Development and Use of the California Healthy Kids Survey Military Module to Support Students in Military-connected Schools

Tamika D. Gilreath, Joey Nuñez Estrada, Diana Pineda, Rami Benbenishty, and Ron Avi Astor

This article describes the development and use of the California Healthy Kids Survey Military Module to provide data about military-connected (MC) students and potential differential educational experiences of military versus nonmilitary youths and their families. Three military modules were developed and pilot tested and are now available for use statewide. These modules elicited information from students, parents, and school staff. Inquiries focused on issues relevant to MC students and explored their behavioral health risks, perceptions of school climate and resources, and mobility and deployment experiences. The process of creating these modules incorporated feedback from each of the targeted populations and a review of what is currently known about schools that serve military families. Results of this large-scale epidemiological study provide impetus for further research to elucidate experiences of MC youths. The project identifies and provides an empirical base to drive decision making on appropriate supports for military students. Results are used to identify needs and resources and assist the districts and principals in understanding the characteristics of the students and families they serve to increase optimal programming implementation.

KEY WORDS: California Healthy Kids Survey; military module; military students; parents; school staff

Military-related life events such as parental deployment, reintegration, war-related illness, and trauma have been found to negatively influence academic, socioemotional, and psychological outcomes among military children (Angrist & Johnson, 2000; Gorman, Eide, & Hisle-Gorman, 2010; Mmari, Roche, Sudhinaraset, & Blum, 2009). Nevertheless, a limited amount of previous research has reported on the remarkable resilience of some military students. Some studies have suggested that the right home and school supports have enabled some military students to adjust well over time to deployments (Mmari et al., 2009; Morris & Age, 2009; Weber & Weber, 2005). Other recent studies on posttraumatic stress and school climate have shown that supportive schools could serve as strong protective settings that shield students from intense depression, conduct problems, feelings of alienation and anxiety, and school failure (Astor, Benbenishty, & Estrada, 2009; Baum, Reidler, Rotter, & Brom, 2009). The central theme of these studies suggests that supportive home and school settings have a profoundly positive impact on military children facing the challenges of transitions and deployments.

Despite the empirical evidence, civilian teachers, principals, and school support personnel are often not systematically trained to understand and appropriately respond to the intense experiences of children with deployed parents. In the absence of better preparation of personnel in these military-connected (MC) schools, the potential of school violence, suicides, uneven academic outcomes, and rising dropout rates may be higher for students from military families (Cozza, Chun, & Polo, 2005; Flake, Davis, Johnson, & Middleton, 2009; Lincoln, Swift, & Shorteno-Fraser, 2008).

Given the findings of the extant literature and the probable hardships faced by MC youths, a regional consortium titled Building Capacity in Military-Connected Schools was developed. The building capacity initiative represents a partnership between the University of Southern California (USC) and eight MC school districts that seek to change school climates so that military and nonmilitary students will feel more welcomed, connected, and academically supported in their schools. Students in responsive school settings (that is, those that understand the needs of their students and make adjustments accordingly) have stronger social and academic...
outcomes (Astor et al., 2009; Osher, Dwyer, & Jimerson, 2006), so the first objective of the Building Capacity project was to develop a monitoring survey module in conjunction with the California Department of Education (CDE) to identify the potential needs and assets of MC students, families, and schools.

This article draws on empirical evidence showing how local data-driven monitoring efforts support the expansion of evidence-based programs and school reform aimed at social climate change that will provide MC schools with accurate information on the risk and protective factors experienced by the students. This will allow districts to develop tailored and targeted data-driven programs and interventions based on the shared concerns and unique situations of each school (Astor, Benbenishty, & Meyer, 2004; Astor et al., 2011; Benbenishty & Astor, 2012).

**USING A DATA-MONITORING SYSTEM TO GUIDE CHANGE PROCESS**

During the last decade, local districts, states, and national organizations have started elaborate surveillance systems, indicator systems, local crime mapping programs, and survey modules to monitor student risk and health-related behaviors. Such surveillance is the backbone of the public health approach to promote health, resiliency, empowerment and prevent risk behaviors. It reveals the magnitude of a problem, tracks it over time, and uses the information gained from monitoring to help shape actions to prevent public health problems (U.S. Department of Health and Human Services, 2001). Such monitoring systems have the potential to provide schools and districts with the information required to formulate policies and make program decisions based on local data.

Despite the widespread global use of school climate indicator and monitoring systems, many local schools do not have school climate or risk factor information about their site. When they do get school-level reports, schools often do not know how to interpret them, rarely share them with the school community, and do not tend to use them as a basis for formulating policies or planning interventions (Astor & Benbenishty, 2005; Astor et al., 2004). This may also be true for many MC schools across the country.

Figure 1 is a conceptualization of how the monitoring procedure works with each activity at the school site level. Each stage involves achieving certain tasks, goals, and products through a set of activities and processes that interact with particular goals and objectives. These stages represent processes of gathering data, making use of the data, creating plans of action, implementing the plans, reassessing the progress made by these programs, and continuing the cycle.

The Building Capacity consortium has developed an elaborate monitoring system that includes multiple ways to gather data continuously from multiple perspectives on all aspects of its processes and outcomes and shares this information with many constituents within the consortium and with outside organizations. In this article, we focus on one aspect of this monitoring system (for other components, see technical reports: Benbenishty, Esqueda, & Couture, 2012 and Benbenishty, Esqueda, & Malachi, 2011).

**CREATION OF A NEW MONITORING INSTRUMENT: CALIFORNIA HEALTH KIDS SURVEY’S MILITARY MODULE**

The nation’s largest continuous school public health surveillance system is the California Healthy Kids Survey (CHKS). The survey was originally funded by the CDE to meet the requirements of Title IV of No Child Left Behind and in response to federal requirements that schools implement the principles of effectiveness—to collect and use data to assess student needs, justify program funding, guide program development, and monitor progress in achieving program goals. In mandating the survey, CDE aimed to promote accountability and data-driven decision making to improve health and prevention programs in schools. The CHKS is conducted in more than 7,600 schools in 833 districts in California. WestED—a nonprofit research organization—and the CDE implement the data collection plan for the CHKS.

The Building Capacity consortium leveraged this existing surveillance system in two ways. First, the new modules included items that identify whether the respondent is associated with the military. These items enable comparisons between MC students and parents and their peers across many domains that are already captured in the existing surveys. In addition to a military module for youths in schools, new modules were developed and added to the surveillance system that also focused on issues that have special relevance to
MC parents and school staff working with military students and their families. All of these modules were developed during the first year of the Building Capacity project with MC school experts, select representatives from the Department of Defense Education Activity (DoDEA), the U.S. Department of Education, WestEd, researchers, students, parents, teachers, and principal advisory boards. The modules were pretested and pilot tested and were slightly modified on the basis of the feedback received.

**Student Version**

The student version of the CHKS contains multiple modules from which schools can choose. All consortium schools used the core module that contains components to assess the school climate and student outcomes targeted by this project (for example, violence, safety, harassment and bullying, alcohol, tobacco, marijuana and other drugs, school and community protective factors).

As described earlier, the Building Capacity project developed, pilot tested, and implemented a custom module that focused on the perceptions and school experiences relevant to military students. The following conceptual areas were identified for this specific military module:

1. **Military background**: Includes questions regarding the nature of the connection to the military, such as who in the family is in active duty.
2. **Military-related stressors**: Includes questions about current and past deployments, school transitions due to relocations, and their consequence.
3. **Military-related assets**: Includes statements regarding being more independent than most of their friends as well as solving problems better than their friends.
4. **School climate experiences relevant to military students**: Includes positive and negative experiences in school, such as feeling that the school respects the student’s family and the student feels welcome in school.
5. **Well-being**: Includes positive and negative affect in the last 30 days.

**Staff Version**

The CHKS survey includes a staff component entitled the California School Climate Survey. This is an Internet-based survey that assesses the level to which staff perceive their school to have conditions such as a positive and safe learning environment, norms and standards that encourage academic success, positive staff–student and intrastaff relationships, and student behaviors and conditions that facilitate learning versus conditions that pose a problem to the school. These staff perceptions are important for multiple reasons. Staff can be seen as informants who provide important information that can be added to and compared with student information. The comparisons between these two perspectives can help identify areas of agreement and areas in which students and staff present very different views of their school. Previous research indicates that such divergent opinions are associated with more negative climate (Benbenishty & Astor, 2005).

The California School Climate Survey contains three sections. The first is for all school staff; the second is for staff with responsibilities for services or instruction related to health, prevention, discipline, counseling and/or safety; and the third is for school personnel with responsibilities for teaching or providing related services to students with individualized education plans. Similar to the student survey, the Building Capacity project developed a military module for staff in MC schools. This module assesses four conceptual areas:

1. **Awareness of the presence of military students and contact with them**: Staff are asked whether they are aware that some of their students belong to military families.
2. **Military students’ school perceptions, needs, and assets**: Staff are asked how they think military students feel at school (for example, whether
they feel supported by peers and staff) and whether students have additional educational, emotional, and financial challenges or strengths.

3. School activities, services, and policies related to military students and parents: Staff are asked about the availability of special provisions to address the special circumstances of MC students and parents.

4. Need for training and other supports to respond to MC students: Staff are asked whether they need professional development to understand military culture.

Parent Version
A military module for the parent survey was also created in this project. The aim was to identify and address the special circumstances and needs of military personnel and their families. This module covers the following topics:

1. Military-relevant background: Background questions were asked related to the military, including position, rank, years of service, location, and number of deployments and family relocations.

2. Factors parents consider when selecting their child’s school: Parents were asked questions about the school’s academic reputation, attitude toward military families, and resources for military-connected students.

3. Needs for services: Parents were asked about their need for additional services, including tutoring, support, and afterschool activities for families.

4. Satisfaction with the inclusion of the military and a supportive school climate: Parents were asked how satisfied they were with issues such as the respect schools show military families.

5. Perceived needs: Parents were asked what they need to maximize the positive impact of the school on their children.

USING CHKS MONITORING SYSTEM TO IMPROVE SCHOOL CLIMATE IN MC SCHOOLS
The use of the CHKS monitoring system with MC schools involves a system-level change in awareness, responsiveness, practice, and decision-making empowerment perspective that allows MC schools and districts to hear the voices of the military students and their families. Districts can use the student military module to link interventions to how issues of deployment, multiple school changes, parental disability and loss, home resiliency, and community supports impact their school’s social and academic outcomes. They can also monitor fluctuations in these outcomes over time and compare them with other local and, eventually, statewide schools.

The goal of collecting data from multiple informants is to improve health, social, and academic outcomes of MC students and to provide support to the families, schools, and communities in which they are embedded. The information provided by the CHKS can help MC districts and schools in numerous ways. To illustrate how the CHKS surveys can support district- and school-level planning for policies and interventions to improve the school experience of military and nonmilitary students, we provide a few examples derived from the surveys that were given to primary and secondary school students.

Perceptions and Behaviors from the Building Capacity Consortium: Student-Level Data
Eight districts are participating in the Building Capacity consortium. Of the eight districts, six serve primary (elementary) schools and seven serve secondary (middle and high) schools. Select data from three of the six districts that serve primary schools are presented in Table 1, and select data from three of the seven districts that serve secondary schools are presented in Table 2.

Primary School Students. The rates of selected school climate, bullying (victim and perpetrator), weapon carrying, and substance use perceptions and behaviors are presented in Table 1. This table can inform each of the districts about the status of the district in each of the areas, how it compares with other districts, and the extent to which MC students are a particularly vulnerable group. Over 90 percent of fifth-grade students reported feeling a part of their school, cared for by adults in the school, and safe at school across all districts. One-third of students reported that they had hit other students. In addition, overall rates of hitting other students varied between districts. For instance, in district B the rate was 34.2 percent, and in district C it was much higher (41.4 percent). Clearly, district C needs to pay special attention to the issue of
peer victimization. Further, MC students reported higher rates of hitting across districts compared with their non–military-connected (NMC) counterparts. MC students also consistently reported higher rates of being hit by other students. The differences were quite significant in some cases. For example, in District A, the prevalence of hitting others among MC students was 40.5 percent, and it was 22.6 percent among NMC students. Such differential rates should raise concerns and spur discussion in the district about what creates this heightened vulnerability of MC students.

Over 21 percent of students reported seeing another student with a weapon at school. Rates of weapon carrying averaged 2.7 percent in the entire consortium, with district prevalence ranging from 0.68 percent to 3.5 percent. Differences in weapon carrying by MC and NMC students varied between districts. These differences should be explored, as they have direct implications for identifying at-risk groups.

Overall rates of lifetime cigarette and marijuana use were low. Rates of lifetime alcohol use were much higher at around 24 percent. Without exception, the prevalence of reported alcohol use was highest among MC students. Districts and schools may want to explore why these students are more prone to use alcohol and perhaps target them for prevention efforts, for example, through outreach to military families who may need more support.

Secondary School Students. The rates of similar items for students in grades 7, 9, and 11 are presented in Table 2. Districts may want to focus on some worrisome trends with regard to weapons in schools. Approximately 4 percent of secondary students reported bringing a gun to school and 8.9 percent reported carrying a knife. The differences between military and nonmilitary students were not consistent: MC students had higher rates of any weapon carrying in Districts A and B, but rates were not that much higher in District C. This means that one approach will not work for all districts. Some districts may need to identify military students as being at risk for involvement with weapons, whereas others may see military–connectedness as a protective factor in this area. Nearly 28 percent of secondary students reported seeing a weapon at school. Here again there was variation between districts, with rates ranging from 25.2 percent to 39.7 percent. The variability with regard to rates of cigarette and marijuana use across districts was very large (5.3 percent to 27.3 percent and 4.3 percent to 37.8 percent, respectively). Clearly, these issues are of more concern in some districts than in others.

The importance of an accurate picture of issues of concern, as they pertain to each district, is illustrated in Tables 1 and 2. Each of the districts presents a different profile of issues; military students are more vulnerable in certain areas and districts, but they are not in other topics and districts. Furthermore, the CHKS findings are presented to each of the 140 schools in the consortium. This provides every school with a systematic view of the voices of students, parents, and staff. Consequently, the consortium does not offer one solution to fit all; instead, each school and district is encouraged to examine its situation (as reflected in the CHKS) and determine its needs and priorities.

CONCLUSIONS FROM DATA

Elementary school-age students feel safer at school than their secondary school counterparts. However, differences in perceptions of school safety between MC and NMC students vary by district. The presence of weapons and peer knowledge of weapons on school grounds is a particular concern for all the consortium districts, as revealed in Tables 1 and 2. Even though the percentages are low for bringing weapons to school, they actually account for a large number of weapons (real numbers) in each district. The percentage of students who claim they brought a gun or knife to school during the past academic year ranges from 2 percent to 13 percent, depending on school level (primary or secondary) and school district. Students who bring weapons to school normally show them to friends or tell some of their peers (Astor, Meyer, & Behre, 1999; Benbenishty & Astor, 2005). Between 13 percent and 39 percent of students in different school districts and levels claim they observed another student with a gun or knife on campus that year. A weapon-free campus should be a common goal for all the districts, particularly for those districts that have higher percentages of students who report bringing weapons to school and students who see other students with weapons. Again, the variation in prevalence by military connection depends on the district. These findings provide a clear impetus for the collection of local data to assess the needs of a particular school or community.
DISSEMINATION AND DATA USE

A key component of the Building Capacity consortium was to provide support for building an infrastructure within districts and schools to utilize the data available to them through the CHKS. These results provide an opportunity for each district and school to assess student, parent, and staff needs in several critical areas. Themes that were identified as being a priority by districts included bullying, threat assessment, and mental health interventions in schools. Following data dissemination, university-based teams met with educators at multiple levels to discuss the data, the implications of various findings, and the opportunities for prevention and intervention.

These efforts resulted in face-to-face meetings with 140 principals and six thematic workshops that were attended by over 300 school professionals. Following these processes, multiple schools requested threat assessment training, which was conducted with more than 100 school personnel attending. In addition, several schools and districts implemented new programming that was dedicated to addressing the needs of MC students who were identified through the CHKS. Other schools are considering ways to support parents and prepare staff to better address the needs of MC students.

Student-level data in combination with pupil, personnel, teacher, principal, and parental data described previously will enable the consortium to continue providing workshops associated with current needs and will allow schools to be proactive rather than reactive in their program planning. As depicted in Figure 1, monitoring is a continuous process.

Table 1: Perceptions and Behaviors of Primary School Students, by District

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall % Yes</th>
<th>District A</th>
<th>District B</th>
<th>District C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O M N</td>
<td>O M N</td>
<td>O M N</td>
<td>O M N</td>
</tr>
<tr>
<td>Feel part of school</td>
<td>93.3</td>
<td>93.1</td>
<td>88.1</td>
<td>95.2</td>
</tr>
<tr>
<td>Feel cared for by school adult</td>
<td>97.0</td>
<td>98.0</td>
<td>95.5</td>
<td>99.0</td>
</tr>
<tr>
<td>Feel safe at school</td>
<td>95.8</td>
<td>98.0</td>
<td>93.2</td>
<td>100</td>
</tr>
<tr>
<td>Hit other students</td>
<td>33.3</td>
<td>27.8</td>
<td>40.5</td>
<td>22.6</td>
</tr>
<tr>
<td>Spread rumors about students</td>
<td>27.0</td>
<td>25.2</td>
<td>34.1</td>
<td>21.4</td>
</tr>
<tr>
<td>Been hit by other students</td>
<td>40.2</td>
<td>37.8</td>
<td>43.2</td>
<td>35.6</td>
</tr>
<tr>
<td>Had rumors spread by others</td>
<td>44.8</td>
<td>43.5</td>
<td>46.5</td>
<td>42.3</td>
</tr>
<tr>
<td>Carried a weapon (gun or knife)</td>
<td>2.7</td>
<td>0.68</td>
<td>2.3</td>
<td>0.00</td>
</tr>
<tr>
<td>Seen a weapon (gun or knife)</td>
<td>21.1</td>
<td>17.1</td>
<td>20.5</td>
<td>15.7</td>
</tr>
<tr>
<td>Ever smoked a cigarette</td>
<td>3.0</td>
<td>1.4</td>
<td>2.3</td>
<td>0.96</td>
</tr>
<tr>
<td>Ever drank any alcohol</td>
<td>23.9</td>
<td>15.5</td>
<td>27.3</td>
<td>10.6</td>
</tr>
<tr>
<td>Ever smoked any marijuana</td>
<td>1.5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Note: O = overall district; M = military connected; N = non-military connected.

Table 2: Perceptions and Behaviors of Secondary School Students, by District

<table>
<thead>
<tr>
<th>Variable</th>
<th>Overall % Yes</th>
<th>District A</th>
<th>District B</th>
<th>District C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O M N</td>
<td>O M N</td>
<td>O M N</td>
<td>O M N</td>
</tr>
<tr>
<td>Feel part of the school</td>
<td>53.7</td>
<td>47.7</td>
<td>46.2</td>
<td>48.1</td>
</tr>
<tr>
<td>Feel cared for in school</td>
<td>89.0</td>
<td>87.4</td>
<td>88.5</td>
<td>87.1</td>
</tr>
<tr>
<td>Feel safe at school</td>
<td>58.5</td>
<td>47.2</td>
<td>44.4</td>
<td>47.9</td>
</tr>
<tr>
<td>Been pushed, shoved, or hit</td>
<td>29.7</td>
<td>30.1</td>
<td>36.2</td>
<td>28.7</td>
</tr>
<tr>
<td>Had mean rumors spread about you</td>
<td>41.0</td>
<td>36.6</td>
<td>43.2</td>
<td>35.0</td>
</tr>
<tr>
<td>Carried a gun to school</td>
<td>4.3</td>
<td>5.8</td>
<td>7.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Carried a knife to school</td>
<td>8.9</td>
<td>10.8</td>
<td>11.9</td>
<td>10.6</td>
</tr>
<tr>
<td>Been threatened with a gun or knife</td>
<td>8.1</td>
<td>11.1</td>
<td>16.1</td>
<td>10.0</td>
</tr>
<tr>
<td>Seen someone else with a gun or knife</td>
<td>27.8</td>
<td>32.1</td>
<td>37.6</td>
<td>30.8</td>
</tr>
<tr>
<td>Ever smoked a cigarette</td>
<td>19.9</td>
<td>23.4</td>
<td>25.8</td>
<td>22.9</td>
</tr>
<tr>
<td>Ever drank alcohol</td>
<td>43.2</td>
<td>48.3</td>
<td>50.0</td>
<td>47.9</td>
</tr>
<tr>
<td>Ever smoked marijuana</td>
<td>29.4</td>
<td>33.0</td>
<td>32.9</td>
<td>33.0</td>
</tr>
</tbody>
</table>

Note: O = overall district; M = military connected; N = nonmilitary connected.
process. Following the administration of the CHKS, dissemination of the findings, and implementation of a range of interventions, the CHKS will be administered regularly along with many other components of Building Capacity. The findings will continue to inform districts and schools about the progress they may be making and the challenges that they are still facing. This feedback will be given continuously to districts and schools so that they can integrate it into their policies and practices. With the creation and implementation of a data-monitoring military survey module, school districts now have the ability to make data-driven determinations of evidence-based best practices that will help them create safer school environments, especially for their military students.

REFERENCES


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