Survey Data Gives Voice to Students in Creating a Healthy Campus/Community Culture

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Abstract

In order to assess elements of a healthy campus initiative at a rural regional university, program planners identified methods of ongoing evaluation that closely aligned with the initiative's goals and the population being served. As a result, a student health survey was administered to a voluntary sample of students ($N = 484$) during the fall 2009 semester. The survey, based on an instrument from the American College Health Association, was modified by researchers at the university. The results were analyzed by the Director and staff of the Institute for Community-Based Research at Delta State University in order to provide direction to program planners based on students' perceived needs and experiences. The Director met with constituent groups to disseminate the results and stimulate discussion around how the results could be used to increase awareness, better serve students, and promote an overall healthier campus. As a result, several recommendations issuing from themes identified through data analysis are currently under consideration or have influenced HCCI program decisions.

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Introduction

Delta State University is a regional university located in the heart of the Mississippi Delta, with a commitment to improving the health of the citizens it serves. The rural and primarily agricultural region of the United States served by the University represents substantial disparities with respect to the health outcomes of its citizens. These citizens are at a higher risk than others across the nation for high blood pressure, cardiovascular disease, diabetes, and substance abuse (Cosby & Bowser, 2008). Through one of its guiding principles, the University acknowledges its role in promoting the physical health of its students and members of the broader community through the provision of programs and resources (*Delta State University Undergraduate Bulletin,* 2010).

The College of Education within the University strives to prepare school and community professionals to create healthy and high-achieving schools and provide professional services that meet a variety of health-related needs for both students and constituents. In 2009 the College of Education expanded its vision, partnering with the Blue Cross and Blue Shield of Mississippi Foundation to develop and promote the Healthy Campus/Community Initiative (HCCI). The objectives of the HCCI focused on improving the health and wellness of those served through curriculum offerings, increased opportunities for involvement in a variety of fitness activities, and nutritional counseling services, resulting in a replicable model for creating and sustaining a healthy school culture ("Healthy Campus/Community Initiative," 2010).

The HCCI was first introduced on the University campus, where all academic departments, student services and programs, administration, and staff council participated in shaping the vision for the Initiative. It has expanded to the local K-12 school system, and the city

of Cleveland, home to Delta State University. Local partners include school officials, teachers, health care providers, city officials, and other interested constituents.

Numerous studies have contributed evidence to support both the need for and effects of health and wellness emphases that target university populations and communities, including K-12 school cultures. Mack and Shaddox (2004) found that university students who engaged in a personal wellness course showed improved attitudes toward physical activity based on a pre- and post-inventory scale completed by the students. Additionally, Conceptually Based Fitness/Wellness (CBFW) courses at American universities and colleges have increased since their introduction in the 1960s, with researchers finding that 90% of schools identified through a national database currently offer CBFW programs (Kulinna, Warfield, Jonaitis, Dean, & Corbin, 2009).

Burwell, Dewald, and Grizzell (2010) conducted a midcourse review of Healthy Campus 2010, a set of 10-year health objectives set forth by the American College Health Association (ACHA). These objectives were to be achieved during the first decade of the 21st century and were designed to increase quality of life and the length of a healthy life span, while decreasing health disparities among segments of the population. A key tool in measuring progress of the initiative was the collection of data from the ACHA National College Health Assessment. The results of the review indicated that the majority of targets for Healthy Campus 2010 showed either no change or movement away from the target. The authors of the review called for increased determination and vigilance in higher education to build healthier campuses, utilizing a grass-roots campus-by-campus approach.

Studies of earlier broad-based community initiatives present a similar call for action. During the 1980s and 1990s, there was great interest in the nation in creating healthy

communities from a holistic approach. Several studies have found the movement to be suffering, lacking focus and momentum. Researchers cite as root causes the difficulty in articulating, coordinating, and measuring the impact of its components. A common theme in these studies is the need for sustaining and transforming healthy communities through activities which bring citizens together in joint ventures that promote camaraderie and support, resulting in the motivation and power to sustain the movement (Wolff, 2003; Kesler, 2000; Weaver, 1997; & Johnston, 2009).

The Centers for Disease Control ("Guidelines for School and Community Programs," 1997) issued recommendations aimed at encouraging physical activity in childhood and adolescence to develop lifelong physical fitness habits. Yet, Langford and Carter (2003) reviewed numerous studies and data, concluding that the lack of emphasis on physical education in our nation's K-12 schools has resulted in a generation of students faced with weight problems and mired in sedentary lifestyles. There remains a need to identify and implement health and wellness initiatives that will provide sustained support for the improvement of the overall health of citizens, whether within a university, community, or K-12 culture.

Regardless of the conceptual framework for the initiative, it is clear that a system of evaluation must be in place to inform planning and drive the continual improvement of programs and services. Further, it is critical that the evaluation process vest the stakeholders. Program planners for the HCCI recognized the need for such a system; therefore, multiple forms of assessment have been identified as critical to the feedback loop that sustains the HCCI. A primary tool in gathering input from the University's student population is based upon leading health indicators associated with the *Healthy Campus 2010 Initiative* (American College Health Association [ACHA], 2006), which serve as a reference point for the project. In alignment with

these indicators, ACHA provides an important assessment tool through its National College Health Assessment (2010). The survey represents a range of public health issues, including attitudes, behaviors and access to services. The purpose of this paper is to describe how HCCI staff utilized a modified version of the ACHA National College Health Assessment as a feedback tool for informing program refinement and development.

Method

The American College Health Association, of which Delta State University (DSU) is a member, annually collects data through its National College Health Assessment (NCHA) regarding college students' views and habits related to a range of health issues (ACHA, 2010). The Association allows member institutions to modify the instrument in order to gather data specific to their institutional needs. Delta State University HCCI staff worked with the University's Office of Institutional Research and constituent groups on campus to adapt the National College Health Assessment in order to assess the University's student population on selected health issues and behaviors. The resulting DSU Healthy Campus/Community Initiative Student Survey (2009) contained 54 items related to the following topics: student demographics; general health; safety; alcohol, tobacco, and drugs; sex behaviors and contraception; weight, nutrition, and exercise; mental health; physical health; and vaccinations. The survey was conducted online through the Office of Institutional Research and Planning for a two-week period during the fall 2009 semester. Prior to making the survey available, the campus newspaper, *The Delta Statement*, provided promotional information and explanation. For the period the survey was accessible, computer stations were set up in high traffic areas on campus, allowing all members of the student population ease of access to the instrument. Initiative staff members were on hand to provide literature describing the survey and to answer questions.

Students voluntarily responded to the survey; they were not required to answer all questions in order to participate. Incentives ($100 on student's campus debit card) were offered to students who chose to enter a random drawing. The total student population at Delta State University in fall 2009 when the survey was administered was 4,031 ("Enrollment Data," 2009). A total of 484 students participated in the survey at some level; there were fewer respondents on most questions.

Dr. John Green, Director of the Institute for Community-Based Research at Delta State University, and Carly Jefcoat, MSCD, analyzed the survey data, which is characterized as providing a snapshot of a segment of community members (students) at one point in time. The researchers used descriptive univariate and bivariate analysis for a broad range of variable combinations. Results of the survey are based on their summary analysis (Jefcoat & Green, 2010). This paper will highlight the dimensions of the survey for which the results were interesting in terms of future planning and programming related to the HCCI.

Results

Participant Demographics. To ensure anonymity, participants were allowed to voluntarily provide demographic data on variables related to their age, gender, and race/ethnicity, as well as their status within the campus student population (classification, enrollment, residence, affiliations, and insured/uninsured). Therefore, the number of students responding to each item in this category ranges from 428 – 435. Demographic data revealed that 82.5% of the respondents were aged 18 to 25 years and the majority (71.5%) was female. The sample had a race/ethnic representation of 55% White; 39.7% African-American; and 1.3% other races/ethnicities. Respondents were primarily undergraduates; 57.6% were classified as juniors and seniors, while 27.6% were either freshmen or sophomores. Survey respondents were primarily full-time students (94.9%); however, only 39.9% of the students lived on campus. Table 1 provides

descriptive data on all demographic variables associated with respondents' characteristics. Table 2 provides descriptive data associated with participants' status within the University student population.

Table 1

Characteristics of Student Respondents

Student Characteristics	Percent
Age (n=435)	
18 to 20 years	34.7%
21 to 25 years	47.8%
26 years or more	17.5%
Gender (n=431)	
Male	28.5%
Female	71.5%
Race/Ethnicity (n=431)	
Asian	0.5%
Black	39.7%
White	55.0%
Hawaiian/Pacific Islander	0.2%
Two or More Races	4.6%

Table 2

University Position Characteristics of Survey Respondents

Student Status	Percent
University Classification (n=431)	
Freshman	13.0%
Sophomore	14.6%
Junior	27.9%
Senior	35.7%
Graduate/Professional	8.8%
Enrollment Status (n=429)	
Full-Time	94.9%
Part-Time	5.1%
Residence Status (n=431)	
On-Campus Housing	39.9%
Parent/Guardian House	13.5%
Other Off-Campus Housing	35.7%
Other	10.9%
Member of Fraternity or Sorority (n=432)	
Yes	21.5%
Insurance Status (n=428)	
No Insurance	22.7%

Health Status. Respondents were able to select from the following five descriptors in assessing their general health: Excellent; Very Good; Fair; Poor; or Don't Know. Of the respondents answering this item (*n* = 440), 51% reported good health, while 32% assessed their health as fair. There were no responses in the "Don't Know" category. The percentages of responses for each category are presented in Figure 1.

Figure 1

Self-Rated Health Status of Students

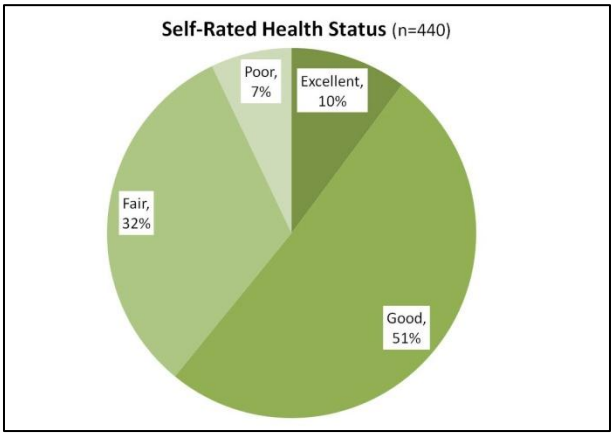


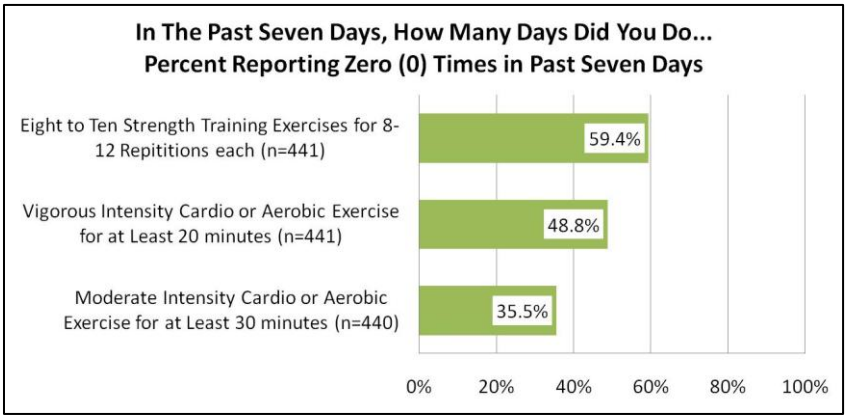
Figure 1. Percentages of respondents assessing their health status in each of the following categories: Excellent, Good, Fair, or Poor.

Weight, Nutrition, and Exercise. Students were asked to describe their weight in terms of one of the following categories: underweight, healthy weight, overweight, obese, or extremely overweight. An analysis of responses (*n* = 434) indicated that 35.4% of females viewed themselves as overweight compared with 24.4% of males who responded to the survey. When asked if they were trying to address their weight in various manners, 51.1% of respondents (*n*=429) indicated they were trying to lose weight. The majority of respondents (85.4%) indicated that they consumed 1 to 4 servings of fruits and vegetables daily. Of the 439 students who responded to this item, only 3.9% reported consuming five or more servings. However, the

respondents who indicated eating five or more servings of fruits/vegetables per day were more likely than their counterparts to report very good/excellent health. When surveyed about exercise habits, freshmen students were most involved in exercise, while those who worked full-time reported limited exercise. Respondents who indicated even moderate intensity exercise were more likely than the respondents who did not report this kind of exercise to characterize their health as very good/excellent. Table 2 provides a comparison of the percentages of the respondents who reported various types and intensities of exercise in the seven days prior to the survey.

Table 3

Percentages of Students Reporting No Exercise in Three Categories



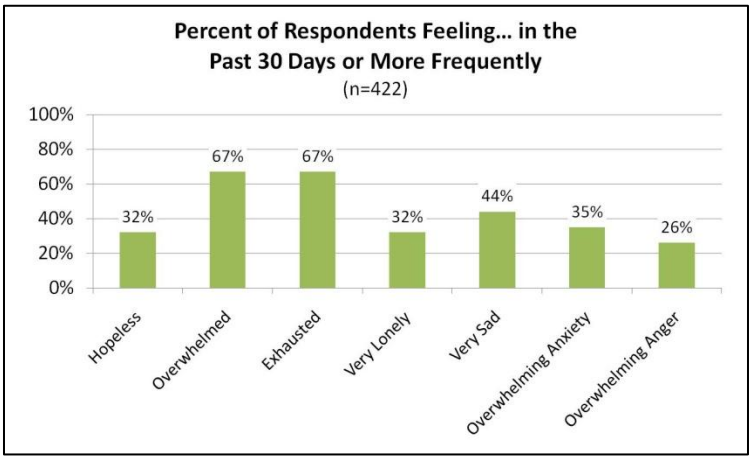
Note. Respondents could select frequencies of 0 – 7 days. The percentage shown indicates the percentage of respondents who reported no exercise for each category during the seven days prior to the survey.

Mental Health. Respondents were prompted to respond to several items that required them to characterize their feelings and types of traumatic issues they had to deal with in recent months. Across a list of eight items, the average number of stress indicators participants reported experiencing in the past 30 days (or more frequently) was 3.2. More than one in five students reported feeling "so depressed it was hard to function" in the past 30 days (or more frequently).

Among a list of stressful situations to deal with in the past 12 months, the largest percent of "yes" responses concerned finances, followed by academics. More than half of all participants reported facing a financially stressful situation in the past 12 months, while 49.2% of all respondents reported stressful or traumatic situations related to academics within the same period. Respondents who reported feeling hopeless, very lonely, and/or very sad were less likely than those who did not feel these ways to report very good/excellent health.

Table 4

Self-Described Emotions Experienced by Students in Previous 30 Days



Note. Respondents could select from a range of emotions which they experienced within the past 30 days (or more frequently).

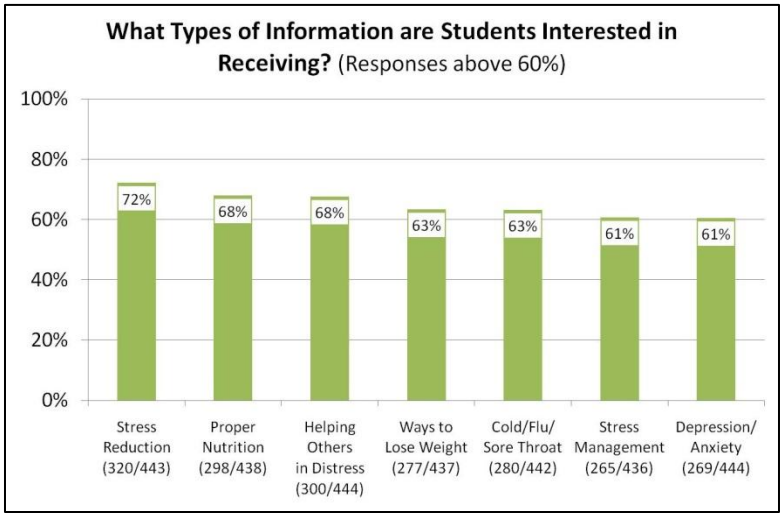
Alcohol, Tobacco, and Drugs. Survey participants were asked to respond to several items designed to assess their habits related to drinking, smoking, and drug use. Participants were asked how many times in the past two weeks they consumed five or more alcoholic beverages in one sitting. Of 447 respondents, 108 (24.2%) reported having consumed five or more drinks in one sitting from one to three times in the past two weeks, while 33 (7.4%) indicated they had done so four or more times within that period. Students living off-campus in residences other than their parents' and members of sororities and fraternities reported higher incidences of binge

drinking. This behavior is also more prevalent among members of the senior class and those in the 21 to 25 age range. Of note, when questioned about types of drugs used, 46.4% of students cited alcohol as the most frequently used drug in the 30 days prior to the survey date. Of 443 respondents, 16% reported having smoked cigarettes in the 30 days prior to taking the survey. Additionally, analysis of survey data related to smoking revealed that more males reported having used various forms of smoking tobacco and marijuana than females and members of sororities and fraternities reported having smoked tobacco and marijuana in greater numbers than did African American students.

Information Interests. Survey participants indicated whether they would like to receive information on a number of topics. The topics in greatest demand included stress reduction (72%); proper nutrition (68%); and helping others to lose weight (68%). Of the top seven information interests revealed, four were related to stress. Table 5 provides information on the topics with responses above 60% and the number of responses for each.

Table 5

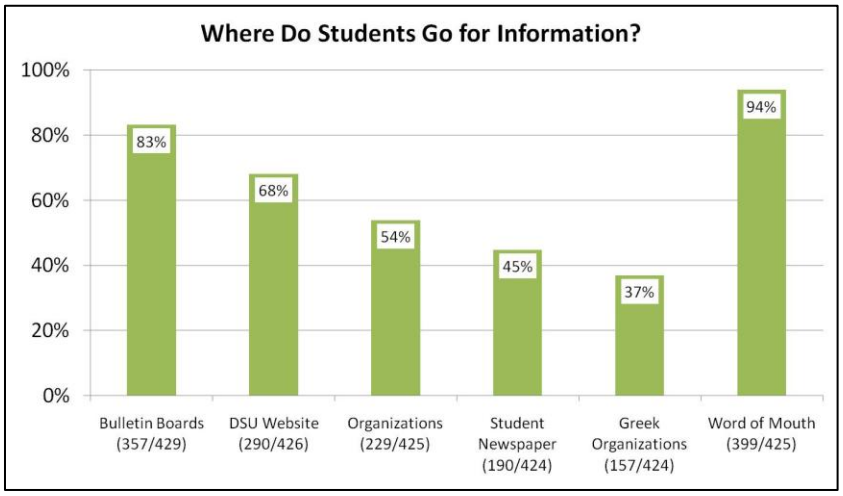
Information Interests Related to Student Health Concerns



Information Sources. Regarding the sources students depend on for information, respondents cited word of mouth, bulletin boards, and the DSU website as their top-rated sources. Of 425 respondents, 399 (94%) identified word of mouth as a dependable source of information; 357 of 429 respondents (83%) cited bulletin boards; and 290 of 426 respondents (68%) identified the DSU website as a source of information. Table 6 provides data related to the top six information sources identified by respondents.

Table 6

Information Sources Identified by Students



Discussion and Conclusions

The largest population affected by the Healthy Campus/Community Initiative (HCCI) on the Delta State University campus is the student body. Therefore, trends and themes identified through analysis of the results of the HCCI Student Health Survey should be considered by HCCI partners and planners when developing programming and activities for the Initiative. In order that all relevant stakeholders have the benefit of this data analysis, multiple avenues of dissemination were pursued across campus. Two major reports were produced, including univariate descriptive statistics and bivariate analysis of association between the socio-

demographic characteristics of respondents and their health attitudes and behaviors (Jefcoat and Green, 2010). Given the length of these detailed reports, follow-up executive summaries were also produced. The latter were sent to the Delta State University student newspaper, *The Delta Statement*, which ran substantive, detailed stories.

Survey results were also presented in face-to-face meetings. Dr. John Green, Director of the Center for Community-Based Research at Delta State University and co-author of the data analysis reports, made several presentations to key groups of stakeholders. These included three separate formal presentations and discussions with:

1) representatives from student government, student life, student business services, and student health/counseling; 2) Academic Council, consisting of college deans, directors of major centers of excellence, and other key personnel; and 3) the President's Cabinet, comprised of senior level administrators. Following each of these meetings, discussions took place concerning the meaning of the data and how these insights could be used to inform the development of programs to build health awareness, better serve students, and promote an overall healthier campus.

The dialogue held with stakeholder groups was consistent with a recommendation made by Kesler (2000). The researcher suggested that individuals leading healthy community movements make concentrated efforts to genuinely understand the needs, perceptions, and lives of those within the community. Wolff (2003) cautioned that healthy communities are dependent upon collaborate problem solving and the ability to build capacity using available assets and resources. Therefore, in addition to the financial support provided through a partnership with the Blue Cross and Blue Shield of Mississippi Foundation, Delta State University stakeholders should utilize data such as the Student Survey results to develop a long-range plan for sustaining and further developing the healthy campus culture utilizing available resources on campus.

Since the HCCI is organic in nature and, therefore continually evolving, the interesting findings and possible trends noted in the data analysis should allow staff to identify patterns, prioritize issues, inform action, and provide a baseline for future evaluation. Suggested clusters worthy of consideration based on the analysis include the following: enhanced communication; increased opportunities for engaging all students in fitness and nutrition education and activities; the identification of ways in which to address stressors in students' lives and provide them with enhanced coping skills; and identifying subgroups which may need targeted intervention related to a number of variables (i.e., smoking and alcohol consumption).

As the HCCI staff, campus steering committee, and advisory board consider these themes, they might benefit from identifying those programs and services that will allow for institutionalizing practice. For example, administering the Student Health Survey to all freshmen through a required introductory course could establish baseline data and create an important communication hub, simultaneously creating the opportunity for a longitudinal study. Similarly, some existing HCCI programs could be expanded or honed to address critical topics such as stress or provide targeted information on a range of topics. Since HCCI currently has programs that address fitness and nutrition, program planners would benefit from analyzing how closely these services correlate with the perceived needs of students. In doing so, a determination could be made as to whether the programs and services require modification or whether they need to be communicated more broadly to the student population. Relevant to those survey items for which students reported risky behavior (e.g., binge drinking), a number of studies suggest that direct interventions are often necessary to effect lasting changes (Sailors, Jackson, McFarlin, Turpin, Ellis, Foreyt, Hoelscher, & Bray, 2010; Peterson, Duncan, Null, Roth, & Gill, 2010; and Weinstock, 2010).

Given the large number of variables and combinations of variables explored through the administration of the HCCI Student Health Survey, the focus of this paper was restricted to themes that emerged through data analysis. Given the scope of the assessment, program planners may consider restricting the number of variables considered for future administrations. Whether the instrument is revised, streamlined, or remains in its original form, its results have important implications that should help to hone services to students and increase the vitality of the Healthy Campus/Community Initiative.

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