

Dec-1999

CART: Research on "The Impact of Wellness Courses" and on "Brockton-Area Transit"

Recommended Citation

(1999). CART: Research on "The Impact of Wellness Courses" and on "Brockton-Area Transit". *Bridgewater Review*, 18(2), 29-30.
Available at: http://vc.bridgew.edu/br_rev/vol18/iss2/14

This item is available as part of Virtual Commons, the open-access institutional repository of Bridgewater State University, Bridgewater, Massachusetts.

CENTER FOR THE ADVANCEMENT OF RESEARCH AND TEACHING

CART grants enable faculty and librarians to pursue research projects. "The Impact of Wellness-Related Courses on BSC Women" and "The Role of Brockton Area Transit in the Welfare to Work Program" are among the projects which were recently awarded CART grants.

THE IMPACT OF WELLNESS-RELATED COURSES ON BSC WOMEN

Dr. Pamela J. Russell (right) and Dr. Kathleen M. Laquale (left), Department of Movement Arts, Health Promotion and Leisure Studies



A recent survey of the physical and emotional health of BSC students has revealed some disturbing facts. The survey, which was administered as part of the Cooperative Institutional Research Program, measures such health indicators as self-esteem level, cigarette use and alcohol consumption. Previous results from the survey suggested that there were significant differences between our first time, full

time freshmen and their national peers at other medium-sized, select four year colleges. In 1996, the emotional health self-assessment of BSC men and women was 12% below the national average. Physical health self-assessments were 6% to 7% below the national average, with BSC women rating themselves 19% below BSC men. The BSC women also rated their levels of cigarette smoking and alcohol consumption above national averages.

These ratings clearly indicate an unhealthy wellness profile. Cigarette smoking and alcohol consumption, in particular, are serious health hazards. According to a recent survey, the number of students consuming alcohol has risen from 39% to 52% over the past five years. The number of student drinkers who were drunk three or more times in the previous month had increased by 22%. Unfortunately, many students see drinking as an inherent and necessary part of their social lives.

As teachers of wellness-related courses such as health, nutrition and performance courses (including jogging, cycling, and weight training), we wanted to find out whether or not women who enrolled in these courses developed healthier life-styles than those who did not. We developed a survey to assess students' understanding of issues relating to nutrition, exercise, alcohol and tobacco. After receiving approval to use human subjects from the Institutional Review Board at BSC, we mailed the surveys to 323 randomly selected women in four groups: (1) freshmen and (2) seniors who had taken wellness-related courses; (3) freshmen and (4) seniors who had

not taken wellness-related courses. Sixty-six students returned the survey. We were surprised and disappointed to learn that neither completion of wellness-related courses nor the college experience had a significant impact on understanding of some health issues and health-related behaviors. Notably, there were no significant differences among the groups in knowledge of alcohol and alcohol-related behaviors. In fact, all four groups of BSC women reported alcohol consumption above national averages. The incidence of cigarette smoking was also above the national average for all the groups.

On a slightly more positive note, seniors who had taken wellness-related courses were significantly less likely than those who had not to report a strong urge for a cigarette or to report that smoking made them short of breath. These differences may be related to tobacco use by family members, since 70% of seniors indicated that their own tobacco habits were affected by their families' use of tobacco. Women who had enrolled in such courses as nutrition, health science, aerobics, jogging and conditioning reported that they had obtained significant amounts of nutrition and exercise information from the courses, while their peers relied more on television and magazines. Given the unreliability of some of the nutrition and exercise information provided by the mass media, the students' dependence on courses for information was a positive finding. A far higher percentage of the students who had taken the courses knew that sit-ups are not an effective spot reduction technique compared to those who had not taken the courses.

It is clear that, given their current alcohol, tobacco, nutrition and exercise practices, many BSC women have a wellness profile that may put their long-term health status at risk. Neither completion of wellness-related courses nor the college experience appeared to have had a positive impact on their wellness profile. We have concluded that efforts to change health-related behavior must

be addressed through specific workshops that incorporate behavioral change strategies. For example, undergraduate students could complete one-on-one health behavior assessments with graduate students in the Health Promotion Program. This one-on-one contracting strategy could be employed throughout the semester to promote behavioral changes in the undergraduate students. These sessions would also help graduate students to develop their skills as health professionals.

THE ROLE OF BROCKTON AREA TRANSIT IN THE WELFARE-TO-WORK PROGRAM

Uma Shama, Professor of Mathematics and Computer Science and Philip Klotzbach, GIS Analyst and Research Assistant



The effort to move most welfare recipients into jobs and to limit the period of time during which they can receive benefits gained momentum during the 1990's. In August, 1996, President Clinton signed into law the Personal Responsibility and Work Opportunity Reconciliation Act, ending the federal government's 60-year open entitlement program, which had provided welfare benefits to all eligible low-income families. Since then, every state has restructured welfare assistance in ways designed to move historically unprecedented numbers of adult recipients from welfare to work by the year 2002.

Massachusetts began its welfare reform effort with a "demo" program in 1995, a year before President Clinton signed the national legislation. Even before the Massachusetts program began, the number of families on welfare had fallen dramatically, from 112,000 in 1981 to 65,000 in 1998. The program established a time limit of 24 months within a 60-month period, after which welfare recipients were no longer eligible to receive benefits.

The great majority of welfare recipients depend on public transportation for access to jobs and child care. Working in partnership with the Massachusetts Executive Office of Transportation and Construction, we designed a study to determine whether or not adequate public transportation is available to welfare recipients in the Brockton area. We worked in the Moakley Center's GeoGraphics Lab and were assisted by Lawrence Harman, the Lab's senior research consultant.

Our primary tool of inquiry in this project was Geographic Information Systems (GIS) software, which uses mapping as an integral part of analysis. GIS makes it possible to display spatial data in layers. For example, in our study, one layer consisted of a map of Brockton bus routes, showing the series of streets over which the buses travel and including information about stops along the route. A second layer, consisting of welfare recipients' information, defined using latitude and longitude, was plotted over the bus routes. Additional layers consisting of child-care and potential employer information were then created.

Our first task was to assemble the necessary data. The Massachusetts Department of Transitional Assistance provided us with a database of welfare recipient identification numbers with latitudes and longitudes based on zip+4 of each recipient's address. The Old Colony Planning Council contributed a list of approved child care centers. We obtained employment data by querying various internet yellow

page search engines, such as Bigbook and Excite. Then, in a process called geocoding, we typed in each address and the mapping program found the corresponding point on the GIS database. Brockton Area Transit's fixed bus routes were added to the map and 1/4, 1/2 and 3/4 mile bands were drawn around the routes. Utilizing these bands, we could see the locations of welfare recipients, potential job openings and childcare centers, all at the same time.

We discovered that over 80% of the 2,538 Brockton area welfare recipients live within 1/4 mile of a bus in the BAT route system. In addition, over 100 potential places of employment, such as restaurants, hotels and service stations, as well as 150 child care centers were identified within 1/4 mile of a BAT route bus. This information should prove to be of great value to case workers in their efforts to assist clients who are making the transition from welfare to work. By clicking on a given client's home address, the case worker can locate the bus routes nearest to the client's home as well as identifying local childcare and work opportunities. Another click brings up detailed transit information for the particular bus route selected: hours of service, frequency of service at different times of day, fares and accessibility for persons with disabilities.

Our Access to Jobs database has proved to be a useful planning tool for welfare-to-work coordinators, enabling them to focus on those clients whose needs are not currently being met. The database makes it graphically clear exactly where additional transit and childcare services are needed.

If you are interested in learning more about this and our other projects, click on the GeoGraphics Laboratory website, <http://geolab.bridgew.edu>.