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Information, Organization, and Target Perceptions of Student Services for Community College Students

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Information, Organization, and Target Perceptions of Student Services for Community College Students

A thesis presented to the faculty of the Department of Sociology East Tennessee State University In partial fulfillment of the requirements for the degree Master of Arts in Sociology

by Benjamin A. Martin May 2012

Joseph O. Baker, Ph.D., Chair Chris S. Dula, Ph.D. William T. Dalton III, Ph.D. Leslie McCallister, Ph.D.

Keywords: information, organization, perception, college students, student services
ABSTRACT

Information, Organization, and Target Perceptions of Student Services for Community College Students

by

Benjamin A. Martin

This study addresses several research questions. First, it explores methods for organizing information regarding health services so as to keep information accessibility at an optimal level. Second, this project identifies student perceptions concerning accessibility and organization of information about student services. This study also assesses students’ awareness of the available services. The study combined qualitative and quantitative methodology, involving two distinct stages of data collection. Results suggest age is largely unrelated to a belief schools should provide student services but positively correlated with the knowledge of the location of student services. Nearly all student services were positively correlated with the use of services. For the most part, no group differences were observed in the use of services. However, first-generation college students seemed to be the best predictor of the use of student services. Content analysis concluded that contemporary students primarily use internet resources to obtain student services information.
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CHAPTER 1

INTRODUCTION

Prevalence of Health Insurance

A recent poll conducted by the United States Census Bureau reported that the percentage of people without health insurance recently increased 1.3% in a single year as a proportion of the population, from 46.3 million in 2008 to 50.7 million in 2009 (U.S. Census Bureau 2010). Surprisingly, this is the first year since 1987 that the total number of uninsured Americans has increased (U.S. Census Bureau 2010). In turn, the number of Americans served by government health programs has increased. Moreover, it was reported that racial minorities were more likely to be without private insurance as compared to non-Hispanic whites (U.S. Census Bureau 2010). The U.S. government recently passed H.R. 3962 which requires insurance companies to allow children to stay on private family healthcare plans until age 26, requires employers to offer insurance to all full-time employees, and provides government subsidies to assist those who cannot afford private insurance. Though a potentially important legislative reform, it currently ignores part-time employees (a demographic the Census Bureau overlooked as well) and college students whose parents do not have private insurance policies to support them, as well as those who cannot afford deductibles (regardless of premium subsidies offered by the government).

College Student Health Concerns

College students’ mental and physical health is an increasing concern among healthcare providers and researchers. For example, Yang and Chiou concluded that price
elasticity regarding certain foods can influence the purchasing decisions of undergraduates (2010). Given that many unhealthy foods are less expensive to produce, subsequently making them available at a lower cost to the consumer (Pollan 2006), undergraduates are more likely to engage in an unhealthy diet. Kitzrow (2009) focused on risk taking behaviors (i.e. prevalence of unprotected sex, drug use, and alcohol use) among college students. Furthermore, researchers such as Dalton and Czyzewski (2009) have studied the relationship between physical health (i.e. eating disorders) and behavior issues (i.e. rumination) concluding that rumination was not an outcome caused by gastroesophageal reflux. Still, other studies have identified a relationship between physical and/or sexual abuse and physical health symptoms among college students (Eadie, Runtz, and Spencer-Rodgers 2008; Tansill et al. 2012). This prompted professionals to call for institution administrators to “consider mental health needs a priority and provide adequate funding” (Kitzrow2009:654). More importantly, there has been a significant increase in the number of college students with mental health issues and the number of college students actively seeking mental health services (Kitzrow2009). According to the National Survey of Counseling Center Directors, 85 percent of directors polled reported an increase in “severe” psychological problems between 1996 and 2001 (Gallagher, Sysko, and Zhang 2001). More recent research has reported that 32 percent of college students are diagnosed with an “apparent” mental health problem (Eisenberg et al.2011). College students are increasingly seeking counseling services for issues such as self-injurious behavior, eating disorders, alcohol abuse, and sexual assault on campus, to name but a few (Gallagher et al.2000;
Kitzrow2009). As the number of college students without private insurance grows, more will need to rely on health services offered by their educational institutions.

Accessing Health Information

Recent research has focused on how college students’ access health related information. For instance, Escoffery et al. (2005) confirmed the Internet to be an effective health-promotion channel for college students as the Internet enjoys virtually ubiquitous use on college campuses and by college students (Escoffery et al. 2005). Other researchers, such as Bates and colleagues (2006) stated that college students are more likely to use health services when information about them is available online. Hanauer and colleagues (2004) posited that the “digital divide” is closing, as the proportion of college students not using the Internet to access health related information shrank from 17 percent in 2000 to 3 percent in 2003. Additionally, Hanauer et al. concluded that searching for health related information on the Internet was significantly and positively related to educational attainment (2004). That is, people seeking post-secondary education are more likely to obtain health information through the Internet. This suggests institutions of higher education have a responsibility to provide easy access to accurate information regarding their health services.

The current generation of college students has grown up with the Internet. Subsequently, many expect to be able to access the Internet as a part of their regular daily activities. Presumably college students would be more likely to turn to the Internet when searching for available student services. Unfortunately, no research exists assessing
which student services are more likely to be accessed as a function of information being available on the Internet. Some researchers have, however, investigated the level of credibility that college students attribute to online information (Metzger, Flanagin, and Zwarun 2003; Rich and Hilligoss 2008). Shenton and Dixon (2004) concluded that young people tended to assess the value of an online source based on quantity of information instead of quality. Rieh and Hilligoss (2008) suggested adolescents and young adults turn to their classmates, roommates, or friends in order to assign a level of credibility to information they may have found. This may be directly related to the desire of an individual to share similar beliefs with others of the same education levels and social statuses (Harris and Dewdney 1994). This means the strategies of young adults in seeking information and deciding whether it is credible enough to use are strongly influenced by their peers. The level of accessibility to information may also contribute to the level of credibility associated with it.

**College Student Services**

Colleges offer a myriad of student services ranging from financial, to legal, to academic, to health-related. The way college students perceive these services strongly influences whether they are used (Rotimi, el-Dean, Freeman, and Lee 1986). For example, Wilcove and Sharp (1971) found that students’ differential perceptions of counselors’ role responsibilities influenced use of counseling center services. Such perceptions can focus on characteristics like quality of service, capability of provider, or credibility of the information provided about the service (Athiyaman 1997; Oldfield and
In a study assessing perceptions of student support services on various campuses across the U. S., Kelley-Hall (2010) determined that students generally displayed positive attitudes regarding academic and career services but more negative opinions regarding student health services and diversity programs. Furthermore, Kelley-Hall identified a positive relationship between student perceptions of the services and peer support. That is, stronger connections made with others in a cohort resulted in a more positive attitude about and an increase in use of the service. This may be because word-of-mouth information was shared among peer groups about services provided by colleges.

Although much of the literature has been centered on college students’ attitudes toward mental health services (Archer and Cooper 1998; Gallagher et al. 2000; Gallagher et al. 2001; Kitzrow2003; Stanley, Mallon, Bell, and Manthorpe 2010; Sue, Fujino, Hu, Takeuchi, and Zane 1991; Yamawaki 2010), some research has focused on student health services as a whole. Almost four decades ago, Comstock and Slome (1973) concluded that attitudes toward student health services were dependent on the availability and relative knowledge about the services.

Wellness has been defined in a variety of ways; most consider multiple components of a person. From a wellness perspective (as opposed to simply an absence of disease or pathology), body, mind, and spirit are integrated to improve the standard of living within all spheres (Smith, Myers, and Hensley 2002). In addition to direct physical healthcare, some institutions of higher education also offer nutrition programs, dieting
programs, and smoking cessation programs at student health clinics. However, while many universities offer student services such as career and mental health counseling, diversity programs, and student healthcare, community colleges seem to offer considerably less. This discrepancy reflects inherent differences in funding structures as well as with a rise in budget cuts for post-secondary schools in recent years.

In 2008, the Tennessee Board of Regents (TBR) began to focus on smoking cessation and weight loss programs in its wellness referendum for employees (TBR 2008). Unfortunately, the same initiative was not provided to TBR community college students. Despite the plummeting of overall smoking prevalence across the last 40 years (Centers for Disease Control and Prevention 2007), cigarettes still remain popular among adolescents and young adults (National Institute on Drug Abuse 2010). This is especially a concern in Tennessee where 23.1 percent of the adult population (18 years and older) currently smoke cigarettes (Centers for Disease Control and Prevention 2010). More importantly, adolescence and young adulthood are the years when most smoking addictions start (Wechsler et al. 1998). Furthermore, Tennessee does not provide any Medicaid coverage for counseling or medications aimed at reducing the prevalence of smoking (Centers for Disease Control and Prevention 2010). Likewise, the rapid increase in obesity rates in persons ages 18-29, has also become a major concern in the college population (Desai et al. 2008; Gow, Trace, and Mazzeo 2010; Mokdad et al. 2003). For example, according to the CDC, no U. S. state has an obesity rate less than 20 percent (2010). However, Tennessee is one of 12 states that have an obesity rate over 30 percent (CDC 2010). Ultimately, such high obesity rates can increase the likelihood of other
health concerns such as heart disease and Type II Diabetes (Lobstein, Baur, and Uauy 2004). Thus, smoking cessation and weight loss programs would be prime interventions to aim at the college-aged population, and higher education systems would be an ideal environment in which to deliver them. However, even if such programs were available through student health services, it is important to better understand how students access information about such issues and programs.

**Group Differences in Perceptions and Use of Student Services**

The epidemiology regarding the use of health services shows that women are more likely to use health services earlier in life, while men are more likely to use health services in later years (Mustard et al.1998); however, this may be due to a stronger correlation between age and mortality in men than women (Scitovsky 1994; Roos, Montgomery, and Roos 1987). Previous literature suggests differences in health issues (Mcyntire, Hunt, and Sweeting 1996), efforts to seek health services (Mustard et al. 1998), and even in the quality of health services provided to men and women (McKinlay 1996) may also underlie sex differences in physical health service use. Additionally, sex differences also exist in the use of mental health services. Most research on this topic shows women are more apt to use mental health services than men. For example, Leaf and Bruce (1987) found that, while stigma regarding the use of mental health services has been waning, women were still more likely to use these services although this may have more to do with help seeking behaviors than negative perceptions surrounding mental health services.
Previous research explains that first-generation college students were more likely to be of an ethnic minority and belong to a lower socioeconomic status (SES) group than those students whose parents had obtained at least a bachelor’s degree (Bui 2002). Interestingly, according to the American Association of Community Colleges (AAAC), this demographic accounts for about 42 percent of the community college student population (2011). Research has shown that first generation college students work more hours than their counterparts, are more likely to live off campus, and participate in fewer social groups that are affiliated with their respective campus (Pascarella et al. 2004). Furthermore, they also maintain a lower GPA when compared to students whose parents obtained a post-secondary degree (Pascarella et al. 2004). This may be due to the lack of a support system in which effective study habits are taught and formed at a young age. Most importantly, Terenzini and colleagues outline the handicap that first generation college students experience when attempting to obtain information regarding student services in general (1996). For example, because of the lack of access to social capital, first generation college students report difficulties in accessing information necessary to make beneficial decisions regarding which institution to attend, which classes to take, and which student support services to use (Pascarella et al. 2004).

Since the 1970s, ethnic minority students have increased in predominately white colleges and universities in the United States (Green 1995). It has also been noted that 21 percent of black college students cite health reasons for dropping out of college (Sanford 1979), making effective communication regarding available health services critical for minority student retention. Furthermore, Balfanz (2007) reported that health problems
remains one of the top reasons for minority college student attrition. This idea was supported by William Boyd in his address to the National Trustee Workshop in which he stated, “…the key to minority student retention is not successful programs for the minority student but basic institutional changes that incorporate the growing demographic so as to render special programs unnecessary” (1982:98). The most recent census data reports a higher rate of uninsured students in the community college setting and a higher rate of minority student enrollment (U. S. Census Bureau 2010). Researchers have also reported more distrust among racial minorities toward the medical community than is typically reported by whites (Hanauer et al. 2004). Fox and Rainie (2000) reported that the Internet empowers minorities by supplementing the information obtained from medical professionals. With this in mind, it is imperative that student health administrators and staff ensure that students who could benefit from utilizing student services are learning about availability.

*Availability of Information*

Studies have shown that the availability of information affects the decision to use it (O’Reilly 1982; Porat and Haas 1969), but unrelated information may decrease the ability to use relevant information (Halpin, Streufert, and Lanham 1971; Manis, Fichman, and Platt 1978; O’Reilly 1982). This seems to be especially true for health services. A study conducted by Ware and Doyle (1977) identified availability and accessibility of health services information as important components for forming perceptions about the service. Rotimi and colleagues (1986) also concluded that the amount and availability of
information had a strong impact on whether college students rated student health services favorably. Other studies have also illustrated a link between lack of familiarity about student health services and lower levels of satisfaction (Mechanic and Greenley 1976; Moos and Dort 1977). Detailed studies were conducted by Comstock and Slome (1973a, b), in which over 1,200 students from various post-secondary institutions identified various health problems they experienced and their opinions about the health services offered by the respective campuses. They concluded that level of familiarity with student health services was positively related to students’ level of satisfaction with that service, which was also confirmed by later research (Hill 1995). Similar results were also more recently observed within an international student population at a U.S. campus (Russell, Thompson, and Rosenthal 2008).

This study seeks to accomplish two objectives. First, the current study attempts replicate the results of previous research such as commonalities of student services offered between community colleges, the relationship between age and use of college student services, sex and race differences regarding use of college student services, and the relationship between the perceived responsibility to offer student services and the propensity to use them. Based on available research, I assess the following hypotheses:

H1. Community colleges would share a commonality of key student service, overall.

H2. Age would be positively correlated with a) knowledge regarding the location of services, while being negatively correlated with b) the use of services.
H3. Student perceptions regarding the availability of student services will be related to whether they are being used.

H4. Minority students will use student services more than white students.

H5. Females will use student services more than males.

H6. Age would be positively correlated with the belief that schools have a responsibility to provide student services.

The second objective seeks to contribute to existing literature by assessing the perception of college students regarding the responsibility to offer student services, effects of first generation college students on the use and perception of student services as well as the organization and availability of the information regarding college student services. Given there is currently no research assessing the organization and availability of student services, a model will be suggested from the results of the study. Based on available research, I assess the following hypotheses:

H7. Race and sex differences will exist in perceptions about whether colleges have a responsibility to provide student services, where a) minority students are predicted to be more likely than white students, and b) females are predicted to be more likely than males, to believe colleges have a responsibility to provide student services.

H8. Given the limited access to social capital, particularly family relationships, a) first generation college students are predicted to be less likely to use student services. Additionally, because first generation college students typically work longer hours than
their counterparts (thus suggesting full-time employment), b) they will be less likely to believe that colleges have a responsibility to offer student services.
CHAPTER 2

METHOD

Participants

This study was conducted with college students at 13 regional community colleges in Tennessee. Participants consisted of 3,154 undergraduates, 706 males (22.4 percent); 2,431 females (77.1 percent); and 17 participants (.5 percent) who did not disclose sex. Ages of the participants ranged from 16 to 74 ($Mdn = 28, SD = 10.79$). The distribution of the age variable was positively skewed with most of the participants falling in the lower part of the range. A total of 2,514 participants (79.7 percent) described themselves as White/Caucasian. A total of 386 (12.2 percent) identified as Black/African-American and 86 (2.7 percent) identified as being Chicano/Latino/Hispanic. A total of 58 participants (1.8 percent) identified with being Bi-Racial/Multi-Racial. A total of 42 (1.3 percent) described themselves as South-East Asian/Pacific Islander, while 29 (0.9 percent) identified as Native American/Alaskan. Thirteen participants (0.4 percent) identified as being African, 13 (0.4 percent) as Middle Eastern, and another 13 students (0.4 percent) chose not to disclose their race. In order to be able to more efficiently

Concerning data preparation: A total of 4,455 participants filled out an online survey beyond the 7th item (age). To ensure validity, additional participants were deleted. Specifically, 101 (0.02%) participants who fit one or more of the following criteria were removed from the database:

1) Took less than 4 minutes to complete the survey
2) Filled out at less than 25% of the survey
3) Filled in Race/Ethnicity with a variation of “Human” or with something inane (e.g., Extra-terrestrial, DNA)
4) Filled out the last written items with obvious sarcasm or diatribes. Critiques of the survey and comments we considered chauvinistic were retained.
5) Reported their status to be “Alumni” as opposed to Faculty, Staff, or Student. This procedure yielded a final “n” of 4,354.
differentiate between whites and minorities, the race variable was re-coded to form a dichotomous variable (0 = minorities, 1 = whites).

Measures

**Familiarity of student disability services battery.** This was a short set of items developed for this study that assessed familiarity with available disability services and use of services. Questions were as follows: (1) Does your campus offer disability services? (2) Do you know where the physical location of the disability services office is located? (3) Are you a disabled student? (if “yes” next question will appear, if “no” it will not). (4) Do you use the disability services? (5) Does this campus have a responsibility to offer disability services? (presented to all respondents). Response options to all questions were as follows: (1) Yes (2) No (3) Don’t know.

**Familiarity of student counseling services battery.** This was a short questionnaire, developed for this study that assessed familiarity with available counseling services and use of services. Questions were as follows: (1) Does your campus offer counseling services? (2) Do you know where the physical location of the counseling services office is located? (3) If you needed counseling, would you use the campus counseling service? (4) Does this campus have a responsibility to provide counseling services to students? Responses to all questions were as follows: (1) Yes (2) No (3) Don’t know.

6) With only 3 student respondents, one campus was not included in any of the analyses.
Familiarity of student insurance battery. This included four items developed for this study that assessed familiarity with available student insurance services and use of services. Questions were as follows: (1) Does your campus offer student health insurance? (2) Do you know where the physical location of the office that has information about student health insurance is located? (3) Have you ever used the student health insurance? (4) Does this campus have a responsibility to provide student health insurance? Responses to all questions were as follows: (1) Yes (2) No (3) Don’t know.

Familiarity of student health services/clinic battery. This was a short questionnaire developed for this study that assessed familiarity with available student services and use of services. Questions were as follows: (1) Does your campus have student health services or a student health clinic? (2) Do you know where the physical location of the student health services or clinic is located? (3) Have you ever used the student health services or student health clinic? (4) Does this campus have a responsibility to offer student health services or provide a student health clinic? Responses to all questions were as follows: (1) Yes (2) No (3) Don’t know.

Familiarity of student academic counseling services battery. These four items were also developed for this study that assessed familiarity with available student services and use of services. Questions were as follows: (1) Does your campus offer academic or career counseling services? (2) Do you know where the physical location of the academic or career counseling office is located? (3) Have you ever used the academic or career counseling services? (4) Does this campus have a responsibility to offer
academic or career counseling services? Responses to all questions were as follows: (1) Yes (2) No (3) Don’t know.

*Website content evaluation.* Additionally content analyses were conducted to identify the type of information available on the various college websites regarding student services. The accessibility of the information was also assessed by determining how many web pages must be navigated from the homepage to arrive at information regarding the services (i.e. how to use the services and where the offices are located). This method referenced the guidelines set forth for evaluating website content by the Environmental Education and Training Partnership (1997). Service information organization was assessed for functionality by identifying the location of the information on the web page.

*Procedure*

This study used a modified version of the web-based survey developed for a diversity study conducted by McCallister and Dula (2010) and funded by TBR, to examine the campus climate of all the TBR universities with regard to race/ethnicity. The original study was modified from focusing on four-year universities and replicated to examine similar issues within the TBR community colleges.

The current study combined qualitative and quantitative methodology and involved two distinct stages of data collection. In Phase I, to ensure that accurate information was obtained, the research team called campus personnel to inquire about available student services. Specifically, campus personnel were asked if each campus
provided the following services: disability services, mental health counseling services, health insurance, career/academic counseling services, or a health clinic/health services. Campus personnel provided information regarding the existence of such services and where they could be located. This information helped hone the questions to include in Phase II’s web-based survey.

The web-based survey (Phase II) was administered to the students of all 13 community colleges. Survey items were developed specifically for this study and were not modeled after any existing items from any published study. Researchers contacted administrators at each community college and asked them to designate staff responsible for sending out the email invitation to campus listservs. Students were offered the opportunity to enter into a lottery-reward program for their participation to increase participation rates (Dillman 2000). This ensured that participation was voluntary. Furthermore, participants were re-directed to a website where they could enter their personal information for the lottery and ensured anonymity as well (McCallister and Dula 2010). “This research project was approved by the East Tennessee State University Institutional Review Board (IRB), as well as by the IRBs of all schools which had IRBs in place. The TBR system is one system, such that approval of an IRB at one institution should constitute general approval within the system” (McCallister and Dula 2010).

Table 1. Proportion of Student Participant Sex By Institution

<table>
<thead>
<tr>
<th>School Name</th>
<th>% of School Males</th>
<th>% of School Females</th>
<th>School Total</th>
<th>% of School Totals</th>
</tr>
</thead>
</table>

22
Of the 3,154 student participants, 100 percent reported institutional affiliation.

See Table 1 above for breakdown of the number of participants from each institution by sex. Generally speaking, female participants outnumbered male participants at a rate of around three to one, depending on the school. As noted, to further ensure anonymity, each campus was assigned a letter in place of the name of the campus.

<table>
<thead>
<tr>
<th>Campus</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>Total %</th>
<th>Total Males</th>
<th>Total Females</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus A</td>
<td>86</td>
<td>25.3</td>
<td>243</td>
<td>74.4</td>
<td>340</td>
<td>10.8</td>
<td></td>
</tr>
<tr>
<td>Campus B</td>
<td>53</td>
<td>21.5</td>
<td>194</td>
<td>78.5</td>
<td>247</td>
<td>7.8</td>
<td></td>
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<tr>
<td>Campus C</td>
<td>34</td>
<td>18.6</td>
<td>146</td>
<td>79.8</td>
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<td>5.8</td>
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<tr>
<td>Campus D</td>
<td>43</td>
<td>12.9</td>
<td>289</td>
<td>86.5</td>
<td>334</td>
<td>10.6</td>
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<tr>
<td>Campus E</td>
<td>92</td>
<td>22</td>
<td>324</td>
<td>77.5</td>
<td>418</td>
<td>13.3</td>
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<td>Campus F</td>
<td>121</td>
<td>26.5</td>
<td>334</td>
<td>73.1</td>
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<td>.9</td>
<td></td>
</tr>
<tr>
<td>Campus K</td>
<td>105</td>
<td>19.6</td>
<td>427</td>
<td>79.7</td>
<td>536</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Campus L</td>
<td>43</td>
<td>30.7</td>
<td>96</td>
<td>68.6</td>
<td>140</td>
<td>4.4</td>
<td></td>
</tr>
</tbody>
</table>

Total: 3,154 100

Note: school names were assigned letters to ensure anonymity
CHAPTER 3
RESULTS

Analyses were first conducted to report overall percentages regarding knowledge of student services, physical location of student services, use of student services, and belief that the campus should provide various student services. In order to avoid spuriousness, response options “No” and “I don’t know” were collapsed into one response category in order to better assess the absence of knowledge and use. Therefore, each item regarding use and knowledge of student service consisted of “yes” and “I don’t know/No” response options. The next set of analyses address the relationship of age and available student services as well as the use of student services and the perception that services should be provided. Next, group differences between sex, race, and being a first-generation college students were assessed regarding the use of student services and the perception that they should be provided. The final set of analyses were conducted to determine if sex, race, or being a first generation college student predicted the use of student services or the belief that the campus should offer them.

Percentage totals were calculated across the entire sample for the following variables: knowledge of the existence of the service, knowledge of the physical location of the service, and whether services were used. All TBR campuses offer disability services, partially supporting Hypothesis 1, and 58.0 percent of students were aware these services existed, whereas 4 percent said the service did not exist, 10.1 percent did not know, and 31.5 percent did not respond. Out of all of the students polled 31.2 percent knew the physical location of disability services and 37.7 percent did not, whereas 31.1%
did not respond. As the use of disability services is only pertinent to those identifying themselves as disabled, subsequent analyses regarding use of services did not include disability services. TBR offers insurance to every college student; therefore, student health insurance is available at every campus used in this study. When asked about student health insurance 8.4 percent of the students indicated that they were aware of it, 7.1 percent stated that there was no available student health insurance, 50.5 percent did not know if student health insurance was offered, and 34% did not respond. Furthermore, none of the campuses had an office dedicated to student health insurance. However, 14.8 percent reported knowing the physical location of the office, while 29.6 percent reported there was no physical location, and 55.6 percent reported that they did not know.

Failing to support Hypothesis 1, not every campus offered mental health counseling services; of the campuses that offered mental health counseling services, 18.7 percent of the students were aware the service was available, but 46.5 percent of the entire sample knew the physical location of the mental health counseling office, and 16 percent agreed that they would use the service if they felt it was needed. As for the campuses that did not offer mental health counseling services, an average of 37.6 percent believed that the service was available, an average of 32.1 percent claimed to know the physical location, and 19.3 percent claimed they would use the service if they felt it was necessary. Further, only two (16.6 percent) schools provided an onsite student health clinic. Only campuses “G” and “H” offered a health service/clinic. Regarding students at “campus G”, 68.5 percent knew the service was available, 39.7 percent knew the physical location of the office. However, 58.9 percent of the students at “campus G” reported
using the onsite health service/clinic, and only 25 percent claimed the institution should provide the service. On the other hand, 5.3 percent of students at “campus H” believed that the service was available, 2.8 percent knew the physical location of the student health service/clinic, but 33 percent agreed that the institution should provide the service. As only two institutions provided a health service/clinic, this variable was not considered in subsequent analyses regarding knowledge or use of the service. Interestingly, an average of 14.4 percent students reported that a student health services/clinic was available when it was not and 6.1 percent claimed to know the physical location of the office that offered the service. Overall, 7 of the 12 (58.3 percent) college campuses offered academic or career counseling. Within campuses offering the service, 79.2 percent of students were aware of it and 63.9 percent knew the specific location of the office. Other than disability services and health insurance, services provided by colleges in the sample were often not consistent between campuses.

A product-moment Pearson correlation was performed to assess the relationship between age, the perceived responsibility of colleges to provide student services, use of student service, and knowledge of the physical location of the office. Supporting hypothesis 2a, age was positively correlated to the knowledge of the physical location of the office for disability services ($r = .10, p < .01$), mental health counseling service ($r = .08, p < .01$), student health insurance ($r = .11, p < .01$), academic/career counseling ($r = .09, p < .01$). Supporting hypothesis 2b, results indicated a positive relationship between age and the use of disability services ($r = .10, p < .01$) and student health insurance ($r = .12, p < .01$). There were no significant relationships between age and career, academic, or
mental health counseling services (see Table 2 for correlation coefficients). Contrary to hypothesis 3, results indicated age was negatively correlated to the perceived responsibility to provide student health services or provide a student health clinic ($r = -0.05$, $p < .01$). In other words, younger students were more likely to expect a campus to provide health services or a health clinic. There were no other significant correlations between perceived responsibility and age. See Table 3 for correlation coefficients.
A chi-square test was conducted to assess the relationship between the use of student services and the perceived responsibility to provide them. Supporting hypothesis 4, results indicated that students who believed the campus had a responsibility to offer student services were more likely to use them for mental health counseling services $\chi^2 (1) = 148, p < .001$; student health insurance $\chi^2 (1) = 7.93, p < .005$; and career/academic counseling $\chi^2 (1) = 96.09, p < .001$. See Table 4 for crosstabulations and percentages pertaining to the belief that the campus is responsible for offering student services.
A series of chi-squares were conducted to examine differences between groups on use of student services. Hypothesis 5 was completely unsupported, as results suggested that the whites and minorities were not significantly different in the use of any student service.
service. In other words, neither group displayed a tendency to use student services when compared with the other.

Hypothesis 6 was completely unsupported as results showed that there were no sex differences in the use of any student services. See Table 5 for crosstabulations and percentages pertaining to the use of student services.

As previous research does not examine the belief of a responsibility of a college campus to provide student services, a series of chi-squares were conducted to examine differences between groups on beliefs of responsibility to offer services. The results regarding hypothesis 7 were mixed. Among belief of a responsibility to offer disability services there was a significant difference between races (Caucasian/Minority) $\chi^2 (1) = 8.73, p < .003$. There was also a significant difference between males and females $\chi^2 (1) = 9.74, p < .002$. The next variable examined was perceptions of campus responsibility to offer counseling services. Results indicated a significant difference between males and females for responsibility to offer counseling services $\chi^2 (1) = 7.70, p < .006$. There was no statistical significant difference for race. On perceptions of universities’ responsibilities to offer health insurance, a significant association between races $\chi^2 (1) = 9.27, p < .002$ and sexes $\chi^2 (1) = 5.91, p < .015$. On perceptions of responsibly to offer career and academic counseling, a significant difference was found for race $\chi^2 (1) = 5.91, p < .015$. With responsibility for the universities to provide a health services clinic, no significant difference was observed for any group. No significant differences were found for the race or sex variables. Hypothesis 8a was largely supported. Results indicated that
first generation college student status did not have an effect on the belief that the campus had a responsibility to offer disability services. However, first generation college students were more likely to believe that the campus had a responsibility to offer mental health counseling services \( \chi^2 (1) = 4.80, p < .028 \) and career/academic counseling services \( \chi^2 (1) = 3.95, p < .026 \). No significant differences were observed between first generation college students and their counterparts in the use of student health insurance. See Table 6 for crosstabulations and percentages related to the responsibility to offer student services.

Table 5. Crosstabulation of race, sex, and first generation college students by use of student services

<table>
<thead>
<tr>
<th>Race</th>
<th>Use Health Insurance</th>
<th>Use Acad/Career Counseling</th>
<th>Use Mental Health Counseling</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>.9%</td>
<td>50%</td>
<td>52.3%</td>
</tr>
<tr>
<td>Minority</td>
<td>.9%</td>
<td>46.6%</td>
<td>56.1%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>.9%</td>
<td>48.9%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Female</td>
<td>.9%</td>
<td>49.3%</td>
<td>53.6%</td>
</tr>
<tr>
<td>1(^{st}) Gen. Coll. Student</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>.7%</td>
<td>51.5%</td>
<td>57.3%**</td>
</tr>
<tr>
<td>No</td>
<td>1%</td>
<td>47.7%</td>
<td>50.2%**</td>
</tr>
</tbody>
</table>

** p < .01

Hypothesis 8b was largely unsupported as first generation college students were only more likely to believe that the campus had a responsibility to offer mental health counseling \( \chi^2 (1) = 14.19, p < .001 \). See Table 6 for crosstabulations and percentages.

Table 6. Crosstabulation of race, sex, and first generation college students by responsibility to provide student services

<table>
<thead>
<tr>
<th>Race</th>
<th>Dis.Serv.</th>
<th>Hlth. Ins.</th>
<th>Hlth Serv./Clinic</th>
<th>Acad./Car. Counsel</th>
<th>M. H. Counsel</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>88.1%</td>
<td>35.5%**</td>
<td>58.1%</td>
<td>89%*</td>
<td>73.9%</td>
</tr>
<tr>
<td>Minority</td>
<td>83.5%</td>
<td>42.5%**</td>
<td>60.3%</td>
<td>85.3%*</td>
<td>74.5%</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>83.8%</td>
<td>32.9%*</td>
<td>56.7%</td>
<td>87.1%</td>
<td>69.9%**</td>
</tr>
</tbody>
</table>
Table 6 (continued)

<table>
<thead>
<tr>
<th>Female</th>
<th>88.4%</th>
<th>38.1%</th>
<th>59.0%</th>
<th>88.7%</th>
<th>75.3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Gen. Coll. Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>86.8%</td>
<td>37.4%</td>
<td>57.0%</td>
<td>88.6%</td>
<td>76.3%</td>
</tr>
<tr>
<td>No</td>
<td>87.6%</td>
<td>36.6%</td>
<td>59.5%</td>
<td>88.2%</td>
<td>72.7%</td>
</tr>
</tbody>
</table>

*p < .05, ** p < .01, ***p < .001

Table 7. Summary of Results By Hypothesis

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Community colleges would share a commonality of key student overall health services. Largely unsupported. All campuses have disability services, but all other services vary greatly from school to school.</td>
</tr>
<tr>
<td>H2a</td>
<td>Age would be positively correlated with knowledge of the location of student services. Supported. Age was positively correlated with the knowledge of location of all services.</td>
</tr>
<tr>
<td>H2b</td>
<td>Age would be negatively correlated with the use of student services. Unsupported. Age was positively correlated with the use of all student services.</td>
</tr>
<tr>
<td>H3</td>
<td>Age would be positively correlated with the belief that schools have a responsibility to provide services. Supported. Age was positively correlated with belief schools have a responsibility to provide all student services.</td>
</tr>
<tr>
<td>H4</td>
<td>A positive relationship was expected between student perceptions regarding the availability of student services and whether services are actually being used. Supported. Students believing that the campus had a responsibility to offer services were more likely to use them.</td>
</tr>
<tr>
<td>H5</td>
<td>Minority students would use student services more than white students. Completely unsupported. There were no significant differences.</td>
</tr>
<tr>
<td>H6</td>
<td>Females would use student services more than males. Completely unsupported. There were no significant differences. This contradicted previous literature.</td>
</tr>
<tr>
<td>H7a</td>
<td>Minority students would be more likely than white students to feel colleges have a responsibility to provide student services. Largely unsupported. Results suggested minorities were more likely to endorse a responsibility to provide health insurance. Whites were more likely to endorse a responsibility to provide disability services and academic/career counseling.</td>
</tr>
<tr>
<td>H7b</td>
<td>Female students would be more likely than male students to feel colleges have a responsibility to provide student services. Largely supported. Females were more likely than males to feel colleges have responsibility to provide disability services, mental health counseling, and health insurance.</td>
</tr>
<tr>
<td>H8a</td>
<td>First generation college students will be less likely to use student services. Largely supported. First generation college students were more likely to use academic and mental health counseling services.</td>
</tr>
<tr>
<td>H8b</td>
<td>First generation college students will be less likely to agree that the colleges have a responsibility to offer student services. Largely unsupported as first generation college students perceived only that the colleges have a responsibility to offer mental health counseling.</td>
</tr>
</tbody>
</table>

Exploratory analyses were conducted in the form of binary logistical regressions to assess the effects of group membership on the belief that the campus had a
responsibility to offer the student services and the use of student services. A linear regression could not be used as the outcome variables are categorical and thus violate assumptions of linear regression. For this reason, a series of logistical regressions were conducted to isolate if group membership in either sex (female vs. male), race (minority vs. white), or first generation college student (yes vs. no) could predict opinions regarding a responsibility to offer student services and the use of them.

The first of set logistical regressions assessed whether the sex group (0 = female, 1=male), race group (0 = minority, 1 = whites), or first generation college student group (0 = no, 1 = yes) could predict an opinion that the campus has a responsibility to offer disability, counseling, health insurance, health clinic, and academic/career counseling services (for all dependent variables 0 = disagree, 1 = agree). Results indicated that the male group significantly decreased one’s odds by 47.5 percent (b = -.39, SE = .13, p = .002), mental health counseling services by 31.6 percent (b = -.28, SE = .1, p = .005), and health insurance by 24.7 percent (b = -.22, SE = .09, p = .02). Sex group membership had no significant effect on the belief that a college has a responsibility to offer academic/career counseling services or student health services/clinic.

Results also indicated that being white increased one’s odds of agreeing that the campus had a responsibility to offer disability services by 52 percent(b = .42, SE = .13, p = .001), and career/academic counseling services by 44 percent (b = -.36, SE=.14, p = .008), compared to membership in the minority group. However, it decreased the odds of agreeing that the campus should offer health insurance by 32 percent (b = -.28, SE = .10,
p = .004), when compared to minorities. Furthermore, membership in the white group could not predict the belief that the campus had a responsibility to offer mental health counseling or a health service/clinic. Regarding the first generation college student group, the regression analyses indicated that membership in the group could not predict an opinion that the campus has a responsibility to offer disability, counseling, health insurance, health clinic, and academic/career counseling services when compared to the non-first generation college student group.

Regression results indicated that with every one unit increase in age, the likelihood that one would believe the campus had a responsibility to offer career/academic counseling services increased by 1.9 percent (b = .02, S.E. = .006, p = .001). However, age did not seem to be an adequate predictor of the responsibility to offer any other student service. Table 8 summarizes the findings of predictors by a responsibility to offer student services.

<table>
<thead>
<tr>
<th></th>
<th>Disability Services</th>
<th>M. H. Counseling</th>
<th>Health Insurance</th>
<th>Car/Acad Counseling</th>
<th>Hlth. Srv./Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>.42 (.13)*</td>
<td>-.01 (.11)</td>
<td>-.28 (.1)*</td>
<td>.37 (.14)*</td>
<td>-.07 (.1)</td>
</tr>
<tr>
<td>Sex</td>
<td>-.39 (.13)*</td>
<td>-.28 (.1)*</td>
<td>-.22 (.09)*</td>
<td>-.16 (.14)</td>
<td>-.09 (.09)</td>
</tr>
<tr>
<td>First Gen.</td>
<td>-.11 (.12)</td>
<td>.16 (.09)</td>
<td>.03 (.08)</td>
<td>-.03 (.12)</td>
<td>-.11 (.08)</td>
</tr>
<tr>
<td>Age</td>
<td>.01 (.01)</td>
<td>.002 (.004)</td>
<td>.003 (.004)</td>
<td>.02 (.006)*</td>
<td>-.004 (.004)</td>
</tr>
</tbody>
</table>

*p < .05

The second set of logistical regression assessed if the sex group, race group, first generation college student group, or age could predict the use of counseling, health
insurance, health clinic, and academic/career counseling services. Results indicated that membership in the male group could not predict the use of any student service when compared to females. Results also indicated that being white did not predict the likelihood of using any of the student services when compared with minorities. Furthermore, results suggested that membership in the first generation college student group increased the odds of using the campus mental health counseling service by 33 percent ($b = -.30$, $SE = .08$, $p < .001$. However, being a first generation college student did not predict the use of student health insurance or career/academic counseling services. With each unit increase in age, the likelihood of using mental health counseling students increased by 1 percent and a 1.1 percent increased likelihood to use career/academic services. Table 9 summarizes the relevant findings by sex, race, and first generation college student status.

<table>
<thead>
<tr>
<th>Table 9. Predictors of Use of Student Services: $b$($SE$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. H. Counseling</td>
</tr>
<tr>
<td>Race</td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>First Gen.$^a$</td>
</tr>
<tr>
<td>Age$^{a, c}$</td>
</tr>
</tbody>
</table>

* $p < .05$

(Content Analysis)

For each service, scores from knowledge of the availability and location of the student services were averaged to produce a rank for each campus on each student service
(1 = highest 12 = lowest). The overall rank of each campus was calculated by averaging the total scores from each student service. The results showed that students at “Campus G” were more likely to know if the service was available and where it was located, while students at “Campus J” were the least likely. Based on these rankings, the websites of both campuses were evaluated regarding the information available regarding student services. Using a content analysis method, the websites from both schools were analyzed based on three criteria. First, the number of clicks or pages that the student services information was away from the homepage was counted. Second, whether the website used the words “student services” was determined. The third criterion was to check the student service website (if one existed) for the contact and location information for each service.

The website for “Campus G” seemed to be the most detailed and contained the greatest amount of information out of all 12 community colleges in the sample. For example, the student services web page was two “clicks” or pages away from the campus homepage. The path to the page was logical and made simple by clicking on “students” from the homepage and then choosing student services on the “For Students” page. On the “Student Services” page all services were clearly listed in alphabetical order and individual links provided contact information and location for each service. Furthermore, the “Campus G” web site provided a site map that listed each service individually and provided a link to the page.
The website for “Campus J” not only seemed to be unorganized, it also did not have much available information. For instance, the web site did not have a web page solely devoted to student services. There was a “current students” link provided on the homepage; however, the only service listed under the web page was disability services. The “Campus J” web site did not include a site map used to search for the available services. Unfortunately, there was not a method to search for available student services (i.e. site search engine).

The campus web sites that fell in the middle of the rankings displayed some of the characteristics of both “Campus G” and “Campus J”. For example, all had a web page devoted solely to student services that was about 2-3 clicks or pages removed from the home page containing a detailed list of available services. On the other hand, higher ranked schools also provided a site map and contact information for each service (i.e. telephone numbers and location) on the student services web page. The content analysis provides support for earlier work from researchers such as Shenton and Dixon (2004) that concluded for contemporary students web-based resources are an important source of information regarding health resources.
CHAPTER 4

DISCUSSION

The hypothesis that TBR community colleges would share a commonality in available student services was partially supported in that the law requires the provision of certain services (i.e. disability services and student health insurance). However, other critical services such as mental health and academic/career counseling were offered at some campuses while others offered a health services clinic. These results may reflect an effect of geographic location (rural vs. urban). For example, rural areas tend to stigmatize use of health services more than urban areas. Rost and colleagues (1993) state stigma is a primary reason that people do not seek mental health care in rural areas in order to avoid being labeled as “crazy”. The only services that every campus had in common were required by TBR. Perhaps the first step in improving the awareness of student services is to offer services that students will both expect and use. Age was positively related to the knowledge of the location of student services and the use of student services. This supports previous literature concluding that nontraditional students (typically older in age) tend to be more conscious of available support services but are less likely to use them (Bannister 2009). Even though the correlations were weak, all were positively correlated and only use of mental health counseling was not significant. This may be due to the stigma held by the older generation regarding the use of mental health counseling services. For example, Klap, Unroe, and Unutzer (2003) stated that middle aged and older adults prefer to receive necessary mental health services in traditional primary care settings. Interestingly, age was positively correlated with the knowledge of the physical
location of every student service except the student health service/clinic. This may be because older adults are more likely to have private insurance, thus they may just be using the service for referrals to primary care specialists. As student health services/clinics are paid for through student fees, students are not required to make co-pays for appointments. This explains why older adults may use it as a referral service to avoid the extra expense when scheduling a doctor appointment for diagnostic reasons. The hypothesis that use of student services would be positively correlated to the perception that the campus had a responsibility to provide the service was supported. This suggests that college students are more likely to use student services they believe their campus has a responsibility to provide. The only exception was disability services. This result could be explained by the fact that students without disabilities are unable to use disability services but can still recognize its importance. Therefore, excluding the service with a prerequisite, the use of student services is positively correlated with the belief that they should be offered.

These findings could benefit post-secondary education institutions two-fold. First of all, because the resource allocation method that an institution chooses to employ can affect its ability to control costs (Ehrenberg 2000), it is advantageous for the administrations to allocate the majority of resources toward the programs that students deem necessary and will use. By catering available services to student needs, this could aid in creating not only budget friendly services that students will benefit from but also form a strong foundation for what Dula and Geller (2007) refer to as a “Total Safety and Health Culture”. This process is rooted in a people-based approach to health and safety in
which encourages personal responsibility and interpersonal interaction regarding health and safety (Dula and Geller, 2007). As far as college student services are concerned, a Total Safety Culture process would be beneficial because it would actively involve students in the development of services and the means used to disseminate the information regarding such services. Dula and Geller state that the more people are involved in a health and safety improvement process, the more likely the process is to be sustained and contribute an ultimate benefit (2007). Therefore, according to the results of this study, community college campuses should track the services that students tend to use more and provide only those services. This would aid in reducing unnecessary expenses as well as in centralizing and focusing the information regarding such services. In other words, students are more likely to keep abreast of information regarding services that they use and it is easier to efficiently organize smaller amounts of information.

The hypothesis that minorities would use and expect student services more than whites was completely unsupported. There were no significant differences between races in the use of student services. However, a common theme did emerge, health services seem to be more important to minority students than other student services. On the other hand, academic/career counseling and disability services (commonly referred to as support services) seem to be more important to white students. Such results may be related to the inequality in earnings between whites and minorities. To elaborate, whites typically have greater access to health insurance than other minorities. For example, Doty and Holmgren (2004) reported that 63 percent of employed whites were uninsured compared to 76 percent of employed blacks and 80 percent of employed Hispanics. This
could be explained as whites are more likely to be employed where health services are offered as benefits or be able to afford independent health services. This can translate into the college setting because white students are more likely to come from households in which they are still covered by their parents’ insurance, while minority students are likely to come from homes in which family members use health services provided by the government or not at all.

The hypotheses that women would use and expect the provision of student services more than men was largely unsupported. Although women were more likely to perceive that the campuses have a responsibility to offer mental health counseling, they were not more likely to use it or any other service for that matter. This may indicate that differences in the perception of health services between the sexes are shifting. However, it is unclear if males are placing more value on such services or if females are attributing less value to them.

Analysis revealed that, overall, being male significantly reduced the odds that a college student would believe the campus had a responsibility to offer most student services. However, males were more likely to use health services/clinic. However, these findings may be a result of measurement error because only two campuses provided an onsite health service/clinic. In other words, many males claimed to use a service that was not provided or believed the question was referencing an off-campus service. Either way, the implications of both provide feedback that may be used to implement a systems change because it could promote a change in the way that administrators make decisions.
about available student services and the allocation of resources for them. Most importantly, this conclusion identifies an area for improvement in the way that information regarding student services is presented to students. It is also possible that this could be used as a means of communication; male students need a health service/clinic on campus.

The overall influence of being a first generation college student had a mixed effect on the results. For example, conflicted results were produced by the different analyses (i.e. chi-square and binary logistical regression). However, a common theme seemed to emerge in the use of mental health counseling services by first generation college students. This tendency to use campus mental health services can be attributed to the lack of social support (i.e. parents) experienced by many first-generation college students (Conneely, Good, and Perryman 1999; Savage 2007). In other words, because the parents of first-generation college students did not attend college; they cannot relate to certain obstacles that the students may face (i.e. demanding class load, personal problems with instructors). Therefore, it is feasible that first-generation college students would be more likely to use the campus mental health counseling service as a substitute for a social support group when looking for guidance and seeking counsel regarding troubling school related experiences. As much of the funding for education focuses targets this population, campus administrators should develop programs designed to retain first-generation college students. For example, mental health counseling as well as academic career counseling services could be combined into a single office. This would be beneficial for two reasons. First of all, it centralizes the two services that first
generation students use the most and makes them more accessible. Given that this
demographic has less access to social support needed for college students, they will be
able to obtain the guidance needed in one office. Secondly, this would aid in reducing
overhead costs of maintaining two separate offices and staffing units.

Limitations and Future Research

A few limitations of the study are worth mentioning. Most importantly, the item
construction contained possible flaws. For instance, some of the questions did not
explicitly specify that the service in question pertained to a service provided by the
campus. In other words, participants could have answered the question in reference to
services that they use in their community. As this study was performed with community
colleges in Tennessee, these results can only generalize to Tennessee community college
students. Future research should consider a national sample to provide more accurate
inferences regarding the “average” college student. Moreover, students were not asked
the method through which they obtain information regarding student services. Therefore,
the data could have been skewed if these students indeed did not use the Internet as a
primary source of information; however, results from the content analysis suggest
otherwise. In the future researchers may want to examine the effect of socioeconomic
status on the variables within this study. Additionally, geographic location (rural vs.
urban) may need to be considered as well. Results from this study can ultimately be used
to initiate a systems change in the way information regarding student services is
organized and presented. For example, a link and specific page dedicated to student
services will increase the likelihood that students will be aware that the service is offered and develop a plan to target specific demographics regarding the student services most important to them. Furthermore, results from this study can help the administration within a community college adhere to their budget constraints while still providing valuable student services. Future research should also seek to identify possible barriers to using student services; including but not limited to discrimination (sex, race, and sexual orientation), limited hours of operation, and limited staffing.

Needs Assessment

Identifying the problem: With the continuance of an economic downturn, lawmakers continue to cut educational spending; consequently hurting families and reducing valuable services. In *An Update on State Budget Cuts*, Johnson, Oliff, and Williams (2010) reported that 39 states consistently reduced funding to higher education in 2008 and 2009. Ultimately, such a reduction in aid to educational institutions could facilitate a reduction in available student services. Furthermore, with first generation college students increasingly becoming a significant part of the community college population (AAAC 2011), administrators should cater student services to the needs of this demographic. Likewise, because women are increasingly outnumbering men in the college setting (U. S. Department of Labor 2010), campus administrators should consider offering services aimed at them as well.

Identifying existing service gaps: In this community college sample, many campuses did not offer necessary services such as a health clinic (58 percent indicated a
responsibility to provide it) or mental health counseling (16 percent indicated a responsibility to provide it). In other words, these campuses are not meeting the perceived needs of some of their students. Furthermore, a lack of knowledge regarding the service led to a lack of use of the service as well, suggesting that a more efficient organization of the information regarding student services is needed.

Possible barriers to using student services: This study identified two possible barriers to using student services, if the campus had a student services web page and how accessible that information was.

Action plan: A Positive Behavior Support plan is a possible solution to this problem. Positive Behavior Support (PBS) uses educational techniques to implement a systems change (environmental redesign), ultimately improving an individual’s quality of life (Carr et al. 2002). Positive Behavior Support is rooted in person-centered planning, a process in which the needs of individuals help to form new service structures that are customized to meet the needs of the community that the service serves (Carr et al. 2002). Such an intervention stresses community participation by designating every individual within the community as an agent of change. TBR community colleges could employ this type of intervention by providing the services that students state they need and dissolving services that students do not use. Furthermore, because a systems change is constantly evolving, TBR community colleges could use PBS in assessing the most effective way to package the information in such a way as to increase the knowledge of the availability of student services.
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APPENDIX

Ben’s Great Questionnaire

Familiarity of student disability services battery

Please answer the following questions regarding campus student services

(1)Yes (2)No (3)I don’t know

(1) Does your campus offer disability services?

(2) Do you know where the physical location of the disability services office is located?

(3) Are you a disabled student?

(4) Do you use the disability services?

(5) Does this campus have a responsibility to offer disability services?

Familiarity of student counseling services battery

Please answer the following questions regarding campus student services

(1)Yes (2)No (3)I don’t know

(1) Does your campus offer counseling services?

(2) Do you know where the physical location of the counseling services office is located?

(3) If you needed counseling, would you use the campus counseling service?
(4) Does this campus have a responsibility to provide counseling services to students?

**Familiarity of student insurance battery**

Please answer the following questions regarding campus student services

(1)Yes (2)No (3)I don’t know

(1) Does your campus offer student health insurance?

(2) Do you know where the physical location of the office that has information about student health insurance is located?

(3) Have you ever used the student health insurance?

(4) Does this campus have a responsibility to provide student health insurance?

**Familiarity of student health services/clinic battery**

Please answer the following questions regarding campus student services

(1)Yes (2)No (3)I don’t know

(1) Does your campus have student health services or a student health clinic?

(2) Do you know where the physical location of the student health services or clinic is located? (3) Have you ever used the student health services or student health clinic?

(4) Does this campus have a responsibility to offer student health services or provide a student health clinic?
Familiarity of student academic counseling services battery

Please answer the following questions regarding campus student services

(1)Yes  (2)No  (3)I don’t know

(1) Does your campus offer academic or career counseling services?

(2) Do you know where the physical location of the academic or career counseling office is located?

(3) Have you ever used the academic or career counseling services?

(4) Does this campus have a responsibility to offer academic or career counseling services?

Demographic Questionnaire

Which institution do you attend?

(1)Institution A   (2)Institution B   (3)Institution C   (4)Institution D
(5)Institution E   (6)Institution F   (7)Institution G   (8)Institution H
(9)Institution I   (10)Institution J   (11)Institution K   (12)Institution L
(13)Institution M

What is your age? _____

What is your sex?

(1)Male   (2)Female
Please indicate your race.

(1) African   (2) African American/Black   (3) Caucasian/White
(4) Chicano/Latino/Hispanic (5) Middle Eastern   (6) Native American/Alaskan
(7) Native South-East Asian/Pacific Islander (8) Bi-Racial/Multi Racial

Are you the first person in your immediate family (siblings, parents, grandparents) to attend college?

(1) Yes   (2) No
VITA

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