 1.113 | .444 | 2.786 |
| SHT has a written mission, vision, or goals | .174 | .390 | .199 | .655 | 1.190 | .554 | 2.558 |
| SHT members are willing to make the necessary time commitment to support CSH | 1.183 | .550 | 4.635 | .031 | 3.264 | 1.112 | 9.584 |
| School uses data to make decisions about CSH programs | 1.320 | .583 | 5.134 | .023 | 3.743 | 1.195 | 11.726 |

**Table 3**

Correlations Between School Health Team (SHT) Lead Skills and More Active SHTs

| | Descriptive Statistics | | | Pearson's correlation | | |
|---|---|---|---|---|---|---|
| **SHT Lead Characteristic** | **n** | **Mean (SD)** | **Range** | **n** | **r** | **p-value** |
| Written communication | 53 | 4.21 | .88 | 52 | .32 | .022* |
| Oral communication | 55 | 4.36 | .85 | 54 | .41 | .002* |
| Group facilitation | 55 | 4.27 | .80 | 54 | .32 | .018* |
| Interpersonal communication | 53 | 4.26 | .79 | 52 | .35 | .012* |
| Grant writing | 36 | 3.97 | 1.03 | 35 | .29 | .097 |
| Problem solving | 53 | 4.11 | .80 | 52 | .51 | <.001* |
| Fundraising | 37 | 3.51 | 1.12 | 36 | .26 | .134 |
| Managing multiple responsibilities | 51 | 4.22 | .86 | 50 | .49 | <.001* |
| Identification of funding opportunities | 35 | 3.83 | 1.10 | 34 | .41 | .016* |
| Consensus building | 48 | 4.02 | .91 | 47 | .40 | .006* |
| Marketing of CSH | 42 | 3.71 | 1.07 | 41 | .56 | <.001* |
| Motivating individuals or groups to advocate for or support CSH | 51 | 4.08 | 1.02 | 50 | .55 | <.001* |
| Providing necessary resources | 48 | 4.02 | .98 | 47 | .48 | .001* |
| Knowledge about CSH | 52 | 4.25 | .97 | 51 | .52 | <.001* |

*Note.* Response options included: 1=poor; 2=fair; 3=average; 4=good; 5=excellent. Skipped and "don't know" responses were treated as missing.

**Table 4**

Descriptive Statistics for the Importance of Select Characteristics in Schools' Efforts to Implement Coordinated School Health (CSH)

| | Frequency Distributions for Importance of Each Characteristic | | | | Descriptive Statistics | | |
|---|---|---|---|---|---|---|---|
| | **Not important % (n)** | **Important % (n)** | **Very important % (n)** | **Don't know % (n)** | **n** | **Mean** | **SD** |
| District leadership's dedication to health | 2.9% (2) | 32.4% (22) | 57.4% (39) | 7.4% (5) | 63 | 3.59 | .56 |
| Support of the School Board | 10.3% (7) | 23.5% (16) | 54.4% (37) | 11.8% (8) | 60 | 3.50 | .70 |
| Effective district school health coordinator | 1.5% (1) | 26.5% (18) | 64.7% (44) | 7.4% (5) | 63 | 3.68 | .50 |
| Effective school health team lead/chair | 2.9% (2) | 22.1% (15) | 69.1% (47) | 5.9% (4) | 64 | 3.70 | .52 |
| Parent engagement | 22.0% (15) | 32.4% (22) | 39.7% (27) | 5.9% (4) | 64 | 3.16 | .86 |
| Community engagement | 22.1% (15) | 33.8% (23) | 38.2% (26) | 5.9% (4) | 64 | 3.16 | .82 |
| School staff engagement | 4.5% (3) | 25.8% (17) | 66.7% (44) | 3.0% (2) | 64 | 3.64 | .57 |
| Availability of funds and resources for CSH | 15.2% (10) | 30.3% (20) | 43.9% (29) | 10.6% (7) | 59 | 3.25 | .90 |
| Local press/media | 23.0% (15) | 36.9% (24) | 27.7% (18) | 12.3% (8) | 57 | 2.95 | .95 |
| Clear and routine communication with stakeholders | 9.1% (6) | 36.4% (24) | 40.9% (27) | 13.6% (9) | 57 | 3.35 | .72 |
| Availability and use of data | 6.1% (4) | 42.4% (28) | 40.9% (27) | 10.6% (7) | 59 | 3.39 | .62 |
| Presence of a functional district-level school health council | 10.6% (7) | 37.9% (25) | 40.9% (27) | 10.6% (7) | 59 | 3.31 | .77 |
| Presence of a functional school health team | 1.5% (1) | 27.7% (18) | 64.6% (42) | 6.2% (4) | 61 | 3.67 | .51 |
| Professional development related to health | 3.0% (2) | 39.4% (26) | 50.0% (33) | 7.6% (5) | 61 | 3.51 | .57 |

*Note*. For analysis, data were coded as: 1=not important at all; 2=somewhat important; 3=important; 4=very important. Skipped and "don't know" responses were treated as missing when calculating the mean score. The n listed under descriptive statistics excludes "don't know" responses.