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I am submitting herewith a dissertation written by Cheryl Ann Lambert entitled "No sickness, no need: A qualitative exploration of female undergraduates' health message perspectives." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Communication and Information.

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**No sickness, no need: A qualitative exploration of  
female undergraduates'  
health message perspectives**

A Dissertation Presented for the  
Doctorate of Philosophy Degree  
The University of Tennessee, Knoxville

Cheryl Ann Lambert  
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## **ABSTRACT**

College student health scholarship indicates a stark contrast between health impediments college students identify and the health information their respective campuses provide; campus health promotions often lacking personal relevance for college students, and health programs that utilize control-based strategies to compel behavior change. College student health scholarship also indicates a heavily positivistic research slant with little consideration given to humanistic, student-centric approaches.

The purpose of this dissertation was to explore college student perspectives about health messages to enhance college student health communications, thus bridging the disciplines of public relations and college student health.

Findings revealed that female undergraduates are proactive and perceptive regarding health messages when they need information for a specific issue or concern. Findings also indicated that female undergraduates are initially dismissive but eventually receptive of health messages they involuntarily encounter. Findings additionally revealed that female undergraduates usually disregard health messages they encounter on campus. Findings also indicated that female undergraduates are differentially responsive to health messages from interpersonal sources. In addition, findings revealed that female undergraduates are grudgingly tolerant of societal health messages—especially those concerning unrealistic body standards.

The researcher discovered dissertation findings through conducting in-depth interviews with 16 female undergraduates at a research-intensive university based in the southeastern United States. Specifically, she explored what health messages

participants encountered, the sources of those health messages, and how participants responded to the health messages they encountered. The researcher applied thematic analysis to the interview transcripts to uncover female undergraduates' perspectives about health messages. She validated dissertation findings by clarifying bias through self-reflexivity, reaching information redundancy, and writing and reviewing self-memos.

Dissertation findings revealed implications and insights for public relations and college student health scholarship and practice. Public relations scholars could extend dissertation findings by investigating how students decide which sources to trust. Public relations practitioners could develop message strategies to enhance campus coverage of issues that matter to students. College student health practitioners could create and consult with "college student councils" before developing and disseminating health messages. Student health practitioners could train the individuals college students already trust as peer educators to facilitate healthful behaviors.

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# **CHAPTER I**

## **INTRODUCTORY INFORMATION**

### **Background of problem**

In 2007, student participants of the national college<sup>†</sup> health assessment identified stress, cold/flu/sore throat, sleep difficulties, concern for a troubled friend or family member, and depression/anxiety disorder/seasonal affective disorder as the top five health impediments to their academic performance (American College Health Association [ACHA], 2007). Conversely, the health information student participants reported receiving from their campuses addressed alcohol and drug use prevention, sexual assault/relationship violence prevention, sexually transmitted disease prevention, physical activity and fitness, and dietary behaviors and nutrition. The stark contrast between health impediments students cited and the health information they received on their respective campuses suggests that college administrators lack awareness of student perspectives regarding health. Further evidence of this lack of awareness is the approach many colleges use to convey health information to students. Much of the [health] communication between campus administration and students criticizes particular behaviors, uses control and punishment as deterrents (Keeling, 2001), or sensationalizes some of the health issues college students face. "Many health campaigns attempt to increase perceptions of risk through information and appeals about a disease to motivate behavior change" (Sherman, Nelson, & Steele, 2000, p.

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<sup>†</sup> Unless explicitly stated otherwise, the terms "college" and "university" were used interchangeably within the dissertation to indicate either type of higher education institution.

1046). Research indicates that fear-based approaches do not successfully promote health behavior change (Becker, McMahan, Etnier, & Nelson, 2002).

Rather than relying on time-worn topics and ineffective communication approaches to promote health, campus administrators should tailor college health programs based on what college students want and need. A good first step for understanding student perspectives is to engage in dialogue with college students about the health messages they encounter. In short, it takes asking.

In order to ascertain college students' health message perspectives, the primary question addressed by this dissertation was: How do female undergraduates perceive health messages? Based on the primary question, the purpose of this dissertation was: To discover how female undergraduates perceive health messages in an effort to facilitate enhanced health communications for college students. (Reasons for this narrowing of the group of participants are provided in Chapter III). This dissertation was expected to reveal implications for public relations scholarship and practice as well as insights for college health scholarship and practice.

One of the public relations implications this dissertation may reveal is related to college enrollment rates. Relationship management theory holds that public relations "balances the interests of organizations and publics through the management of organization-public relationships" (Ledingham, 2003, p. 181). Using the tenets of relationship management theory, colleges are organizations, college students are one of their publics, and managing the relationship they share is paramount for both. "Colleges and universities have understood intuitively that relationship building with students is an

important activity that may positively influence retention” (Bruning, 2002, p. 41). Nearly 17.5 million students were enrolled in college in the United States (U. S.) in 2005 (U.S. Department of Education, 2008); however, up to one-fourth of all students at four-year colleges do not return for their second year (ACT, Inc., 2004). “Each student that leaves before degree completion costs the college or university thousands of dollars in unrealized tuition, fees, and alumni contributions” (Chemers, Hu, & Garcia, 2001, p. 66).

One of the college health insights this dissertation could reveal is related to health-related absenteeism. Students experiencing the transition from high school to college encounter social, emotional, and cultural changes (Bray & Born, 2004), which contribute to physical and academic problems. Nichol, D’Heilly, and Ehlinger (2005) conducted research indicating that illness can lead to absenteeism and impaired levels of academic performance among college students. The researchers studied the impact of students’ upper respiratory tract illnesses, colds, and influenza-like illnesses on their general health, healthcare use, and school and work performance. Results indicated that colds and influenza-like illnesses affected students’ health, school and work performance, leisure activities, and health care use. During the six-month-long study, upper respiratory tract illnesses were responsible for 45,219 days of illness, 6,023 days in bed, and 4,263 days of missed class among the 3,249 participating students. “Student affairs professionals are constantly challenged to create and maintain support for students’ physical and mental health” (National Association of Student Personnel Administrators [NASPA], 2004, p. 5).

A public relations implication this dissertation may reveal is related to crisis response theory (e.g., Coombs, 2006; Hearit, 1999; Reber, Gower, & Robinson, 2006). Scholars have examined the potential for crises involving student safety and security public relations perspectives regarding image restoration. "The need for appropriate and effective public relations communication strategies is greatly heightened when an organization is presented with a crisis situation" (Fortunato, 2008, p. 116). In 2007, the Bazelon center for mental health law released a model policy for colleges and universities placing particular emphasis on "how to deal fairly and non-punitively with students in crisis, and how to support those whose mental health problems which may be interfering with their academic, extracurricular or social lives" (Bazelon center for mental health law, 2007).

One of the college health insights this dissertation may reveal is related to student mental health. "Perceived stress is a prevalent health issue among college students" (Largo-Wright, Peterson, & Chen, 2005, p. 360). Some college students adopt maladaptive strategies for coping with stress, including "behaviors that can impede healthy living, such as substance abuse and unsafe sex" (Zaleski, Levey-Thors, & Schiaffino, 1998, p. 127). Worse, "high-risk sexual behaviors can result in sexually transmitted infections or unintended pregnancies that can compromise students' academic success and may also result in potentially life-altering consequences" (Scholly, Katz, Gascoigne, & Holck, 2005, p. 159). The tragic consequences of untreated severe mental health came to the forefront in 2007 at Virginia Polytechnic Institute and State University ("Virginia Tech"). Seung Hui Cho, a senior-year student at Virginia Tech who

suffered from severe psychological conditions and behavioral issues, killed 32 students and injured 17 students and faculty in two related incidents on campus (Virginia Tech review panel, 2007).

By exploring how female undergraduates perceive health messages, this dissertation may reveal implications for public relations scholarship and practice as well as insights for college health scholarship and practice. These insights are also expected to facilitate the development of enhanced health communications for college students.

### **Statement of problem**

College efforts to promote healthful behaviors and prevent harmful behaviors among students often lack appeal for their target audiences. A stark contrast exists between health impediments college students have identified and the health information their respective campuses provide. Campus-based health programs often provide information that is not personally relevant to college students, criticizes particular health behaviors, or uses control-based strategies to compel behavior change. By exploring how female undergraduates perceive health messages, this dissertation is expected to reveal implications for public relations scholarship and practice as well as insights for college health scholarship and practice. These implications and insights may facilitate the development of enhanced health communications for college students.

## **Significance of problem**

Historically, college health programs began for many of the following reasons:

- A call from faculty to create a support system to maintain students' health for academic studies;
- The public health and communicable disease concern of a compact campus community before the advent of vaccines and antibiotics;
- The specialized medical needs of the predominantly young-adult population that may be different from the care of adults and children provided in the surrounding community;
- The confidentiality needs of a young adult in establishing new relationships with parents and healthcare providers;
- The need for access to treatment for uninsured members of the population, and
- A healthcare financing system, an indemnity third-party-payer [*sic*] model that did not cover primary care even when a student was insured (Swinford, 2002, p. 311).

Some of these historical reasons for maintaining the health of college students remain (Swinford, 2002); however, college health scholars of the past decade have identified other rationale for supporting college health.

College student health scholars have established a correlation between learning environment and health. According to Jackson and Weinstein (1997), the proper environment can foster college students who are motivated to learn, able to take on personal challenges, capable of coping with stress, and prepared to enhance their

individual development. Thus, “the creation of healthy university communities is essential to the intellectual, social, and emotional development of America’s college students (p. 242). Nevertheless, some colleges have not embraced the concept of promoting student wellness. Zimmer, Hill, and Sonnad (2003) conducted a survey assessing health promotion practice among member-institutions of the ACHA. Less than half of all responding colleges had mission statements that included either health or quality of life, and few had formal health improvement strategies.

The college setting was appropriate for exploring female undergraduates’ perspectives about health messages because it could reveal implications for public relations scholarship and practice and insights for college health scholarship and practice. The setting could also reveal strategies for making health communications more meaningful to college students and their peers.

### **Scope and delimitations**

Ascertaining female undergraduates’ perspectives about health messages required first understanding the social context where students encountered health messages (see table 1). “The [social] context must be clearly and adequately described so that the reader is able to properly understand the phenomenon being studied” (Côté & Turgeon, 2005, p. 72). For the purposes of this dissertation, the social context encompassed anywhere college students engaged in daily activities in which environmental, organizational, and personal factors interacted to affect their health and well being (Nutbeam, 1998). The following section identifies contextual information that was relevant to this dissertation.

## **Setting social context**

The study took place among students enrolled at the University of Tennessee at Knoxville (UTK). The campus comprises 220 buildings stretching across 550 acres of land (University of Tennessee, 2008). One notable aspect of the campus layout is “the Hill”, a rising bank above the north shore of the Tennessee River signifying the 1800s-era campus. Students with classes on the Hill report that they need extra time between classes to make the trek (Lambert, Haley, & Jahns, 2006). Students who prefer not to walk take the “T” instead, the UTK transportation system. The system provides free bus service to students, faculty, and staff across campus on weekdays when courses are in session (University of Tennessee, 2008). The T stops every five-to-10 minutes at several locations including the Carolyn P. Brown Memorial University Center, the John C. Hodges Library, and The Hill. The system also provides late-night service, designated buses for disabled passengers, and limited off-campus service.

Students residing on and off campus at UTK socialize at “the Strip”, a section of Cumberland Avenue due West of the main campus. The strip has three bars which are often frequented by students on game nights. “Through the years, the street has been home to filling stations, grocery stores, clothiers, restaurants, clubs, drugstores, an automobile dealership, and other neighborhood enterprises” (University of Tennessee, 2008). Today, the strip is also known for a variety of food options—many unhealthy—including fast-food restaurants, pizza places, and delis with oversized sandwiches (see table 2).



On campus food options are strictly regulated by UTK. Undergraduate students who live in Gibbs, Humes, Morrill, North Carrick, Reese, and South Carrick residence halls are required to purchase Meal plans. Meal plans are accounts tracked through student identification cards to purchase a designated number of buffet-style meals in residential dining halls (University of Tennessee, 2008). Meal plan accounts can be supplemented with Meal equivalency. Meal equivalency is a specific dollar amount allotted per meal that students can use to exchange a residential meal for a meal at select restaurants on campus. Students can also supplement their Meal plan accounts with Dining dollars. Dining dollars enable students to purchase food in UTK-based retail restaurants (e.g., Burger King, Chick-fil-A, KFC Express, and Pizza Hut Express), designated campus convenience stores, and markets during lunch or dinner hours, or UTK residential dining halls. Students can also add money and update account details based on their particular type of Meal, Dining dollars, or Meal equivalency plan, and their respective deadlines.

Students with physical health concerns at UTK can visit Student Health Service, a campus-based health clinic that provides services free to insured students and for a moderate charge to those without insurance (University of Tennessee, 2008). Clinic services include primary care, immunizations, gynecological care, and counseling and psychiatric evaluation. Mental health assistance is also available to students through UTK's Counseling Center. The Counseling Center provides free individual, group, and couples counseling.

An off-campus, non-UTK-affiliated health option for students is the Hope Resource Center, a sexual health and pregnancy resource clinic staffed by medical professionals (Hope Resource Center, 2008). The clinic provides free services including sexual health information and testing, post-abortion counseling, pregnancy tests and general counseling. However, Hope Resource Center provides limited reproductive health services and does not perform abortions. Its Christian mission to minister to clients' "medical, physical, emotional and spiritual needs with unconditional love, practical help and Biblical counseling" determines the scope of its services.

Students can focus on physical fitness through the Recreational sports department at UTK (University of Tennessee, 2008). The department operates a fitness facility, Tennessee Recs (T-Recs), where students, faculty, and staff can attend exercise classes, lift weights, or go swimming. Students can also join recreational programs through T-Recs in aquatics, fitness, intramurals, outdoor, and sport club. Some UTK students can also work out in their dorms. Some campus residence halls provide small gyms on-site with treadmills, stationary bikes, and free weights (P. One, personal communication, April 28, 2008). Students can also participate in intramural sports through T-Recs, or one of 20 men and women's varsity intercollegiate teams fielded at UTK.

The researcher conducted pre-planned, semi-structured interviews with key informants (Daymon & Holloway, 2002) to further explore the social context of students at UTK. "The reader must be provided with meaningful information concerning the characteristics of the setting and the individuals involved and all other information

needed to understand the phenomenon” (Côté & Turgeon, 2005, p. 72). Key informants are identified by “personal communication” monikers in the following paragraphs.

The UTK does not offer health as a major and health is not included among the mandatory general education courses (G. Petty, personal communication, February 22, 2008); however, the university does offer a major in nutrition as well as courses in health, nutrition, and related disciplines. Opportunities exist for students interested in applied rather than discipline-directed health projects as well. The Panhellenic [*sic*] council, which represents the 19 sororities at UTK, hosts health-oriented community service programs collectively and sororities participate in chapter-specific efforts individually (M. Fields, personal communication, February 21, 2008). The council hosts women’s health workshops with gynecologists and healthy eating seminars with nutritionists. In addition, sororities address student health through drug abuse prevention, domestic violence awareness, and breast health education programs (University of Tennessee, 2008).

Sorority and fraternity members are part of the target population for the Safety, Environment and Education (SEE) Center, a UTK facility that addresses student health, safety, and security (J. Brummette, personal communication, February 1, 2008). Staff members of the SEE Center collaborate with Student Health Service, student housing, the UTK police department, and community contacts to conduct campus-based research about alcohol, drug, and safety concerns. The SEE Center staff also conducts survey research to evaluate campus- and community-specific needs, determine environmental and cultural influences, and correct misperceptions about student drinking at UTK.

Additionally, staff members of the SEE Center utilize government and scholarly research to facilitate safety and security among students campus wide (University of Tennessee, 2008).

Various venues address student health at UTK, but only one full-time staff person promotes health as her sole job responsibility. Wellness coordinator Rosa Thomas conducts most health promotions outside of her Student Health Service office through partnerships with representatives of the SEE Center, career services, student housing, and the Panhellenic [*sic*] council (R. Thomas, personal communication, January 25, 2008). As a result, health promotion ideas originate from Thomas, her colleagues, and the U. S. Healthy People initiatives. Health promotions at UTK include health fairs, faculty and staff-focused health workshops, and student health handouts like topical brochures.

Health brochures, flyers, newsletters, and bookmarks are on display at select dining halls, Student Health Service, T-Recs, and the Counseling Center. The researcher collected 66 student health handouts—all of which were on display during the dissertation period—and reviewed them to identify topics and themes that are part of the setting and social context of health messages on campus. Handout topics could be classified broadly as disease prevention and treatment; health and wellness; healthcare; mental health; personal care; safety/security, and student support (see table 3).

The most prevalent topics in the health handouts were healthy eating; physical health and fitness; mental health; personal care, and safety and security. All of the student health handouts in the safety/security theme, most of which were about sexual

assault prevention, were targeted to college students. The number of documents on display suggested the topic held a high level of importance to UTK administration. Campus-specific student-relevant topics of student health handouts covered UTK Meal plans, student health insurance, academic assistance, Student Health Service, and the Counseling Center. Nearly one-third of the topics presented in the handouts did not seem to be directly targeted to UTK student health issues (see table 4), however. Examples of such non-targeted topics were diabetes, heart conditions, short-term medical insurance, breast cancer detection and mammograms, the city of Knoxville, and the nontraditional students association.

The moderate student relevance of some student health handouts suggests UTK administration has an incomplete understanding of college student perspectives. It is unclear how student health handout topics are selected. They may originate with the sources UTK uses to develop health promotion ideas: Thomas, her colleagues, and the U. S. Healthy People initiatives (R. Thomas, personal communication, January 25, 2008). The location of the student health handouts, select dining halls, Student Health Service, T-Recs, and the Counseling Center, seemed appropriate for their audience. These are the contexts in which UTK students experience health.

The social context research suggests that student health at UTK is decentralized and facility-specific rather than campus-wide. College and university health scholars have noted this phenomenon at other universities (e.g., ACHA, 2006; NASPA, 2004; Tsouros, Dowding, Thompson, & Dooris, 1998). However, employees from the multiple sites at UTK who address student health have begun collaborating more often on

programs to promote student health (J. Brummette, personal communication, February 1, 2008). College and university health scholars have suggested that partnerships across departments are critical for addressing student health. In a survey study with faculty and student affairs staff, Ott, Haertlein, and Craig (2003) reported that the presence of support from the campus administration lent unprecedented visibility and credibility to their health promotion program.

### **Definition of terms**

The following five definitions were tentative because the dissertation participants' perspectives about these health terms did not emerge until data analysis began. Moreover, a priori definitions are difficult to include in qualitative<sup>‡</sup> studies because of the inductive, evolving methodological design of such research (Cresswell, 2003).

The circle of health model developed by Saylor (2004) defined *health* as "optimal physical, mental, spiritual, social and role function, well being and quality of life" (p. 106). In 1998, the World Health Organization (WHO), the United Nations' authority on international health whose experts produce health guidelines and standards, defined *health communication* as "a key strategy to inform the public about health concerns and to maintain important health issues on the public agenda, and the use of the media to disseminate useful health information to the public" (Nutbeam, 1998, p. 8). Albano, Ramsey, Barbour, Rintamaki, Dockum, and Brashers (2003) defined *health information sources* as print media, electronic media, health care workers, family members, friends, health organizations, and educational sources (p. 23). The *American Journal of Health*

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<sup>‡</sup> Details about the qualitative approach of this dissertation are covered in a later section.

*Promotion* (1989) defined *health promotion* as the science and art of helping people change their lifestyle to move toward a state of optimal health (1989, p. 5). Corbin and Pangrazi (2001) defined *wellness* as a “multidimensional state of being describing the existence of positive health in an individual as exemplified by quality of life and a sense of well-being” (Corbin & Pangrazi, 2001, p. 1).

### **Significance of study**

This dissertation has significance for public relations and college health scholars and practitioners, and findings could have broad significance for college students and other individuals seeking health information. The findings may reveal information that can be used to improve health communications overall. Dissertation findings could also uncover message strategies to facilitate health-focused media coverage through insights from a key public: college students. The findings may enable public relations practitioners to develop message strategies to foster accurate coverage of sometimes-complex issues. Dissertation findings could also uncover message strategies for enhancing consumers’ ability to access health information. Dissertation findings may reveal insights from a key audience that can be utilized to enhance current campus-based health promotions. The findings could also challenge assumptions about college student health, thus informing—and possibly improving—the design of current models of campus health clinics. Details about the significance of this dissertation follow.

## **Details of significance**

Dissertation findings may reveal information that can be used to improve health communications overall. "Uncovering the mechanisms driving the effectiveness of health communications will provide principles for developing maximally persuasive educational interventions across populations" (Schneider, 2006, p. 820). Some of the health communications that could be improved based on participant insights are brochures, booklets, or personalized letters tailored to individuals' attributes (Marshall, Owen & Bauman, 2004). Health communications via "printed pamphlets and booklets are particularly suited for tailoring to specific audience subgroups through choice of topic, language, and graphics" (Schooler, Chaffee, Flora, & Roser, 1998, p. 416). Findings could also foster the development of public service announcements, a common venue for health communications.

Through insights from a key public, dissertation findings could also help reveal message strategies to facilitate health-focused media coverage. "If used strategically, mass media can play a strong supportive role in drawing attention to programs and strategies, in disseminating information, and in setting the agenda for future physical activity promotion initiatives" (Marshall, Owen, & Bauman, 2004, p. 76). According to Winnett and Wallack (1996) public relations professionals can engage the media "to help cultivate professional and social relationships with key 'publics'" (p. 173). Americans get more health information from the media than healthcare professionals (International Food Information Council Foundation, 2005). By advocating for specific health topics, public relations practitioners may shape the construction of newspaper



stories about health research, pharmaceuticals and healthcare organizations (Parrott, 2003).

Dissertation-derived message strategies may also enable public relations practitioners to foster accurate coverage of sometimes-complex issues. The Center for media and public affairs has noted an “increase in the citation of scientific research to support an assertion of harm or benefit, but many of these citations were as simple as ‘studies show,’ ‘research suggests,’ or ‘according to research’” (International Food Information Council Foundation, 2005, p. 2). The center conducts a biannual study that tracks, in part, the changing patterns in media coverage about the foods people eat and what kind of information is readily available to consumers. The Center for media and public affairs also assess the quality of media coverage about the foods people eat.

Dissertation findings may uncover message strategies for enhancing consumers’ ability to access health information. Public relations professionals can play a key role in the advancement of health literacy among the public, according to Ratzan (2001). The researcher cited health literacy as the key to linking health knowledge and practice. Parrott (2003) has reported similar assertions, attributing the importance of public relations in part to the increasing complexity of organized healthcare in the U. S. Noting access-granting advances in multimedia and new information technology, Gieck and Olsen (2007) stated, “health communication becomes an increasingly important element to achieving greater empowerment of individuals and communities” (p. 8). The proliferation and promotion of medical and scientific journals and the increased use of the Internet as a tool to find information have made studies that were once read only

by the medical community accessible for all of the lay public to review and report on the findings (International Food Information Council Foundation, 2005, p. 1).

Another message strategy for enhancing consumers' ability to access health information is simplifying health-related documents. In 2004, Springston and Champion conducted research about health-focused printed materials, which are frequently used by health and public relations practitioners. Study results indicated that participants generally became more knowledgeable and less anxious and perceived fewer barriers and greater health benefits after reading "targeted" brochures (Springston & Champion, 2004).

Dissertation findings could reveal insights from a key audience that can be utilized to enhance current campus-based health promotions. According to Lowery et al. (2005), health promotion programs that focus on positive health behaviors "may include positive media messages about body acceptance, education to increase students' awareness of the negative and often subtle influences of the thin ideal, and peer support programs that encourage students to focus foremost on making healthy choices" (p. 622). Public relations practitioners who work in or with colleges are well qualified to identify strategies for tailoring campaign messages for college-age consumers (Parrott, 2003). Rozmus, Evans, Wysochansky, and Mixon (2005) suggested first determining what health behaviors put young adults at risk as they enter college. According to the researchers, this research-based approach would assist health professionals and organizations in developing cohesive health programming for students.

Dissertation findings may also challenge assumptions about college student health, thus informing—and possibly improving—the design of current models of campus health clinics. Zoller (2005) stated that understanding how students perceive and label their own health behavior is vital from a communication perspective. Such information could generate ideas for changing college student health behavior, which college health practitioners could integrate into practice.

### **Organization of dissertation**

In Chapter 1, an introduction to the significance of the phenomenon of health message perspectives is presented. Also included is the statement of the problem, the scope and delimitations, and definition of terms for the dissertation. In addition, this chapter identifies the significance of the dissertation.

Chapter 2 serves as the situating framework for this dissertation, placing it within the body of knowledge. Existing literature on college health is reviewed, indicating that scholarship has tended to focus on specific sets of health behaviors and has utilized quantitative methods. An extended literature review uncovers several thematic college health studies.

In Chapter 3, the materials and methodology for this dissertation are presented. Pilot study results are also included in this chapter, suggesting the appropriate participant population for the dissertation. In this chapter, participant selection, in-depth interviews, and analysis of interview transcripts are employed to explore the research questions. Additionally, strategies for validating the accuracy of dissertation findings are presented: clarification of bias, information redundancy, and self-memos.

Chapter 4 identifies findings of the dissertation. In this chapter, themes that emerged from analysis of interview transcripts are identified.

Finally, in Chapter 5, the discussion and conclusion of the dissertation findings are presented. This chapter includes limitations of the dissertation and recommendations for public relations scholarship and practice and college health scholarship and practice. This chapter also includes recommendations for future research regarding health messages.

## **CHAPTER II REVIEW OF LITERATURE**

### **Behavior-specific college health studies**

Much of the research that has been conducted about college student health during the past decade has “tended to emphasize a specific, single set of behaviors” (Luquis, Garcia, & Ashford, 2003, p. 156). The set of behaviors this researcher identified in college health studies were: (a) alcohol use and abuse; (b) sexual health; (c) mental health; (d) prescription and illicit drug use and abuse, and (e) smoking. A selection of behavior-specific college student health studies conducted during the past 10 years is reviewed next.

### **Alcohol use and abuse research**

The image of the binge-drinking college student has become embedded in the collective cultural consciousness. As a result, some college student health scholars have challenged this and other common assumptions about students’ alcohol use and abuse. Research in this area has examined how alcohol affects new students, the consequences of alcohol use and abuse, and the role of community engagement.

College student health scholars acknowledge the existence of alcohol use and abuse at college, but many have conducted studies to correct misperceptions about student drinking (e.g., Wechsler, 2008; Wechsler & Nelson, 2008. “It is particularly alarming that student’s misperceptions about their peers’ alcohol use can lead to an increase in drinking” (Stewart et al., 2002, p. 382). In a case study of a successful campaign to prevent dangerous drinking, Stewart et al. (2002) found that first-year

students lacked understanding of the realities of campus life and drinking before they entered college.

Interestingly, Zaleski, Levey-Thors, and Schiaffino (1998) reported that new students who coped effectively with the transition to college relied, in part, on the use of moderate amounts of alcohol to alleviate school-related stress. Conversely, students who did not perceive strong social support from friends during the transition to college drank more alcohol. Some college student health scholars have identified place of residence as an influencing factor on new students' alcohol use and abuse. Ham and Hope (2003) reported lower rates of drinking and drinking problems by students who lived with their parents. "Proximity to parents appears to play a role in protecting the students from alcohol problems" (p. 747).

Other college student health scholars have investigated the consequences of students' alcohol abuse. "Students put themselves and others at risk for negative consequences due to their high-risk drinking behavior" (Ham & Hope, 2003, p. 750). Hingson, Heeren, Winter, and Wechsler (2005) identified some of those consequences in a literature review study. According to the scholars, between 1998 and 2001, alcohol-related unintentional injury deaths increased and the proportion of 18-24-year-old college students who reported driving under the influence of alcohol increased. Study results also indicated "nearly 600,000 college students were injured because of drinking [and] 696,000 were assaulted by another drinking college student" (p. 267). Ham and Hope (2003) reported that heavy drinking among college students can endanger more than roommates and classmates; it can also endanger the broader community.

Some college student health scholars have suggested that, since colleges and communities share the responsibility for student drinking, they should share in the efforts to curtail it. Hingson, Heeren, Winter, and Wechsler (2005) reported that colleges and communities “have an obligation to control the harms to others posed by college-age drinking, regardless of whether these drinkers are college students” (p. 273).

### **Sexual health research studies**

Several college student health scholars have conducted research regarding sexual health among students. Some student health scholars (e.g., Grello, Welsh & Harper, 2006) have conducted research regarding unhealthy behaviors that can occur as a result of students’ sexual activities, such as alcohol consumption. Grello, Welsh and Harper (2006) reported a direct link between alcohol consumption and casual sex, with 65 percent of study participants who engaged in casual sex reported using alcohol or drugs before or during their most recent encounter. Many college student health scholars (e.g., Eisenberg, 2001; Scholly, Katz, Gascoigne, & Holck, 2005; von Sadovszky, Keller, & McKinney, 2002) have reported irregular or lack of condom use among students. According to von Sadovszky, Keller, and McKinney (2002) “primary reasons for thinking that their encounters were risky or safer were based on using contraceptives to prevent pregnancy and to mistakenly believing they had practiced safer sex if no sex had occurred” (p. 137).

Other college student health scholars have studied intervention programs, conducting research to determine what makes a health program successful. “College

campuses are conducive to a variety of interventions encouraging safer sexual practices” (Eisenberg, 2001) because many students engage in sexual activity during their college years (p. 576). In a study about HIV intervention programs, Albarracín, Gillette, Ho, Earl, Glasman and Durantini (2005) concluded “the most effective interventions contained attitudinal arguments, educational information, behavioral skills arguments, and behavioral skills training. The least effective interventions attempted to induce fear of HIV. Eisenberg (2001) investigated the differences in sexual health practices between college students with same- versus opposite-sex partners. The scholar concluded that messages about the importance of condom use, promotion, and distribution be renewed—especially for males with same-sex partners.

College student health scholars have also studied peer influences on students’ sexual health behaviors. According to Rittenour and Booth-Butterfield (2006), students are comfortable discussing sexual health with their peers, they usually speak with those of the same gender, and they “offer warnings in regards to each other’s sexual health” (p. 63). Interestingly, Grello, Welsh and Harper (2006) identified a link between casual sex and depressive symptoms, primarily among women.

### **Mental health research studies**

Recent mental health research interest may be due, in part, to the 2007 campus-based mass shootings committed by a Virginia Polytechnic Institute and State University (“Virginia Tech”) college student, Seung Hui Cho (Virginia tech review panel, 2007, p. 5). Cho murdered 32 and injured 17 students and faculty in two related incidents on campus.



In the annual national survey of counseling center directors' survey, participants were asked how the Virginia Tech tragedy impacted their counseling centers. Sixty-six percent reported a significant increase in calls from faculty members and others on campus seeking consultation about students of concern. Additionally, 85 percent of participants reported an increased level of concern about liability risks regarding student suicides (Gallagher, 2007). Research studies indicate that college students are seeking counseling services now more than ever before (e.g., Astin, 1998; Benton, Robertson, Tseng, Newton, & Benton, 2003; Gallagher, 2007; Pledge, Lapan, Heppner, Kivlighan, & Roehlke, 1998; Voelker, 2003). College student health scholars have attributed the increased demand for mental health assistance to students being away from supportive social networks (Pledge, Lapan, Heppner, Kivlighan, & Roehlke, 1998), students facing serious issues such as depression (Kitzrow, 2003), and students being overwhelmed by their responsibilities (Astin, 1998). "Such challenges make these individuals more vulnerable to the deleterious effects of stress" (Pledge, Lapan, Heppner, Kivlighan, & Roehlke, 1998, p. 388).

Some college students health scholars have focused, instead, on the contextual or environmental factors related to students and their mental health. For example, Benton, Robertson, Tseng, Newton, and Benton (2003) learned that the counseling center in their single-campus study had begun limiting student-counseling sessions to 10 or fewer. As a result, it initially seemed as though the therapists had focused more on the situational or immediate aspects of students' problems. The fact remains, however, student health services and campus counseling centers often have not kept

pace with the increased demand for treatment” (Voelker, 2003, p. 2055). The campus where Voelker resides has tried to improve its mental health environment by conducting a personal and mental health survey with freshmen and providing the students with information about campus-based medical services. “The practice is an effective screening tool, and it ‘normalizes’ mental health issues for students by placing them in the overall context of general health” (p. 2056).

Several college student health scholars have noted changing mental health needs of current college students (Kitzrow, 2003). Colleges have taken multiple approaches to enhance mental health services, including better preparation for addressing more serious client concerns, more emphasis on crisis management support, and additional training about medications (Benton, Robertson, Tseng, Newton, & Benton, 2003; Pledge, Lapan, Heppner, Kivlighan, & Roehlke, 1998). According to anecdotal evidence, the number of students visiting counseling centers who are already using medications, particularly antidepressants, has increased (Benton, Robertson, Tseng, Newton, & Benton, 2003).

### **Prescription and illicit drug use and abuse**

The pressure college student’s face to excel academically may lead them to maladaptive coping through drugs. This could be why prescription and illicit drug use and abuse have been common research themes for college student health scholars during the past 10 years.

Some student health scholars have reported appropriate medication use among students. Aronson (2006) conducted a telephone interview study to explore the medication-taking experiences of 34 undergraduate college students who were prescribed short-term antibiotic therapies. Results indicated that participants identified several self-management tactics including integrating antibiotics into busy schedules, patterns of dose taking, and strategies for remembering medications. Yet several student health scholars have reported increased prescription drug use among college students. Nichol, D'Heilly, and Ehlinger (2005) reported increased antibiotics prescriptions among student participants for colds and flu-like illnesses of viral origin even though antibiotics have no effect on viruses. McCabe, Teter, Boyd, Knight, and Wechsler (2005) reported that previous-year; non-medical use of prescription pain medication was higher among students including residents of fraternity/sorority houses and off-campus houses. The researchers also reported that, compared to college students who had not used prescription pain medications non-medically, those who did were four times more likely to report frequent binge drinking, four times more likely to report driving after binge drinking and eight times more likely to report marijuana use in the previous year.

Mohler-Kuo, Lee, and Wechsler (2003) reported harmful related health behaviors among college students who use illicit drugs. The scholars found that more than nine in 10 marijuana and other illicit drug users also used other substances and smoked cigarettes. "Because students are likely to be...[multiple drug] users, comprehensive

substance abuse prevention programs should stress illicit drug use as well as heavy alcohol use and smoking cigarettes” (p. 21).

### **Smoking research studies**

Tobacco lobbyists have kept smoking top-of-mind among legislators by working to protect smokers’ rights; advocacy groups have kept the issue in front of television viewers through entertaining public service announcements highlighting the negative consequences of smoking. As a result, smoking has also been a frequent focus of college student health research.

Noting a sharp increase in smoking among college students during recent years (Johnston, O’Malley & Bachman, 1999), some student health scholars have investigated behavior differences between smokers and nonsmokers. Patterson, Lerman, Kaufmann, Neuner, and Audrain-McGovern (2004) identified dieting status and fear of weight gain, especially among female smokers. The researchers also reported smokers used stress-, mood-, and, emotion-orientated coping strategies. Conversely, nonsmokers participated in physical activities and athletics more than their peers who smoked. Additionally, nonsmokers reported higher levels of life satisfaction, an internal locus of control, and self-efficacy (Patterson, Lerman, Kaufmann, Neuner, & Audrain-McGovern, 2004).

College student health scholars have also emphasized the importance of campus-based programs to reduce smoking among college students. According to Martinelli (1999), smoking prevention and cessation efforts should begin at an early age and continue throughout college. He based his suggestion on research he conducted comparing self-perceptions among smokers and nonsmokers.

## **Extending the literature review**

As illustrated in the preceding review, college student health scholars frequently conduct behavior-specific student health studies about alcohol use and abuse, sexual health, mental health, prescription and illicit drug use and abuse, and smoking. "While these studies have provided valuable data about college health issues...it is important to emphasize that any single behavior is influenced by other health risk behaviors among young people" (Luquis, Garcia, & Ashford, 2003, p. 156). In order to ensure that the full scope of college student health scholarship was considered in relation to the phenomenon of health message perspectives, the researcher extended the review beyond behavior-specific studies. Extending the literature review was also necessitated by the multidisciplinary nature of the phenomenon as situated within the health communication field (see table 5). "Scholarship of health communication campaigns needs to integrate and join the efforts of the mutually disparate subdisciplines [*sic*] of mass communication, interpersonal communication, and organizational communication" (Dutta-Bergman, 2005, p. 113). The extended literature review is arranged thematically.

## **Prevalent themes in college health research**

The following extended literature review is divided into the following sections, based on the research themes prevalent in college student health studies conducted during the past 10 years: (a) campus level commitment to student health; (b) social support influences on college student health; (c) barriers to college student health; (d)

unhealthy behaviors among college students; (e) health information-seeking behaviors of college students, and (f) college student responses to health messages.

### **Campus level commitment**

The college campuses working to improve student health have utilized facility-specific and campus-wide approaches as well as Healthy Campus 2010 an extension of Healthy People 2010, "the national public health framework designed to identify the most significant health threats to Americans and to establish national goals to reduce those threats" (Morad, 2005, p. 18). Other campuses have utilized Leadership for a healthy campus, an initiative designed to help campus administrators foster understanding in relation to the effect health can have on entire campus communities. (NASPA, 2004). Other campuses have utilized their individual institution's missions to promote college student health. Some campus environments are not conducive to student health, whether due to intemperate climates that restricts outdoor activities or off-site mental health facilities that are difficult for students to access.

Frank, Hedgecock, and Elon (2004) conducted a mixed-methods research study of medical schools with top-ranked health promotion programs. Findings indicated that student and administration participants preferred campus-wide health promotions to individual programs or courses. Specifically, participants stated that promotions should be integrated throughout school curriculum because "a separate course gives the impression that the content is less important and optional" (p. 6).

In 2004, Dunne and Somerset conducted focus group interviews to identify which health issues concerned students in a British university. Participants identified

adjustment to university life, lifestyle behaviors and student support services, as personal health needs. "Students recognize the benefit of a holistic, university-wide approach to health promotion and they value campaigns as appropriate to provide students with knowledge they need" (p. 369).

The campus-wide program Healthy Campus 2010 was sponsored and co-created by the ACHA. Healthy Campus 2010 comprises planning guidelines and health objectives for the nation's colleges and universities to achieve by 2010 (ACHA, 2006). Many member-institutions of the ACHA have adopted elements of Healthy Campus 2010 guidelines. Another campus-wide effort to address college student health, developed by NASPA , comprises a program and accompanying booklet entitled "Leadership for a healthy campus: An ecological approach for student success". After conducting "ecological assessments" of college student health at nine U. S. -based colleges during the 2002-2003 academic years, NASPA concluded that such assessments could help college administrators develop healthy campus communities (NASPA, 2004).

The United Kingdom also developed a campus-wide effort and an accompanying booklet, "Health promoting universities" (Tsouros, Dowding, Thompson, & Dooris, 1998). Its ambitious objectives are to promote healthy and sustainable policies and planning university-wide, to provide healthy working environments, to offer healthy and supportive social environments, to establish and improve primary health care, to facilitate personal and social development; to ensure a healthy and sustainable physical environment, to encourage interest in health promotion, and to develop links with the community (pp. 125-127, 1998).

Even the World Health Organization (WHO) has implemented a program to address college student health (Nutbeam, 1998). Though not geared toward colleges, the WHO program shares commonalities with the efforts addressing health in higher education. Among the lofty goals the WHO identified for health-promoting schools were to “foster health and learning with all measures at its disposal, to implement policies that respect an individual’s well being and dignity, and to strive to improve the health of school personnel, families, community members and students” (WHO, ¶ 2, 2007). Like the WHO goals, college student health scholarship indicates that social networks are key influences when it comes to students and their health.

### **Social support influences**

One of the biggest challenges college students face is the transition from home life to campus life. “The transition to college creates a situation where regular contact with traditional supports, e.g., friends from high school and family, may be reduced...College marks a period where new systems of social support are being created. This process can, in and of itself, be stressful” (Hudd et al., 2000, p. 217). Some students thrive with their newfound independence, developing time- and money-management skills they can utilize the rest of their lives. Other students, overwhelmed by the interpersonal demands of a roommate, classmates and undefined student-professor interactions, suffer through isolation, sadness, and sometimes depression. College student health scholars have responded by conducting research about what affect student’s social health has on students’ physical, mental and emotional health.



Some studies indicate that social support is not always beneficial for first-time college students. "High family social support appears to have exacerbated students' problems with adjustment to college. For instance, students reporting an above-average amount of family social support reported a greater number of physical symptoms when faced with daily hassles than did their peers with low family support" (Zaleski, Levey-Thors, & Schiaffino, 1998, p. 134). The scholars investigated the degree to which personality factors and social support moderated the stress involved in the developmental transition of college life.

Newton, Kim, and Newton (2006), reported that students benefit individually and relationally through their new social connections at college. Starting the college experience allows students to experience increased autonomy, establish new relationships, and create independent identities. College also can promote healthier behaviors among students because of their increased awareness of personal health behaviors and opportunities to initiate improvement through mentor assistance.

In related research, MacGeorge, Samter, and Gillihan (2005) investigated whether the supportive communication college students receive from friends and family moderates the association between their academic stresses and depression and physical illness symptoms. The scholars reported that supportive communication positively influenced students' levels of depression and physical illness. MacGeorge, Samter, and Gillihan (2005) also suggested that "informational support may deter depressive symptoms, possibly by encouraging functional coping behavior in the academic context" (p. 369) and "may be associated with diminished physical illness because these forms of

support help college students engage in health-protective activities, including exercise, healthy eating, and sufficient sleep” (p. 371).

Hale, Hannum, and Espelage (2005) also reported the importance of connection to others when it comes to college student health. When the scholars investigated the association between social support and physical health, female participants had higher levels of social support, higher levels of belonging, and tended toward better health perceptions. According to Hale, Hannum, and Espelage, “belonging was significant in the prediction of physical health, indicating that a social network or close circle of friends is important for college students” (p. 282).

Social connections also appear to be related to academic achievement among college students. DeBerard, Spielmans, and Julka (2004), in a study investigating possible risk factors for low academic achievement and attrition, found that “total level of social support was a significant independent predictor of academic achievement [and]...social support may be a useful way of insulating the individual from the harmful impact of stress” (p. 68). Likewise, Ullah and Wilson (2007) found an association between students’ academic achievement, students’ involvement with learning, students’ relationships with faculty, and students’ relationships with peers. Moreover, the scholars reported that “female students’ relationships with peers influence academic achievement positively” (Ullah & Wilson, 2007, p. 1192).

Social connections have other effects for college students, according to Hale, Hannum, and Espelage (2005). Social connections are critical during college because students’ relationships there are determined by how they engaged in previous

relationships. Moreover, college relationships can determine students' present behaviors—including those related to health.

### **Barriers to health**

Campus-based health programs include gift giveaways to boost student attendance, opportunities for course or sorority "community service" credit, and expansive booths or health fairs; nevertheless, student participation in such programs remains a challenge for campus administrators. Some college student health scholars have studied the health barriers college students face.

College students sometimes react to what they perceive as health barriers, according to a survey conducted by Von Ah, Ebert, Ngamvitroj, Park, and Kang (2004). Study results indicated that perceived barriers were one of the most significant factors predicting health behaviors among the 161 undergraduate participants. Conversely, college students in other studies have cited tangible barriers to health. In Davies et al. (2000), all-male focus group participants cited lack of time and fear of responses to ethnicity or sexual orientation among other barriers to their seeking healthcare.

Fear and time constraints also emerged as barriers when Bost (2005) conducted a survey study with faculty, students, and staff who did not participate in a campus health assessment program. Specifically, respondents cited time constraints, communication and fear of blood draws among their barriers to participation. To address some of the barriers, Bost concluded that future campus health program planning should include clear, concise communication through a variety of sources to ensure that students receive and understand information.

Similarly, Davies et al. (2000) identified a campus-based men's center and library, trained peer educators, and a telephone information line among participants' suggestions to overcoming health barriers. And sometimes, according to researchers, the barriers students face are self-inflicted. "If recipients of a health message fail to accept the information, then they will be unlikely to change their risky behaviors" (Sherman, Nelson, & Steele, 2000, p. 1046).

### **Unhealthy student behaviors**

Some colleges approach student health by incorporating key health messages in freshmen experience courses or requiring all students to take entry-level health courses. Other colleges, such as those belonging to the ACHA, participate in regular assessments to gauge health attitudes and behaviors among their students. Nevertheless, many studies indicate that college students continue to engage in unhealthy behaviors, so student health scholars continue to conduct research related to this issue.

Luquis, Garcia, and Ashford (2003) conducted focus group research to explore college students' perceptions of health behaviors. The scholars reported that, although college students continued to engage in unhealthy behaviors, most students expressed concern about the behaviors. Rozmus, Evans, Wysochansky, and Mixon (2005) had similar findings when they conducted a survey questionnaire with 251 new college students. The scholars found that college student participants did engage in behaviors that placed them at risk for serious health problems.

Lowry, Galuska, Fulton, Wechsler, Kann, and Collins (2000) reported that many undergraduates are making poor food and physical fitness choices, placing their health at risk. The scholars suggested that student-directed weight management programs in response. Such programs “discourage reliance on diet pills or dangerous purging behaviors in the place of appropriate physical activity and healthy food choices, especially among women” (p. 26). Many of the unhealthy behaviors college students engage in are food related; e.g., consuming irregular meals, late night snacking, or eating high-fat junk foods (Newton, Kim, & Newton, 2006).

Student health scholars have not limited their research to unhealthy college student behaviors, however. Some scholars have conducted extensive research regarding health promoting behaviors among college students; specifically, how and when college students seek out health and wellness information.

### **Health information seeking**

College students, particularly those who live on campus, are in an information-rich environment with resources ranging from the wealth of formal data organized in libraries to their many interpersonal connections to friends, classmates, faculty, and others they encounter each day. Public relations and college student health and scholars have studied how students navigate these information sources when they are seeking out health information.

One body of research has focused on the Internet as a health information source (e.g., Escoffery, Miner, Adame, Butler, McCormick, & Mendell, 2005; Hanauer, Dibble, Fortin, & Col 2004). Scholars have reported that many college students use the Internet

for health information, but they weren't always able to find the information they needed online (Escoffery, Miner, Adame, Butler, McCormick, & Mendell, 2005). Health-related topics most popular among college students searching online were diet/nutrition and fitness/exercise. Students were far less likely to search for the types of topics often the focus of on-campus health-promotion (e.g., smoking cessation) even when the context of a research study encouraged them to do so (Hanauer, Dibble, Fortin, & Col, 2004). Despite the focus on technology-delivered health communication, scholars have reported, "it can be underutilized or utilized in ineffective ways" (Brashers, Goldsmith, & Hsieh, 2002, p. 265).

Other college student health scholars have focused less on technology and more on how students assess information sources overall. Among the factors that students have identified as important in online sources are accuracy, credibility, currency, clarity, and ease of understanding (Escoffery, Miner, Adame, Butler, McCormick, & Mendell, 2005). Similar factors were reported in studies investigating health information sources more broadly. Albano, Ramsey, Barbour, Rintamaki, Dockum, and Brashers (2003) reported that undergraduates cited source credibility and information relevance as characteristics of information effectiveness. Additionally, participants were more likely to seek such health information from family members and health care workers (Albano, Ramsey, Barbour, Rintamaki, Dockum, & Brashers, 2003).

Brashers, Goldsmith, and Hsieh (2002) stated that a research agenda examining information-seeking and information-avoiding behaviors in health contexts is valuable for health practitioners and their patients. Indirect methods of seeking information in

health care encounters can mean less information passed from physician to patient. The scholars concluded that, "information management is an important component of coping with illness and illness-related uncertainty. People seek information from supportive others, health care providers and media sources" (p. 269).

Sometimes college students' access to health information is restricted due to selective distribution. Ridner, Frost, and LaJoie (2006) reported that gay/bisexual men were less likely than their heterosexual counterparts to report having received some health information. Similarly, Brener and Gowda (2001) reported that nontraditional students might have been less likely to receive health information than full-time students between 18 and 24 years of age. Additionally, the scholars stated that the overall number of health topics covered needed to be increased.

### **College student responses**

Among the many messages college students must process every day are those pertaining to health. Such messages range from health fair flyers to informational food labels. Less known, however, is the success rate of such messages in influencing college students' attitudes and behaviors. As a result, public relations and student health scholars have studied how college students respond to health messages.

Self-identity plays a role in how some college students respond to health messages. In a female-only focus group and in-depth interview study exploring what influences women's level of involvement with health messages, Aldoory (2001) reported that participants' self-identity and consciousness of their everyday practices were key factors. Similarly, when Curry (2007) conducted in-depth interviews with African-

American college students and college graduates to explore how African-American women make meaning of HIV/AIDS communication, she found that participants did not want to face judgment from others who associated their identities with a health problem.

Also key in how students respond to health messages is how closely such messages relate to their target audience. Participants in Aldoory's (2001) focus group and in-depth interview study exploring what influences women's level of involvement with health messages, participants indicated that health messages from sources that were credible, attractive, or similar to them were important to their involvement. In related research results, Curry (2007) found that target publics might choose *not* to process messages when they believe the messages inaccurately represent them. Vardeman (2005) also reported the significance of relatable messages. She conducted focus groups and in-depth interviews with African-American, Hispanic, Indian and White college students to explore how women of different ethnicities make meaning of cervical cancer communication. Study results indicated that women felt differentially involved with cervical cancer, and the distinctions were primarily based on age (Vardeman, 2005).

Student health scholars have suggested that audience involvement is a sound approach for health messages. "Enhancing personal involvement with health issues should facilitate message processing" (Schneider, 2006, p. 820). However, involvement cannot be manufactured. "Campaign materials that propose to alter the belief structure of the receiver of the messages are not likely to be adhered to. Instead, those



individuals who are already interested in the issue end up learning from the message” (Dutta-Bergman, 2005, p. 112). Likewise, “health campaigns normally target segments of the population that are at high risk for adverse health consequences...Often, however, those whom a campaign most seeks to reach with health information are the least motivated to pay attention to it” (Schooler, Chaffee, Flora, & Roser, 1998, p. 414).

Other college student health scholars have explored influencing factors for student responses to health messages. In one of three college student health studies, Booth-Butterfield (2003) conducted behavior coding on seatbelt safety by measuring seatbelt usage among customers at a business in close proximity to a college campus. Results indicated that that reminder signs increased seat belt use over baseline. Although Booth-Butterfield’s (2003) research was not limited to college students, several studies suggest that health information signage works. In surveys with 1,317 first-year college students living in a residence hall, Conklin, Cranage, and Lambert (2005) examined students’ use of nutrition and ingredient labels at point of selection in a campus-dining hall that had begun posting nutrition labels. Female study participants were significantly more likely to use labels to make food choices, and they chose dining halls rather than other food establishments that did not provide nutrition information. Levi, Chan, and Pence (2006) reported similar results in their survey study examining the relationship between involvement level and students’ food decisions. Female respondents considered healthiness, mood, quality, appearance, taste, and label information of significantly greater importance than did their male counterparts. The researcher was only able to locate one student health study with dissimilar findings in

health message signage. Morrone and Rathbun (2005) surveyed 354 Ohio University juniors about their food-handling behaviors following an aggressive federal government labeling campaign to influence preparation of meat and poultry. Study results indicated that 44 percent of participants had eaten a hamburger with pink or red inside during the previous month, which could have resulted in food borne illness; only a small percentage of participants remembered label content, and those who remembered content admitted the labeling had not changed their food preparation behaviors.

Before exploring how college students respond to health messages, student health scholars and practitioners must first ensure that students receive the messages. According to a secondary analysis of weight and weight management practices among college students, “only about 1 of 3 students who were trying to lose weight reported ever receiving any information from the college or university on the topics of physical activity and fitness or dietary behaviors and nutrition” (Lowry, Galuska, Fulton, Wechsler, Kann, & Collins, 2000, p. 25). Context is equally important for determining how, or whether, college students will respond to health messages. “A college student watching a [health] message alone in a dorm room will perhaps respond very differently to the message as opposed to being exposed to the message amidst a group of friends at the student union” (Dutta-Bergman, 2005, p. 110).

### **Literature review insights**

The preceding literature review indicates that some college administrators have demonstrated a commitment to student health through campus-level programs designed to increase healthful and decrease risky behaviors among students. Social

support can positively influence student health; unfortunately, barriers can negatively influence student health. Regardless of the reason, some college students continue to engage in unhealthy behaviors. Student health studies indicate that college students have distinct health-information seeking behaviors, and they have equally distinctive responses to the health messages they encounter.

Only three of the reviewed college student health studies addressed health messages in particular (Aldoory, 2001; Curry, 2007; Vardeman, 2005). The fact that one of these research studies was a dissertation, another was a thesis, and the third was based on a larger study suggests an in depth approach is appropriate for the present study. All three of these studies used qualitative approaches, suggesting that a qualitative approach is appropriate for this dissertation. "We need additional information and more data to provide greater richness and texture to our understanding of health among college students" (Keeling, 2001, p. 12).

Several scholars have advocated a qualitative approach in health and health-related research studies (e.g., Belgrave, Zablotsky, & Guadagno, 2002; Skirton, 2001). Morse (1994) reported that qualitative researchers have an important contribution to make in developing the theoretical foundations of health care. According to Murphy, Dingwall, Greatbatch, Parker, and Watson (1998) "where qualitative research is conducted properly and data analysed [*sic*] thoroughly, this approach can provide valuable information on the implementation and impact of health technologies on both health professionals and patients" (¶ 23). In addition, Belgrave, Zablotsky, and

Guadagno (2002) reported “increased recognition of our need to understand subjective health experiences” (p. 1427).

### **Theoretical framework: A qualitative approach**

This dissertation was developed to explore health message perspectives, so it was important to use the approach best suited to the phenomenon of study. The researcher selected the qualitative approach. “The qualitative inquiry movement is built on a profound concern with understanding what other human beings are doing or saying” (Schwandt, 2000, p. 200). Qualitative researchers are, thus, “keen to explore people’s intentions, motivations, and subjective experiences. They appreciate that people do things based on the meanings they hold, which they attribute to their actions and the actions of others” (Daymon & Holloway, 2002, p. 4). The qualitative approach enables the researcher to make knowledge claims based “on the multiple meanings of individual experiences, meanings socially and historically constructed” (Creswell, 2003, p. 18).

Selecting the qualitative approach meant that the researcher began this dissertation with certain assumptions about how and what she would discover (Creswell, 2003). Qualitative researchers make ontological assumptions (regarding the nature of the knowable, or reality), epistemological assumptions (regarding the nature of the relationship between the knower/inquirer and the known/knowable), and methodological assumptions (regarding how the researcher should go about finding knowledge) (Guba, 1990). This researcher’s ontological, epistemological, and

methodological assumptions, outlined next, are consistent with a specific kind of qualitative approach known as constructivism.

Ontologically, constructivist qualitative researchers maintain a relativist belief that realities exist as multiple mental constructions, socially and experientially based, and are dependent on the persons who hold them (Guba, 1990). Constructivist qualitative researchers also believe the world is subjectively constructed by the meanings people ascribe to observations, and the empirical world is not independent of people's observations (Schutz, 1932/1967). Constructivist qualitative researchers "seek answers to questions that stress how social experience is created and given meaning" (Denzin & Lincoln, 2000, p. 10). This dissertation explored the experience of health messages in the campus setting, supporting the relativist ontological assumptions of constructivist qualitative researchers.

Epistemologically, constructivist qualitative researchers are subjectivists, believing that the researcher and participant are fused into a single entity (Guba, 1990). This means that research study findings are literally created by the process of the researcher and participant interacting. "We do not construct our interpretations in isolation but against a backdrop of shared understandings, practices, language and so forth" (Schwandt, 2000, p. 197). Discovering health message perspectives meant dissertation findings would be a co-creation of the participants' perspectives and the researcher's interpretation, supporting subjectivist epistemological assumptions of the constructivist qualitative approach.

Methodologically, the hermeneutics and dialectic assumptions of the constructivist qualitative tradition aim to identify the variety of constructions that exist in order to “reconstruct” the world of the participant (Guba, 1990). In-depth interview was an appropriate method for this dissertation because it is a natural, open communication process which allowed participants to (re)construct their world for the researcher (Lindlof & Taylor, 2002), supporting hermeneutics and dialectic assumptions of the constructivist qualitative tradition. Additional information regarding the dissertation methodology is provided in Chapter III.

## **CHAPTER III MATERIALS AND METHODS**

### **Pilot study**

In qualitative research, initial decisions have to be made about the group or setting to be studied (Murphy, Dingwall, Greatbatch, Parker, & Watson, 1998). This researcher's goals were to select a group and setting for the dissertation that would ensure the phenomenon of study had meaning for college students, and enable student realities to be discovered via interview questions. She conducted three pilot study interviews in fall 2007 to meet those goals.

Not every qualitative dissertation begins with a pilot study, but conducting a pilot is a very useful way of determining if a line of thinking will bear fruit. In the course of conducting a pilot study, directions to follow and questions to ask usually emerge and can be developed and honed (Kilbourn, 2006, p. 549).

The pilot participants were Caucasian female undergraduates, two were sophomores, one was a senior, and all three were enrolled in general education communications courses. The sophomore pilot participants lived on campus; the senior lived off campus. Pilot interviews took place individually on the UTK campus, and they ranged from 17-22 minutes apiece.

One finding from the pilot studies was participants' lack of understanding about the terms *source* and *health promotion campaign*. Following consultation with dissertation committee members about the pilot interviews, the researcher removed the terms due to their *etic* perspective, the outsider perspective from the researcher's

reading and research (Daymon & Holloway, 2002). To better facilitate the *emic* perspectives, the insider's perspective that the participant can provide a question about health information sources was replaced with the question: "Where do you go/whom do you turn to when you have a health issue?" A question about health promotion campaigns was changed to the following: "Have you seen any health-related information on campus? If so, tell me where you were and how you responded to it". The interview guide (appendix A) was adapted based on these findings. Another pilot study finding was the variety of definitions that emerged when participants defined the word *health*. Participants defined *health* as being healthy, avoiding illness, and maintaining mental, physical, and social wellness. This finding indicated multiple mental constructions (Guba, 1990), which could be explored through a research study. It also indicated the need to integrate definitions for terms that would be used throughout the dissertation.

One limitation of the pilot study was the short duration of each interview. The 20-minute interview length may have indicated lack of complete input from study participants. In order to ensure participant realities would be uncovered during the dissertation, the researcher incorporated key phrases during the interviews to elicit detailed responses (Daymon & Holloway, 2002). A second limitation of the pilot study was that all participants were Caucasian. Their responses were likely influenced by their ethnicity. However, the pilot-study participants had each experienced the phenomenon under study (Daymon & Holloway, 2002) so the findings remained relevant. The



researcher included more than one ethnicity in the dissertation to reflect the breadth of experiences among the study population.

Dissertation committee members noted the importance of identifying a population best suited to explore the phenomenon of study, health message perspectives. Thus, the researcher reviewed the literature to ascertain the participant profiles common in college student health scholarship. Her review indicated that lower-level (freshmen and sophomore) undergraduates, females, and on-campus residents had been the focus of several college health studies. Thus, the researcher selected students who fit these criteria as her dissertation population.

### **Study participants**

Participants for this dissertation were 16 UTK students who were dormitory residents, females, and freshmen or sophomores (see table 6 for participant profiles). Several college student health research studies that have identified this group as suitable for study are reviewed next.

Dormitory residents were chosen as the population of study because students establish new eating habits in such settings and “residential life in college represents an opportunity for food and nutrition professionals to influence eating habits that could be with students for the remainder of their lives” (Conklin, Cranage, & Lambert, 2005, p. 97). Additionally, “eating habits established by the end of traditional college age are difficult to break” (Levi, Chan, & Pence, 2006, p. 95). College student health scholars have also studied dormitory residents’ levels of physical activity. “Questions have arisen regarding college students and their amount of physical activity once they take

residence in a college dorm” (Simpson, Brehm, Rasmussen, Ramsay, & Probst, 2002, ¶ 4). According to Reed and Phillips (2005), understanding environmental influences on college students and physical activity might lead to improved interventions and modifications in on-campus workout sites. Some residence halls have already begun adapting living environments to wellness lifestyles (Conklin, Cranage, & Lambert, 2005; Owen, 2002). After conducting research about the relationships between the proximity of exercise initiation and levels of physical activity, Reed and Phillips (2005) concluded that “proximity to exercise facilities might encourage freshmen and sophomores to engage in more exercise bouts over a 7-day period” (p. 288).

Freshmen and sophomore students were selected as dissertation participants because academic scholars have cited weight gain, decline in physical activity, inactivity, unhealthy dietary behaviors, and declines in emotional health among students during their first two years of college (e.g., Bray & Born, 2004; Butler, Black, Blue, & Gretebeck, 2004; Kilpatrick, Hebert, & Bartholomew, 2005; Racette, Deusinger, Strube, Highstein, & Deusinger, 2005; Sax, Bryant & Gilmartin, 2002). College student health scholars have also reported that freshmen and sophomores had higher reactions to stress than juniors and seniors (Misra & McKean, 2000). Misra and McKean (2000) examined correlations of college students’ academic stress, anxiety, time management, and leisure satisfaction. The scholars found that females experienced higher self-imposed stress and more physiological reactions to stressors than their male peers.

Females were selected as the population of study because gender is one of the most important influences of health-related behavior (Courtenay, 2000). Several

researchers have reported significant differences in health patterns between men and women (e.g., Davy, Benes, & Driskell, 2006; Dusselier, Dunn, Wang, Shelley, & Whalen, 2005; Hicks & Miller, 2006; Reed & Phillips, 2005), including substantial concerns among women about weight (e.g., Hall, Kuga, & Jones, 2002; Kilpatrick, Hebert, & Bartholomew, 2005), and food decisions (e.g., Levi, Chan, & Pence, 2006). In a secondary research study describing overweight and weight management among college students, females were more likely than males to perceive themselves as slightly or very overweight, and to be trying to lose weight (Lowry, Galuska, Fulton, Wechsler, Kann, & Collins, 2000). The scholars also reported that females were more likely to use exercise, diet, diet pills, and vomiting or laxatives for weight control—even though they were less likely than males to be overweight.

Research reviewed in the preceding section indicated that dormitory residents establish eating and exercise habits related to their new living quarters. These studies also suggested that freshmen and sophomores have unhealthy diets and struggle with academic stressors. In addition, the preceding section indicated that females are more likely to use unhealthy behaviors for weight management, regardless of their weight. The college student health scholarship regarding health issues unique to dormitory residents, females, and freshmen and sophomore college students indicates that this population was suitable for this dissertation.

## **Methodology**

The researcher sought and received documented approval to conduct this dissertation from the UTK Institutional Review Board (IRB) before proceeding. The

researcher used purposive sampling to draw the population of study. "Purposive sampling is used when subjects are intentionally selected to represent a predefined characteristic or trait" (Cottrell & McKenzie, 2005, p. 225). As indicated in the preceding section, the characteristics selected for potential study participants were gender (female), residence (dormitory), and school year (freshman or sophomore).

The Panhellenic [*sic*] council advisor was identified as a contact source because of her female-only clientele; likewise, residence hall directors where underclassmen reside helped facilitate contact with the population of study. Approval from the IRB stipulated that the researcher receive written approval from the Panhellenic [*sic*] advisor and respective residence hall directors before proceeding with the dissertation. Following their approval, the Panhellenic [*sic*] council advisor provided contact information for sorority members who lived in the designated dormitories (see appendix D for sample approval letter). The researcher emailed students who fit the participant profile. After the researcher's request, students volunteered to participate.

The researcher used in-depth interviews for this dissertation because of how effective this approach is in "getting people to talk about their personal feelings, opinions, and experiences. They are also an opportunity for us to gain insight into how people interpret and order the world. Interviews are especially appropriate for addressing sensitive topics" (Mack, Woodsong, MacQueen, Guest, & Namey, 2005, p. 30). Mental constructions among individuals represent their distinct realities and social experiences, according to qualitative constructivist traditions. In-depth interviewing enabled the researcher to access participants' multiple realities (Guba, 1990). Moreover,

health researchers have reported the value of interviewing “for a wide range of purposes, including discovering how consumers evaluate the services they are offered, what understandings and attitudes underlie particular kinds of health behaviour [*sic*] and what might be required to persuade people to change health-related behaviours [*sic*] (Murphy, Dingwall, Greatbatch, Parker, & Watson, 1998).

### **The research questions**

The research questions in a qualitative study identify the phenomenon to be studied (Strauss & Corbin, 1990). They tell the readers what the researcher specifically wants to know about a subject. “Research questions provide the scaffolding for the investigation and the cornerstone of the analysis of the data (Anfara, Brown, & Mangione, 2002, p. 29). Table 7 relates research questions to interview questions to provide a visual depiction of the “scaffolding”. The research questions for data collection and analysis for this dissertation were as follows:

**RQ1:** What health messages do female undergraduates experience?

**RQ2:** What is the originating source of the health messages female undergraduates experience?

**RQ3:** How do female undergraduates experience the health messages they encounter?

### **Data collection procedure**

Each participant read, signed and received a copy of an informed consent statement regarding study details and human subject’s guidelines provided by UTK. In order to alleviate any possible discomfort that could arise discussing certain health-

related topics, IRB approval also required the researcher to supply each participant with a document identifying all UTK-based health facilities prior to each interview (See appendix C for healthy handout).

The researcher developed the data collection instrument, an interview guide with a semi-structured design (see appendix A) based on previously conducted research studies addressing college student health (e.g., Albano, Ramsey, Barbour, Rintamaki, Dockum, & Brashers 2003; Dunne & Somerset, 2004; Luquis, Garcia, & Ashford, 2003). The researcher also developed interview questions on the basis of what needed to be known to address the research questions (Anfara, Brown, & Mangione, 2002). Table 7 relates the interview questions to the research questions, identifying what needed to be known to address the research questions. Additionally, “the [interview] guide was slightly modified as needed to probe for additional insights” (McMillan, Haley, Zollman-Huggler, Avery, Winchenbach, & Bell, 2007, p. 267) as the dissertation progressed.

Interviews took place during the spring and summer 2008 school semesters on the campus of UTK. According to Strauss and Corbin (1990) interviews should take place in the setting in which the data and participants naturally interact. Female, freshmen and sophomore on-campus residents of UTK would likely interact with health messages on campus. The setting also enabled the researcher to develop details about the participants and to be highly involved in their actual experiences (Creswell, 2003). Interviews took place in various locations on the UTK campus including the John C. Hodges library, the Communications building, Hess residence hall, and the Panhellenic [*sic*] Affairs office. Interviews were conducted in person because face-to-face is the

best technique for conducting long interviews (Strauss & Corbin, 1990). Each interview took place individually in order to capture mental constructions of each participant, as necessitated by the relativist ontological assumptions of the constructivist qualitative approach (Guba, 1990).

Open-ended questions, facilitated by the semi-structured interview guide (appendix A), enabled the researcher to gain “depth of insight into the attitudes and beliefs of a particular population” and “some insight into behaviors” (McMillan, Haley, Zollman-Huggler, Avery, Winchenbach, & Bell, 2007, p. 273). The researcher also included follow-up questions during dissertation interviews. These follow-up questions were essentially co-created by the knowledge that was exchanged between participants and the researcher (Guba, 1990). These follow-up questions, thus, supported the subjectivist epistemological assumptions of the constructivist qualitative approach.

Interviews were audio-recorded and transcribed by the researcher in order to accurately depict participant constructions, as dictated by the hermeneutic methodological assumptions of the constructivist qualitative approach (Guba, 1990). Each interview lasted from 20-40 minutes. As with Halliwell and Dittmar’s (2003) research study assessing women and men’s body image attitudes toward ageing, “length and depth varied according to the participants’ enthusiasm and involvement with the topic” (p. 678). Demographic characteristics of participants were tracked for classification purposes. The researcher also provided incentives to each participant, either bottled water or a \$5 gift card for a national coffee chain that operates a store on campus.

Because the researcher is the instrument in qualitative research (McCracken, 1988), she analyzed the dissertation data, the interview transcripts. Done properly, analyzing qualitative data is systematic and rigorous, and therefore labour-intensive [*sic*] and time consuming" (Pope, Ziebland, & Mays, 2000, p. 116). The analysis necessitated looking for repeated patterns that represented how people responded to their situations. The researcher used an "iterative process" and developed "increasingly richer concepts and models of how the phenomenon being studied really works (Ryan & Bernard 2000, p. 783). She collected verbatim transcripts of interviews and read through them line by line. The researcher analyzed interview transcripts throughout the data collection process, allowing any themes to emerge prior to each successive interview. Such ongoing analysis supports the hermeneutic and dialectic methodological assumptions of the constructivist qualitative approach, which seek continuous improvement of information and sophistication (Guba, 1990).

### **Strategies for validating findings**

In qualitative research, validity refers to the accuracy of findings from the perspectives of the researcher, readers, and participants of a research study (Creswell & Miller, 2000). This researcher used three different strategies to validate the accuracy of dissertation findings: clarifying bias through self-reflexivity, reaching information redundancy, and writing and reviewing self-memos.

In order to clarify bias through self-reflexivity, the researcher reveals that her educational status (doctoral candidate) placed her in the same educational setting as



dissertation participants. This proximity likely influenced the students' responses to her research. The researcher engaged in self-reflection throughout all stages of the dissertation in order to honestly address potential bias. This meant asking follow-up questions even when the response seemed obvious. For example, when one participant used the term "counselor- person", the researcher initially thought the participant was describing a psychotherapist. Follow-up prompts revealed that the "counselor-person" was an emic descriptor (Daymon & Holloway, 2002) for an anger management counselor.

Reaching information redundancy in interviews is the point when qualitative research is considered complete (Taylor, 1994). Information redundancy occurs when participants repeat the same ideas, and any further interviews are expected to reveal the same information. Thus, the number of study participants in this dissertation was not determined until information redundancy was reached. Redundancy was reached by interview 11; however, the researcher continued past that point—five additional interviews—in order to ensure that the phenomenon of study had been fully explicated.

The researcher wrote and reviewed self-memos before and during data collection, as suggested by Morrison, Haley, Sheehan, and Taylor (2002). According to the researchers, these memos should include reactions and conclusions. "Tracking these during the research process can help you to determine if you have come to understand others or if you have imposed your own interpretations on the data" (p. 26). Thus, the researcher included key points and phrases she heard during the interviews (Aronson, 2006) in her self-memos. She wrote her first self-memo three-and-

a-half weeks after the first participant interview; she wrote the last self-memo one week after the final interview. One thing the researcher noted early on during data collection, after consultation with her dissertation chair, was the importance of self-efficacy among participants. This notation was based on participants' reference to their eating and exercise behaviors despite some of the barriers they faced on campus. The researcher noted several times during data collection the importance of eliminating assumptions she'd held since co-authoring an ethnographic study exploring undergraduates' food and fitness perceptions (Lambert, Haley, & Jahns, 2006). In that study, traditionally aged, second semester freshmen lacked dietary constraint and had inconsistent or nonexistent exercise regimens.

## **CHAPTER IV STUDY FINDINGS**

### **Summary**

This chapter presents findings of the dissertation based on thematic analysis of interview transcripts. Thematic analysis can involve identifying themes through pattern recognition within the data where emerging themes become the categories for analysis (Fereday & Muir-Cochrane, 2006) or identifying categories and applying them to the data and refining the categories into broader themes (Simons, Lathlean, & Squire, 2008). Specifically, "themes are general propositions that emerge from diverse and detail-rich experiences of participants and provide recurrent and unifying ideas regarding the subject of inquiry" (Bradley, Curry, & Devers, 2007, p. 1766). The researcher conducted thematic analysis in two stages, the second more in-depth than the first.

In order to ensure that participant perspectives were the focus of the findings, interview transcript themes were labeled using participants' own words. Participant's words, in turn, gave the researcher insight into their worlds. "Insiders' accounts of reality help you to uncover reasons why people act as they do and inform your descriptions and interpretation" (Daymon & Holloway, 2002, p. 137). Participant perspectives were central for gaining understanding throughout the dissertation, but the researcher's perspective was also important. According to Daymon and Holloway (2002), research study results should include emic and etic perspectives. Findings from

the initial stage of thematic analysis are identified in the following section. Emic and etic perspectives are represented in theme titles and subtitles.

### **First stage of thematic analysis**

The first stage of thematic analysis involved reading for overall understanding (Bradley, Curry, & Devers, 2007). The researcher printed out and read each interview transcript. Next, she wrote paraphrases of participant's remarks in transcript margins alongside relevant text. Then, the researcher reread the paraphrases and identified and labeled repeated ideas, words, and phrases. These labeled categories were themes. Three themes emerged from this initial stage of thematic analysis: 1) Participants were grudgingly tolerant of society's health messages; 2) Participants usually disregarded campus health messages, and 3) Participants were differentially responsive to interpersonal health messages. Details of the initial stage of thematic analysis follow, along with corresponding participant quotes.

#### **1) Participants were grudgingly tolerant of society's health messages:**

##### **"Everyone is always looking"**

While society did not always overtly issue health messages, many participants cited societal beauty standards as a major influence on their health-related beliefs. The importance of physical appearance was evident in several quotes and in participants' accounts of peer and social group interactions. It was not uncommon for participants to cite concerns about their appearance in response to researcher questions regarding their health, thereby conflating health and beauty.

You have to be—you don't have to be, but you want to be healthy, but mostly just for the aesthetics of it. You want to look healthy and you want to be skinny and you want to fit into your clothes and look cute. It's not like I'm not concerned in the long run about my health, but that really is the reason. Well, I mean, everyone is always looking and, I mean, it's not just for others, I mean, you want to look and feel good about yourself, but everyone's always looking—  
Participant 2

Participant 2 reported that her primary concern was to “be skinny”, fit into her clothes, and “look cute”, while being healthy was less important. She acknowledged holding an aesthetic-oriented view of health, “it's not like I'm not concerned in the long run about my health” while simultaneously defending her position as society-driven, “everyone is always looking”. Hers was a common sentiment among dissertation participants.

According to participants who belonged to sororities, the message of visual appeal was intensified in their organizations. The focus on image manifested itself through special events that required dressy attire, frequent photos of chapter members, and a fostered mentality to “represent” their “sisters” aesthetically.

I mean, being in a sorority you don't want to be, like, really overweight because you want to be representing your sisters and you have to wear dresses a lot—  
Participant 1

The tacit health message was that members were expected to maintain an acceptable body weight. Although sorority members attributed some of the body image messages to their organizations, non-member dissertation participants reported similar messages from other settings. In fact, some participants stated that females overall are expected to maintain a certain body weight because of societal standards for beauty. This perspective is illustrated in the following quote.

Being a female, of course, girls are expected to look a certain way and, it's like, you don't want to let anyone down. I didn't really want to come to school and gain weight, and come home and be, like, bigger—Participant 2

For participant 2, society's standards for beauty were summed up in the singular statement that "girls are expected to look a certain way". This participant understood the unwritten rules about her diet and physical fitness, and she recognized the consequences of disregarding those rules: letting society down. Participant 2's perspective appeared to compromise her level of control regarding her body image. Her healthfulness could only be achieved through perceived appeal to others. Despite several participants focusing on societal body image standards, a few revealed differing viewpoints. Participant 9, quoted next, expressed adamant opposition to society's focus on appearance.

I've noticed with just women in general that more people are worried about being skinny rather than being healthy. That's something that's always bothered me because I've always been a full-figured girl, you know? It bothers me that women care more about being socially acceptably skinny rather than just taking care of their bodies and doing everything to maintain and just being healthy—Participant 9

Interestingly, participant 9 framed part of her argument around being full-figured. It is unclear whether she would have expressed such opposition if her body size was in keeping with societal standards; however, she implied causation by using the term "because" to connect "always bothered me" and "full-figured". Participant 8, quoted next, recast the issue of societal standards for beauty as one of external (societal) pressures and personal (individual) choice.

I will admit I've always been one of those people that have been very concerned with my image. When I danced, there was a lot of stress, you know, put on you.

I was a competitive dancer, so I guess that's always been in my mindset. And I kind o' let it go my first year of college just because, you know, there's so many things to do—Participant 8

College gave participant 8 an opportunity to “let go” of her previous focus on body image; however, she expressed regret for doing so. An image focus, she reasoned, could have prevented her freshman-year weight gain. To participant 8, body image issues seemed an unpleasant necessity. Her concerns about gaining weight were echoed by other participants, many of whom were familiar with the “health message” about the fabled ‘freshman 15’ first-year weight gain. The following quotes illustrated this perspective.

I was real in fear that I was going to gain the dreaded 15 pounds from living here. That was my main concern. And I guess, too, other people are kind of scared to gain weight from just sitting around—Participant 11

Well, all girls are concerned with the way they look, obviously, and everybody's going ‘oh no, the freshmen 15’. So, I mean, obviously every single one of my friends is going ‘oh, I need to watch what I eat, I need to work out, and I need to run’—Participant 12

Participants 11 and 12 identified the freshman 15 as common issues of concern for themselves and others, noting “other people” and “every single one of my friends”, respectively. Their responses illustrated that a health message originating with society had transitioned into an interpersonal message. The tone of the message shifted as well, gathering poignancy. It was not surprising, then, that participant 11 used emotionally laden terms “fear”, “dreaded”, and “scared” when discussing the freshman 15. Fear may have even facilitated the transition of the health message from the societal to the interpersonal level.

**2) Participants were differentially responsive to interpersonal health messages: “We don’t call each other ‘fat’, but we try to motivate each other to go to the gym”**

Participants encountered health messages frequently through interpersonal sources. Their level of responsiveness varied depending on the message source. The decision-making process for determining responsiveness was not always readily apparent. Participant responses did indicate, however, that health messages from interpersonal sources were alternately positive and negative. Interpersonal health messages were sometimes situated in the context of concern about an individual’s physical appearance. The following two quotes illustrate this theme.

I think we kind of always talk about our bodies. It’s like a perpetual examination of our figures and how we look. I think it’s always a concern of how you look. I mean, I guess we talk about that all the time—Participant 2

Well, all my roommates, we always talk about weight. We’re always in, like, a race to see who can be skinnier. That’s so bad. We always stand in the bathroom and get on the scales and everybody looks and we’re like ‘ah’ you know, and ‘how did that happen’. I mean, we don’t call each other ‘fat’ or anything like that, but we try to motivate each other to go to the gym—Participant 8

Both preceding quotes indicate that “perpetual examination” of their bodies is a regular pastime for participants and their peers. Interpersonal messages are not as easily ignored or discounted as societal messages, so it is troubling that participants are engaging in what appears to be psychologically destructive behavior. Participant 2’s hyper-awareness of body image was fostered by ongoing discussion regarding her and her peers’ body shape as well as their appearance to others. Similarly, participant 8 and her peers were zealous in their approach to weight loss, competing to “see who can be



skinnier". It was initially encouraging when participant 8 acknowledged her and her peers' level of examination was extreme—"that's so bad" —but disheartening when she immediately contradicted herself. Participant 8 defended her and her peers' hypercritical approach because, by doing so, they motivated "each other to go to the gym".

Several participants expressed appreciation for interpersonal health messages. In the following quote, participant 1 revealed specific traits of the peers she acknowledges and consults regarding health issues.

My roommate, she is a nutrition major, so she kind of keeps me on track. If I eat something, she grabs it and says, 'this has, like, 25 calories per bite, you can't eat that'—Participant 1

Identification of her roommate's nutrition major suggests that participant 1 ascribed expertise to her roommate due to her major. The same message would likely not have been as credible had it come from a peer without health knowledge. Participant 7 also expressed the importance of source credibility. By way of example, she described a health-related exchange she had with a nutritionally aware peer in the following quote.

One of my friends, he's one of these people that goes and works out at the Rush [fitness club] and, you know, drinks the protein. We were sitting there talking and, we were talking about how you can get a salad this big for three bucks, or you can buy Burger King and you're full, you know? Because at Burger King, you can get all the fat [for] free. All that lovely stuff...—Participant 7

Although the preceding quote illustrates the societal message that eating healthy is expensive, participant 7's depiction of her friend who "works out at the Rush" and "drinks the protein" also established the friend as someone with nutritional know-how. As with participant 1, participant 7's quote suggested that the same exchange would not have been as credible had it taken place with a different peer. Source credibility

was important for other dissertation participants, but they appeared to equate credibility with familiarity. In the following quote, participant 9 identified connection with a peer as important in communication exchange.

One of my best friends, actually, we talk about more of the healthy eating, because we've both been sort of slightly overweight for awhile, since college, anyways. We both decided to go on diets for summer. It makes it a lot easier to talk to somebody and to have somebody relate to your problems and your struggles with staying fit and staying healthy—Participant 9

The peer referred to in the preceding quote was credible to participant 9 because of the struggles with weight the two had in common. Credibility also appeared to be linked to the peers' experience and, thus, expertise, regarding weight issues. Participant 12 also implied the importance of identifying with a message source. In the following quote, she discussed a topic-specific health message.

I know with a lot of sexual health my friends would be, like, 'oh, I'm worried about this' and they would say, 'well I read it in a magazine'. Although that's probably not the best way to hear, I think it's more comforting for a young girl to hear from her friends just to get, like, a general idea before, maybe, pursuing another option—Participant 12

Participant 12 acknowledged that a magazine was "probably not the best" information source for a sexual health message from a friend, yet she defended her choice.

Familiarity seemed to surpass credibility for participant 12's health message sources.

### **3) Participants were primarily dismissive of campus health messages:**

#### **"I read that there was a health fair. I just wasn't interested in going"**

Participants encountered health messages on campus regularly, on posters, flyers, and student newsletters, but they primarily dismissed such messages. Although no participants expressly mentioned the vast numbers of messages they encounter

daily, information overload could be partly to blame for not acknowledging campus health messages. The individual factors participants cited were disinterest, lack of perceived need, and no personal relevance. The only societal factor cited was lack of message credibility.

Participant 1 expressed her lack of interest in a health message she received on campus.

I read in an email, like, news for students, that there was a health fair. I just wasn't interested in going, really. I don't know if it was a time conflict, but I just wasn't interested in going—Participant 1

Participant 1 was unsure of her reason for dismissing the health message, yet she was quite sure of her disinterest in attending. Her disinterest in attending the health fair may have been due to a time conflict, as she suggested, or another factor. It is notable, however, that she remembered the venue (an electronic newsletter) and message focus (campus health fair). Her memory, though limited, may indicate that participant 1 held a positive attitude about the topic or the electronic newsletter format. Overall, participant responses did not reveal what role, if any, message format played in shaping their perspectives about health messages. However, the following quote suggests that the format participant 12 identified was not effective for a health message she encountered.

I know here we have something for mental health, but I have to admit I'm not quite sure what it is. I heard about it at my freshman orientation. They had, like, a 20-minute or 30-minute presentation, but that's about all I've heard about it. I'm sure they have a Web site, but I wouldn't know what it is. I don't even know what the thing is called, but I know it does exist. I don't know how many people utilize it 'cause it's not very widely known as far as I know—Participant 12

Participant 12 arguably retained enough information about the Counseling Center to locate it if she needed it in the future, thus, the knowledge she retained may have met some of its presenter's objectives. Still, her response may be all-too-familiar to student health practitioners struggling to capture attention (see table 8) from busy college student populations.

Lack of perceived personal relevance was to blame for some participants' disregarding health messages. For participant 8, quoted next, message relevance was determined by its context.

As far as, like, the [Student Health Services] postings, I mean, if I'm not really sick or anything I don't really pay attention to those—Participant 8

Despite being aware of posters and flyers about Student Health Service, participant 8 disregarded them. Attributing her lack of attentiveness to "not being sick or anything" suggests she may have responded differently had she been ill.

Only one dissertation participant attributed her dismissal of a campus health message to societal factors. Participant 3 recounted her response to some student health brochures she saw in a residential dining hall.

They really try to advertise, like, on the brochures and stuff, and they'll show pictures of really healthy meal options, but I've never seen that [food in the dining hall]. So, things are misleading. I've seen some brochures in the cafeterias, it's called a 'just for you' brochure, and on the front it's got, like, raspberries, like, all this stuff I've never seen in there. In the cafeteria, it's, like, apples and bananas, so I think stuff like that is a little misleading—Participant 3

Themes uncovered during the first stage of thematic analysis were classified according to their situational context; i.e., the situations in which participants

encountered the health messages. Findings indicated that 1) Participants were grudgingly tolerant of society's health messages; 2) Participants were differentially responsive to interpersonal health messages, and 3) Participants usually disregarded campus health messages.

### **Second stage of thematic analysis**

During the second stage of thematic analysis, the researcher put interview transcripts and self-memos in sequence by date (LeCompte, 2000), reread them one-by-one, and wrote down key insights or ideas not fully developed during preceding stages of analysis. Rereading transcripts and self-memos also allowed the researcher to assess her in-field understandings alongside the themes from the first stage of analysis. This second stage of analysis led to her identification of two additional themes that focus on receiving and seeking out health messages: I) Participants were reluctantly receptive of compulsory health messages and II) Participants were proactive and perceptive regarding health messages when they had health information need. Themes identified in the first stage of analysis led to the development of these two additional themes.

Compulsory health messages participants identified were societal, interpersonal, and campus-based. Participants did not seek out these compulsory health messages; instead, the health messages here were compulsory. However, participants eventually expressed appreciation for receiving these compulsory health messages. By contrast, when participants perceived a health information need, they proactively sought health information from a variety of social, interpersonal, and campus sources. Details about

compulsory and proactive communication are identified next along with corresponding participant quotes that tie back to the earlier findings regarding societal, interpersonal, and campus-based health messages.

**I) Participants were reluctantly receptive to compulsory health messages:**

**“If my teacher didn’t have us research Student Health Service,  
I probably wouldn’t even know where it was”**

Representative quotes in this theme illustrate the reality that participants did not value certain health messages until long after encountering them. Although college student health practitioners may prefer messages have immediate impact, participants identified delayed impact for some of the messages they encountered. Delayed impact messages may be an alternate approach student health practitioners can utilize to engage college students in campus settings. Participant 2, for example, benefited from encountering a compulsory health message, yet she expressed initial reluctance and non-responsiveness.

If you’re just, like, for instance, walking to the cafeteria, there’s, like, signs and they have fruit on them. I can’t remember exactly what it says, but it’s something like ‘you can eat well here’.... I believe everyone’s trying to eat healthy and it’s a good reminder, just a little conscious choice to try to choose correctly—Participant 2

In contrast to the final theme of the preceding section in which participant 3 dismissed student health brochures when she questioned their credibility, participant 2 appeared to hold a positive view of the student health handouts she’s encountered at UTK. Many participants were dismissive initially, as they were with campus-based health

messages. But upon further probing, it became clear that they often eventually recognized value in the messages. The following two quotes illustrate this theme.

I feel like a lot of campuses do promote and publicize the sexually transmitted diseases, the STDs and the HIV testing and all that stuff, and I think it's a good thing that they do publicize that—Participant 9

I think it's good to be aware of what's going on as far as the flyers go. If you're aware about blood drives and things like that, you're more likely to do it. Being informed in general is helpful—Participant 10

Based on participant 9's description of select compulsory health message topics as "a good thing", she might respond according to particular health topics. Her experience challenges student health practitioners to choose carefully when selecting health message topics for college students. Conversely, participant 10 demonstrated a common response to multiple compulsory health message topics. Her statement that "being informed in general is helpful" contradicted findings reported in theme 3, which revealed participants' primarily dismissive response to campus health messages. The following participant also identified far-reaching benefits of a series of compulsory health messages that had strong interpersonal and social components.

For my sorority we have an officer [who] was an aerobics instructor at T-Recs, so we had, for a while, like, weekly workouts and she would give us tips. There was one meeting where she stood up and gave us all a handout about what to do and how many calories you burn doing this and, I mean, it was kind o' beneficial to the whole chapter. During our chapter meetings she could stand up and she gave us all a handout and talked to all of us—Participant 12

The health messages identified in the preceding quote included a presentation, an exercise routine, and a student health handout. This suggests that health messages may benefit from a multi-level promotional approach. Participant 12's response that the

handout alone was “kind o’ beneficial” indicated likewise. She did, however, emphasize the expansiveness of the presentation when she stated its benefits were felt chapter-wide.

Some participants implied their eventual appreciation of compulsory health messages rather than stating it outright. The following quote illustrates this perspective.

I’m from a generation of people that have had health problems. But we’re trying to work on it, so they give me advice that they know. They tell me to keep walking and get active and stop eating so much pork and drinking a lot of drinks; to keep drinking water, and stop going to sleep after I eat and stop eating so late—Participant 5

Participant 5 identified three distinct areas of advice her family members shared with her: physical activity, food choice, and water consumption. By stating, “we’re trying to work on it”, participant 5 suggested she and her family were in partnership to pursue healthful habits. She also intimated an overall positive response to the health message/advice she received.

Participant 15, quoted next, reported a high level of appreciation for a compulsory health message she encountered, but her appreciation occurred when she had a specific health information need. Interestingly, participant 15 faced a health concern soon after encountering a compulsory health message, thus demonstrating the interrelationship between compulsory messages and proactive message seeking.

Our teacher had us research the [Student Health Service] health center. If my teacher didn’t have me do that, I probably wouldn’t even know where the health center was...It’s funny ‘cause after I did that, I actually had to go to the health center—Participant 15



**II) Participants were proactive and perceptive regarding health messages when they had health information need: “I had a wart on my foot. I didn’t know if it was a wart, so I had to look that up”**

Participants are proactive and perceptive when they need health information, and they seek out such information from multiple sources. Sometimes participants conduct health information searches online; other times they seek out health or medical professionals for initial or confirmatory advice. As illustrated in the preceding section, on-campus messages are also sometimes the impetus for proactive information seeking. Regardless of their information-seeking behaviors, dissertation participants were most amenable to health messages when they had a health information need. As illustrated in the following quote, participant 10 sought medical confirmation after an online search.

I go on the Internet and if I have symptoms and I don’t really know if it’s more than a cold, I’ll put it in the Internet and see if it brings something up. Then I’ll go to my doctor and be like, ‘do I maybe have this?’ Because I’m always afraid that I’m going to go to the doctor and they’re not going to, like, check everything—Participant 10

Participant 10 used the knowledge she gained from her Internet search as a means of protection during her doctor’s visit. Her fear that “they’re not going to check everything” drove her Internet search. For participant 10, an online search reduced her chances of receiving insufficient medical care. Participant 13, quoted next, health information searches on specific Web sites provided confirmation.

Honestly, the first thing I do is Google it. I go online and see if I can find anything that looks similar to what I have, and then when I go to the doctor, I take it to him and say ‘hey, I’ve seen things like’, you know, ‘this, this, and this,

what do you think? Does it even sound like it could be right?’ Just to get a general idea—Participant 13

Using Google as a first step suggests that participant 13 has had success using the mammoth search engine. Her perspectives about health messages may have even been shaped by her experiences on Google, with the site representing a credible health information source due to her frequent use and familiarity. Participant 12, however, was less trusting of the Internet, despite her use of the Web to seek out health information.

Especially now with the Internet you can always look it up. Although, I’ve heard that can be kind of misleading sometimes, but I mean it’s a resource if you have something pressing. I had a wart on my foot, I didn’t know if it was a wart, so I had to look that up—Participant 12

Interestingly, participant 12 did not let her view of the Internet as “misleading sometimes” limit her use of it as a health information source. She identified convenience and immediate need as the focus for her approach, as indicated by her statement, “it’s a resource if you have something pressing”. Echoing earlier misgivings about some information sources, dissertation participants showed an abiding interest in source expertise. When they have a health information need, participants repeatedly cited those in the health and medical profession as sources.

When I have a question about health, I ask my mom because she’s a RN—Participant 15

Even when participant 15 sought different sources for more personal health information, expertise remained important.

When I was back home, if it was something I didn’t want my mom to know, I would go to the health department—Participant 15

Even when alternate means were required, participant 15 demonstrated self-assuredness in seeking out health information. Her proactive approach may have been partly due to her familiarity with the medical field because her mother was a nurse. Other participants also relied on medical expertise when they needed health information. The following participant identified Student Health Service as her only health information source.

I go there [Student Health Service] to get my checkups, you know? If I notice anything different, I definitely go there. My friend had, like, a big bruise on her leg and so, we didn't know where it came from. She just woke up one day and it was there. So we were just like, 'you need to go and get it checked out 'cause something could be seriously wrong'. But it was nothing after she went and got it checked out. But, little things like that, you know, are you protecting yourself, if you're sexually active, are you protecting yourself—Participant 16

Participant 16 visited the clinic for checkups, sexual health issues, and if she noticed "anything different" on her body. She also encouraged peers to do the same as indicated by her solution-oriented reaction to a friend's potential health issue.

Participant 16 was the only dissertation participant who identified Student Health Service as her sole health information source. This may have been due to the level of expertise she ascribed to the clinic or the strength of her relationship with her clinic physician. Relationship was a key for participant 9's preferred health information source: her mother. Source expertise seemed secondary when she reasoned that "moms know everything" in the next quote. But her follow-up statement suggested otherwise.

It depends on how serious the problem is. I usually call my Mom, because she's my Mom, you know, and Moms know everything. And if it's something a little more serious, I call my Aunt who has some medical background—Participant 9

Identifying a relative with “some medical background” as her preferred health information source when she faced “something a little more serious” indicated that source expertise remained important to participant 9. The level of medical knowledge this particular source had was unknown, however.

### **Responses to research questions**

The first research question asked what health messages female undergraduates experienced. Participant responses indicated that female undergraduates experience compulsory and sought out health messages which are interpersonal, intrapersonal, societal, and organizational.

The second research question asked the originating source of the health messages female undergraduates experience. Participant responses indicated multiple originating sources of the health messages female undergraduates experience including society, their peers, family members, health and medical personnel, and campus-based venues.

The third research question asked how female undergraduates experienced the health messages they encountered. Participant responses indicated that female undergraduates have differential experiences to health messages they experience. Specifically, female undergraduates were grudgingly tolerant of society’s health messages; they were usually dismissive of campus health messages; they were differentially responsive to interpersonal health messages, and they were reluctantly receptive of compulsory health messages. When female undergraduates have a health

information need, however, participants indicated they were proactive and perceptive regarding health messages.

These findings and their implications for public relations and college student health scholarship and practice will be discussed in detail in the fifth and final chapter.

## **CHAPTER V DISCUSSION AND CONCLUSION**

### **Summary**

The purpose of this dissertation was to discover how female undergraduates perceive health messages in order to identify implications for public relations scholarship and practice, to uncover insights for student health scholarship and practice, and to facilitate enhanced health communications for college students. The research questions for this dissertation explored what health messages female undergraduates encounter, what sources of health messages female undergraduates encounter, and how female undergraduates respond to the health messages they encounter. To review how the purpose and research questions were addressed, a brief summary of the first four chapters of this dissertation are provided next.

The first chapter of the dissertation outlined the significance of studying health message perspectives to public relations and college student health scholars and practitioners. It also included a statement of the problem, the scope and delimitations of the study such as the social context of UTK, and definitions of key college student health terminology. In addition, this chapter included background information about college student health and health message perspectives.

The second chapter of this dissertation provided context for the dissertation by identifying its position in the academic body of knowledge, which included public relations and college student health scholarship. Reviewed literature indicated that studies often focused on single, specific sets of health behaviors. An extended literature

review uncovered thematic college student health studies. The literature reviewed indicated that a study of health message perspectives was relevant because of the small number of college student health scholars conducting qualitative, exploratory research regarding student perspectives.

The third chapter of the dissertation presented data collection materials and interview transcript analysis methods. Pilot study findings were included, suggesting changes to the interview guide and parameters for the participant population. Thematic analysis was identified in this chapter as the select method of analysis to address the research questions. This chapter also identified three strategies the researcher utilized to validate dissertation findings: clarifying bias through self-reflexivity, reaching information redundancy, and writing and reviewing self-memos.

The fourth chapter of this dissertation identified three themes that emerged during the initial stage of thematic analysis: participants were grudgingly tolerant of society's health messages; participants usually disregarded campus health messages, and participants were differentially responsive to interpersonal health messages. The fourth chapter also identified two additional themes related to health message strategies that emerged during the second stage of analysis: participants were reluctantly receptive of compulsory health messages and participants were proactive and perceptive regarding health messages when they had health information need.

### **Importance of context**

The social context of UTK shaped dissertation participants' understanding of health and health messages. The physical layout of the campus and its surrounding community repeatedly appeared as both an opportunity and challenge. Participants often reported the positive benefits of exercise while navigating the hilly campus but also experienced the negative pull from fast-food restaurants that offered unhealthy eating options. Dissertation participants reported some limited knowledge of on-campus health facilities and programs (often reluctantly received through compulsory messages). Participants also reported fairly strong use of recreational facilities, which are available to some students living in dormitories.

Even though UTK students are not exposed to compulsory health classes, there was strong evidence that coursework in nutrition and other health-related topics is filtering through to students who do not take those courses. Students majoring in nutrition and other health areas have become trusted interpersonal sources for other students. Dissertation participants also referenced health brochures, flyers, newsletters and other campus-based health information. While they often initially disregarded such messages, there was evidence that they proactively accessed these campus sources (among others) when faced with a health need. The primary topics presented in those materials (healthy eating, physical health and fitness, mental health, personal care, and safety and security) were topics that participants identified as important—regardless of whether they mentioned seeing those on-campus messages.



## **Relevance of earlier literature**

Much of the literature on college student health focuses primarily on student behaviors such as alcohol use and abuse, sexual health, mental health, prescription and illicit drug use and abuse, and smoking. While some of these topics did arise in during the dissertation, participants seemed far more interested in the social and interpersonal contexts of health topics than in the structured messages presented to them on campus in an often compulsory way. However, there was evidence that, when faced with a health situation, participants would proactively seek information.

Earlier research also focused on campus-level commitments to health. While programs such as Healthy Campus 2010 are laudable, this dissertation suggests that their immediate impact may be limited. Most health messages will serve primarily as “background” to the stronger social and interpersonal messages that female undergraduates receive. But when messages were present in the environment, then when health needs arose, participants were more likely to recognize and rely on those sources.

Earlier literature did recognize the importance of social support and the creation of new social networking systems (e.g., Hudd et al., 2000). Interestingly, these students who are in the early years of their college experience seem to be balancing messages they receive from their families and messages they receive from their college associates. Sometimes “Mom” is the “go to” person because she “knows everything.” But sometimes, a sorority sister is the expert who can validate the message in a printed document.

Like earlier studies that found high prevalence of health barriers among college students (e.g., Davies et al., 2000; Von Ah, et al., 2004), dissertation participants reported several barriers to health beyond the relative cost of junk food and healthy food. But their comments also revealed that social interactions can create both barriers and supports (see table 9). The need to “look good” led to eating behaviors that controlled weight gain even though the primary goal was to look good rather than to be healthy. Friends who exercise and eat healthy diets were turned to as “experts” in some instances. Unfortunately, friends also engaged in unhealthy “fat talk” (see, e.g., Ousley, Cordero, & White, 2008).

The literature also provided multiple examples of unhealthy student behaviors (e.g., Lowry et al.; 2000, Luquis et al.; 2003, Newton et al., 200; Rozmus et al., 2005). While some participants admitted to concerns that might result from behaviors such as sexual activity, their conversations about health and health messages did not focus primarily on negative behaviors. This reinforces the idea introduced at the start of this dissertation that there may be a disconnect between campus health messages and college student health message perspectives.

The literature on health information seeking identified some of the sources used by participants. In a survey study examining students’ use of the Internet for seeking health information, Escoffery, Miner, Adame, Butler, McCormick, and Mendell (2005) reported that “criteria for assessing Web sites with health information important to college students are related to the accuracy, credibility, currency, clarity, and ease of understanding the health content” (p. 185). Study results suggested that electronic

media can be a resource to clarify sometimes-complex health issues. However, dissertation participants indicated that social and interpersonal sources were highly important to them while “official” campus sources were likely to be ignored until there was a pressing need for information.

### **Improving communication about health**

Dissertation findings revealed information that can be used to improve health communications overall. Participants were grudgingly tolerant of society’s health messages because of the unrelenting and unrealistic focus of such messages on women’s weight. Although they acknowledged the negative impact of such messages, some participants admitted to participating in weight criticism. This behavior, thus, made them part of the problem. Despite expressing dislike for society’s health messages, participants’ tolerance was evident in the role they sometimes had in enabling and sustaining such messages. College student health scholars have reported similar findings. Ousley, Cordero, and White (2008) conducted survey research to learn about how college students communicate regarding food and body weight, shape, and appearance, a phenomenon the scholars call “fat talk”. Study results indicated that the frequency of fat talk was positively related to eating pathology and body dissatisfaction in students with and without eating disorders. Sadly, study results also revealed that the most frequently reported topic of fat talk was other people’s appearance. This information can be used to improve health communications overall by involving those influenced by such messages—female undergraduates themselves—in developing and disseminating health communications.

Dissertation participants' identification of social organizations and fitness facilities as two places where they receive health messages could be used to improve health communications overall by providing accurate messages to organizations where female undergraduates hold memberships. These health messages could be disseminated at fitness facilities through orientation sessions with staff, and during client meetings and exercise classes via personal trainers and exercise instructors. Social organizations can embed such messages in talking points during mandatory meetings and events. Participants said they were "reluctantly receptive" of compulsory health messages. Their receptivity—albeit reluctant—revealed an opportunity to deliver health messages through this venue. Incorporating appropriate weight-related health messages into communications between experts in health and medical fields could go a long way toward improving health communications overall.

Dissertation participants identified peers, family members, and health and medical personnel as health information sources. Providing such sources with appropriate health messages about weight could also help to improve health communications overall. Peer education has been applied in schools, colleges and youth centers to reach young people according to Turner and Shepherd (1999). The student health scholars investigated the relevance of five theories commonly applied to health-related peer education. "There is evidence to show that credible peers can influence health behaviour[*sic*] change and can reinforce such change afterwards" (p. 240).

The finding that participants were proactive and perceptive regarding health messages when they have health information needs can help facilitate health-focused

media coverage through health message strategies. Participants identified television monitors at the T-Recs, Web sites for T-Recs and Student Health Service, and Internet search engine-generated sources among the media they use when seeking out health or treatment information. Health-focused coverage can take place in venues where participants seek health or treatment information. Electronic media could post related stories online where they are most likely to be picked up through search engine keyword searches. Hanauer, Dibble, Fortin, and Col (2004) conducted survey research to measure how much community college students use the Internet to retrieve health information. The scholars concluded that the Internet was a “potentially useful vehicle for delivering health interventions to hard-to-reach populations” (p. 200). Similarly, nearly half the participants in a survey study examining college students’ use of the Internet for seeking health information reported they wanted to find health information on the Internet (Escoffery, Miner, Adame, Butler, McCormick, & Mendell, 2005).

Dissertation findings revealed one sometimes complex issue public relations practitioners can demystify: the cervical cancer vaccine. Several participants cited interest in and awareness of sexual health matters. Two participants in particular stated their intentions to get the vaccine after a mutual friends’ cervical cancer diagnosis. Experts remain divided on whether the vaccination should be mandatory or not. Public relations practitioners could facilitate clear, consistent messages through the internet and other mass mediated sources about the cervical cancer vaccine and other sexual health matters. The importance that women in this study placed on interpersonal sources also emphasized the need to provide women who receive the vaccine with

printed material and/or references for online sources that they can provide to other women.

Andsager and Powers (2001) conducted research to explore women's magazine coverage of breast implants and breast cancer. By utilizing a variety of sources, facts from all sides of the issue, and information promoting self-efficacy in their research, the scholars applied a women-centered sense-making approach to the study. "[Using] a sense-making approach to cover women's health issues requires the media to go beyond reporting new medical procedures and economic considerations to contextualizing information in a way that provides women with enough information to make informed decisions" (p. 181). The need for contextualization was also expressed by dissertation participants. They reported paying attention to messages that are brought to them by interpersonal sources who literally meet them where they live.

Public relations practitioners may also utilize dissertation findings to create messages around appropriate weight guidelines. The federal government adopted the Body Mass Index (BMI) as a guideline to help doctors determine when to address their patients' overweight or obese status, but in 1998, the National Institutes of Health lowered the overweight score for men and women. "The impact of the BMI revision was to classify an additional 30 million persons as overweight. This movement...from just below to just above the formal definition of overweight and obesity, is what public health officials are referring to when they point out that rates of obesity have exploded over the course of the last generation" (Campost, Saguy, Ernsberger, Oliver, & Gaesser, 2006, p. 55). Dissertation participants' frequent mention of body image issues suggests

potential opportunity for public relations practitioners to foster accurate information in a variety of sources about weight issues taking care that body image concerns are not exacerbated by the new BMI guidelines.

Consumers could access health information better by modeling dissertation participants' proactive and perceptive approach for accessing health information. Participants cited primary, secondary, and confirmatory sources of information when they have health information needs, including peers, the Internet, and medical personnel. According to Prouty, Protinsky, and Canady (2002) universities would best reach students by incorporating peer educators, who would have better access and authority with their young peers in sororities, dormitories, gyms, social groups, classrooms, and other places that provide opportunities for women to learn...from people their own age" (p. 360). While those student health scholars were studying disordered eating among college women, the current study supports the notion that women talk to each other about eating and weight-related issues. The key challenge to fostering peer communication is to make sure such messages stay positive.

Health information consumers will always benefit from receiving a second opinion about any health or medical issue they face, just as participants sought out health information from multiple sources. This approach has been well-documented. College student-participants in survey research examining their health-information seeking behaviors identified physicians, friends, parents and the media as health information sources (Albano, Ramsey, Barbour, Rintamaki, Dockum, & Brashers, 2003). "Despite the high awareness for print media and electronic media, students reported

being more likely to seek information from family and health care worker (e.g., physician, nurse) and health organizations (e.g., health center)” (p. 17). Dissertation participants also ascribed expertise to certain health information resources. This was a particularly interesting finding given the number of messages—health and otherwise—female undergraduates encounter every day. It would seem to require considerable effort to alternately ignore and acknowledge health messages, but the technologically oriented environment in which participants live (see, e.g., McMillan & Morrison, 2006) has necessitated selective attentiveness. Participants identified several personal and professional contacts as health information sources, suggesting that their perspective about a particular source took precedence over any given source’s academic or professional *expertise*. Source credibility has also been reported in public relations and communications scholarship. According to Albano, Ramsey, Barbour, Rintamaki, Dockum, and Brashers (2003), source credibility was important for study participants, and participants were more likely to seek “credible” health information from family members and health care workers. The student health scholars’ survey research examined the health-information seeking behaviors of college students. Similarly, source credibility was one of three important factors influencing participants’ involvement in health messages in a focus group and in-depth interview study exploring what influences women’s level of involvement with health messages (Aldoory, 2001).

Dissertation participants’ willingness to pursue alternate information sources and determine source preference illustrated another strategic approach consumers could use to access health information. Participants used the Internet for proactive, reactive,



and confirmatory health information, and scholarship corroborates their usage of the Internet as a source. Macias, Lewis, and Shankar (2004) reported that participants used generic health Web sites as well as specialized sites to research health topics. Similarly, McMillan, Avery, and Macias (2008) reported a proactive approach to healthcare among study participants as well as empowerment related to the value they ascribed to the Internet as a source. Although participants of that study were senior citizens, their use of the Internet for health information was similar to dissertation participants' usage patterns.

It is important to note, however, that some scholars have reported problems involved with online health information seeking. Escoffery, Miner, Adame, Butler, McCormick, and Mendell (2005) reported that online users were not always able to find the information they needed. Similarly, Brashers, Goldsmith, and Hsieh (2002) reported that the Internet "can be underutilized or utilized in ineffective ways" (p. 265). Such was not the case for dissertation participants, however. To reiterate, the technologically oriented environment in which participants reside likely increased their familiarity with online information searches, thus enhancing appropriate use.

### **Improving campus health communication**

Dissertation findings revealed several participant insights that can be utilized to enhance current campus-based health promotions. The fact that participants usually disregarded campus health messages they encounter indicates that the current approach toward campus-based health promotions is ineffective for its intended audience. Aldoory (2001) reported that campus-specific factors influenced participants'

approach to health messages in a focus group and in-depth interview study exploring what influences women's level of involvement with health messages. "College life was described as a barrier to involvement [with certain health issues]" (p. 173). Similarly, many dissertation participants expressed indifference and apathy regarding health messages in the campus setting, which they alternately attributed to lack of personal interest, lack of perceived personal relevance, lack of need, and, in one case, lack of source credibility.

Like inactive publics, dissertation participants sometimes did not engage in deliberate information seeking efforts. Thus, dissertation findings extended situational theory, in particular, the inactive publics model Hallahan (2000) proposed. He defined inactive publics as "groups that have only minimal motivation, ability, or opportunity to know about, talk about, or participate in efforts to influence the policies or practices of organizations" (p. 499). In this dissertation, UTK was the organization participating in efforts to influence college student health. Dissertation participants' active seeking of information in relation to personal health concerns initially seems incompatible with the model, but it is not. According to Hallahan, inactive publics are "selective about the issues in which they become involved or consider important" (p. 503). "In the case of inactive publics, it becomes incumbent on organizations to seek out these groups...to build positive relationships" (p. 511).

Current campus-based health promotions should consider that female undergraduates are reluctantly responsive to compulsory health messages. Utilizing this finding could involve providing class credit to health and medical students to increase

student attendance at health promotion programs; providing personal invitations for health and medical students to distribute to encourage student attendance at health promotion programs, or simply asking health and medical students to mention health promotion programs to their peers and colleagues. In their review of the ways mass communication is used to promote beneficial changes in behavior among members of populations, Abroms and Maibach (2008) identified another opportunity to utilize interpersonal messaging to disseminate health messages. According to the scholars, one effective strategy has been using the media “to encourage members of social networks who are exposed to a campaign to discuss the topic of the campaign with others in their social network and thereby pass on or reinforce the prescribed health information or practice” (p. 224).

Campus-based health promotions can also be enhanced by integrating health messages within required course curriculum. Inclusion in course curriculum can be facilitated via in-class assignments, homework assignments, or off-site activities. An option for off-site activities could be providing class credit to students who attend health promotion programs. In a survey research study comparing two different academic reward structures to determine which would be more effective for students, DeVahl, King, and Williamson (2005) reported that students with the greater reward showed more compliance in a voluntary exercise program than those who were offered less reward. The student health scholars also found that students with the greater reward had better reductions in their percentage of body fat. In a focus group and in-depth interview study exploring what influences women’s level of involvement with

health messages, Aldoory (2001) reported that women were more attentive when messages were “more convenient to daily rituals and practices” (p. 182). Dissertation findings also indicated that student health handouts could enhance campus-based health promotions. While female undergraduates may not be involved initially, a handout such as a bookmark could be used later to retrieve information, as could a syllabus that includes key health messages.

Because participants are proactive and perceptive regarding health messages when they have health information needs, campus health promotions could be enhanced through contextual proximity to students’ health information needs. Campus health communicators could situate promotions in venues where participants seek health or treatment information, such as at the Student Counseling Center, Student Health Service, and the T-Recs. Aldoory (2001) reported in her focus group and in-depth interview study exploring what influences women’s level of involvement with health messages that, “women seem to pay more attention” when such messages “directly address a health problem already experienced personally” (p. 182). Health promotions could also be extended to the Web sites for each facility. This approach is common in contemporary mass media campaigns according to Abroms and Maibach (2008). In their review of the ways mass communication is used to promote beneficial changes in behavior among members of populations, the student health scholars reported that “more sophisticated [mass media health campaign] Web sites may include features such as interactive games or ‘advergames’, downloads, cell phone applications, and expert systems” (p. 223).

Dissertation findings may help enhance campus-based health promotions through targeting promotions for cold, flu or allergy seasons—when participants would be more apt to be seeking health or treatment information. Participants expressed the importance of health messages when they had a personal concern and appeared to be highly involved in any health concerns they deemed personally relevant. When they had a personal health concern, dissertation participants sought whatever personal, professional or online resources were required to resolve their concern. Student health scholars report that this proactive approach to health information seeking leads to empowered, informed consumers (Gieck & Olsen; 2007; International Food Information Council, 2005).

Participants' approach to information seeking may enhance campus health promotions because their approach supported some tenets of diffusion of information theory, which analyzes news flow from media dissemination to the time when nearly everyone in the population learns about an event (Quarles, Jeffres, Sanchez-Illundain, & Neuwirth, 1983). Although diffusion of information pertains to news dissemination, the new information participants uncovered was news to them. Participants' follow-up doctors' appointments to confirm Internet information was also consistent with diffusion of information.

Dissertation findings challenged the traditional medical model of college student health that "privileges traditional direct clinical services (i.e., primary medical and mental health care) over prevention programs, locates 'health' in specific often separate facilities, and emphasizes one-to-one health education interventions over coordinated,

population-based health promotions” (Silverman, Underhile, & Keeling, 2008, p. 5). Although UTK does provide medical and mental health care through separate facilities, as depicted in the scope and delimitations section of this dissertation, participants defined health messages inclusively. Dissertation participants identified the T-Recs fitness facility, health promotions (albeit limited), campus-based and external Internet sites, parents, and peers among their information sources for health.

Student health scholars have indicated that “because college students continue to talk about health-related matters to their parents” (Bylund, Imes, & Baxter, 2005, p. 32), parents have an opportunity to potentially support positive health behaviors and influence against risky health behaviors in their children. The student health scholars conducted two simultaneous surveys with college students and their parents to investigate how parents’ perceptions of their college student children’s health risk behaviors compares with the students’ own reports. Bylund, Imes and Baxter (2005) acknowledged that parents were overoptimistic about their college students’ health and underestimated their health risk behaviors, but concluded, “college health educators, clinicians, and public health officials should consider examining the parental-college student relationship as an opportunity for improving health risk behaviors” (p. 36). Similarly, Nelson (2008) reported that families continue to be an important influence in college students’ lives. “Intervention strategies targeting parents, possibly facilitating communication between parents and children around specific health-related issues may be an effective means of promoting health lifestyles among youth” (p. 27).

The disparate views of students and the UTK structure of health can inform—and possibly improve—the design of college health clinics such as Student Health Service. Participant feedback suggested an opportunity to promote wellness while treating illness; after all, the display of college student health handouts at the Counseling Center, Student Health Service and T-Recs indicate this process is already underway. Further evidence that the integration of student health has begun at UTK is a statement by Brummette (J. Brummette, personal communication, February 1, 2008) that employees are beginning to integrate their efforts on behalf of student health.

Interestingly, all of the set of behaviors prevalent in student health studies (i.e., alcohol use and abuse, sexual health, mental health, prescription and illicit drug use and abuse, and smoking) emerged during the dissertation, either in interviews or student health handouts. However, one topic was notable due to its infrequent mention. McCracken (1998) stated the importance of researcher attention to subjects that participants do not mention, thus, it is identified here. Only one dissertation participant identified smoking as a student health issue, despite numerous studies reporting an increase in smoking among college students (e.g., Johnston, O'Malley & Bachman, 1999). Additionally, smoking was the topic of only health handout, a brochure for a smoking cessation medication. It is unlikely that UTK campus administrators are unaware of studies regarding student-smoking rates. Lack of inclusion in student health documents suggests that other issues college students face (e.g., alcohol use and abuse, sexual health, mental health, and prescription and illicit drug use and abuse) have greater priority for UTK campus administrators. Lack of mention in dissertation

interviews may have been due to two factors. First, participants who were smokers may have been uncomfortable disclosing this fact during their interviews. The researcher detected the scent of tobacco smoke on one participant, for example, but the student did not mention smoking during her interview. Second, dissertation participants may have been students for whom health-promoting behavior is essential; thus, smoking would not have been a top-of-mind issue for them.

### **Limitations**

Population- and context- related limitations occurred during this dissertation. Details about the specific limitations are identified next.

One population-related limitation might have occurred based on the value ascribed to the dissertation incentive. Participants received either a bottle of water or a \$5 coffee chain gift card, which may not have motivated participation. Instead, dissertation participants could have been those for whom health has personal relevance; if so, findings could have been biased toward health-conscious perspectives.

Another population-related limitation of this dissertation was the lack of ethnic diversity among participants due to the homogeneous ethnic makeup of the student population at UTK. Of the 20,435 undergraduate students enrolled in 2006, more than 17,000 were Caucasian (UTK Fact book, 2006-2007). However, the inclusion of African-Americans in this dissertation, which comprised the largest ethnic minority at UTK, may have offset this limitation.

A context-related limitation of this dissertation was the single-campus setting, which was chosen based on accessibility to the researcher and the natural setting in



which participants encountered the phenomenon of study. Constructivist qualitative researchers hold that “true knowledge is gained through prolonged immersion and extensive dialogue practiced in actual social settings” (Lindlof & Taylor, 2002, p. 11). In this dissertation, the natural environment was the campus setting.

The context-bound nature of the dissertation suggested that findings could not be generalized (Côté & Turgeon, 2005; Misra & McKean, 2000). Generalizeability [*sic*] is not a goal of qualitative research; however, (Belgrave, Zablotzky, & Guadagno, 2002) so the researcher addressed transferability instead. Transferability refers to transferring “the specific knowledge gained from the research findings of one study to other settings” (Daymon & Holloway, 2002, p. 93). The following recommendations indicate how dissertation findings could be transferred to public relations and college health practice and scholarship.

### **Recommendations**

Engaging college student participation in student health scholarship and practice is essential for ensuring that future programs are tailored to their unique perspectives. “Making students full partners in addressing health issues improves the probability that interventions will match their needs and reduces the chance of developing ineffective or demeaning programs and messages” (Keeling, 2001, p. 11).

### **Implications for public relations, college student health practice**

Dissertation findings indicating that participants ignore many health messages unless they have health information needs could offer a program opportunity for public relations practitioners. Public relations practitioners can develop programs in

partnership with health clinics in close proximity to college campuses since such clinics interact with students when they experience personal health crises. An off-campus option for UTK students is the Hope Resource Center, a women's health clinic that provides free women's health services. Additionally, several dissertation participants identified sexual health as a primary health concern for female undergraduates.

Public relations practitioners could also address college students' ambivalence regarding health messages by developing message strategies to enhance campus coverage of issues that matter to students. Specifically, public relations practitioners could create and consult with "college student councils" before developing health messages.

Dissertation findings may inform college student health practitioners' efforts to promote health. Many participants indicated the importance of source credibility among health message sources; therefore, student health practitioners could train the individuals college students already trust as peer educators to facilitate healthful behaviors. Informant interviews and participant responses revealed an immediate opportunity for UTK. Some dissertation participants were unaware of the location and information about the Student Health Service and the Counseling Center. These findings suggest a critical need to enhance and promote the presence of both facilities at UTK.

### **Recommendations for public relations, college student health research**

College student health scholars could extend dissertation findings by investigating how students decide which sources to trust. Several student health scholars have explored elements of students' attention to health information messages

(e.g., Conklin, Cranage, & Lambert, 2005; Levi, Chan, & Pence, 2006; Morrone & Rathbun, 2005), but dissertation findings suggest additional value in ascertaining why college students respond to some health messages and not others. The exploratory nature of the dissertation phenomenon also indicates the potential for other qualitative research approaches.

Public relations or college student health scholars could extend scholarship by exploring female undergraduates' health message perspectives through case study, ethnographic research, focus group, participant observation, or textual analysis. The review of student health handouts completed for this dissertation provides a starting point for conducting textual analysis. Scholars could also benefit from replicating this dissertation with a different population, such as students with a broader understanding of the phenomenon of study, for example, communications, health, or nutrition majors. The multidisciplinary nature of health communication calls for inclusion of multiple viewpoints—and student standpoints. “Engaging the complexities of health and social action can broaden health communication theorizing. The field of communication has much to contribute to interdisciplinary work in the area” (Zoller, 2005, p. 358).

## **Conclusion**

This dissertation revealed that female undergraduates are grudgingly tolerant of society's health messages; they usually disregard campus health messages, and they are differentially responsive to interpersonal health messages. This dissertation also indicated that female undergraduates are reluctantly receptive of compulsory health

messages, and are proactive and perceptive regarding health messages when they have health information needs.

Dissertation findings also indicated that female undergraduates ignore many of the health messages they encounter on campus. They may have distrusted health messages in the campus context because so many unhealthy characteristics of college—hectic class schedules and unhealthy food selection—were an ongoing struggle for them. When they had a health concern, female undergraduates preferred health messages from credible sources, and they used these criteria whenever they were seeking health information.

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## LIST OF REFERENCES

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## **APPENDIX**

## **Appendix A: Interview Guide**

1. Tell me what it's like to be a student here at UT.
2. What do you do in your free time?
3. What (else) do you do to stay healthy?
4. How do you define health?
5. What do you do/who do you turn to when you have a health question?
6. How easy/how difficult is to find out what you need to know?
7. What specific things here on campus make it easier or more difficult for you to stay healthy?
8. Tell me about a time when you and your friends discussed health.
9. What do you think are the main health issues or concerns for female undergrads?
10. What health issues or concerns do you think UT should address?
11. Have you seen any kinds of health-related information on campus? If so, talk about what they were and how you responded to them.
12. What would make a health message catch your attention?
13. Anything else?

### **Demographic Questions**

- Age
- Ethnicity
- Year in school

## **Appendix B: List of Tables**

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## Appendix B: Tables

**Table 1: Health messages encountered at UTK**

| <b>QUESTION—Have you seen any kind of health-related information on campus? If so, can you tell me about it?</b> |
|------------------------------------------------------------------------------------------------------------------|
| Flyers about Student Health Services                                                                             |
| T-Recs bulletin boards: posters about intramurals; postings about outdoor program                                |
| Healthy eating brochures in cafeteria                                                                            |
| Flyers at Panhellenic building advertising community service                                                     |
| Flyers for Relay for Life                                                                                        |
| Flyers for women’s health issues                                                                                 |
| Poster in dorm about avoiding colds                                                                              |

**Table 2: Health enablers, inhibitors at UTK**

|                   |                                                                                                                                                                   |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Enablers</b>   | <b>QUESTION—What specific things on campus make it easier for you to stay healthy?</b>                                                                            |
|                   | T-Recs                                                                                                                                                            |
|                   | Layout of campus requires walking                                                                                                                                 |
|                   | Dorm-based fitness areas                                                                                                                                          |
|                   | Cafeteria: Steamed veggies; ingredients available to make sandwiches; apples and bananas                                                                          |
|                   | Friends' motivation                                                                                                                                               |
|                   | Intramurals                                                                                                                                                       |
|                   | Club sports teams                                                                                                                                                 |
|                   | Sorority membership encourages weight/appearance maintenance for social events/photo ops                                                                          |
|                   | Student Health Services Web site                                                                                                                                  |
| <b>Inhibitors</b> | <b>QUESTION—What specific things on campus make it harder for you to stay healthy?</b>                                                                            |
|                   | On-campus food options: meal plan restrictions (e.g., expensive salads); few healthy food options; lack of fruit variety; fast food restaurants; vending machines |
|                   | Off-campus food options: High sodium content in pre-packaged foods; produce expensive                                                                             |
|                   | Alcohol: It's everywhere; lots of calories in beverages; drinking causes hunger; leads to mindless eating                                                         |
|                   | Residence hall living: close quarters means germs; meal plan required                                                                                             |
|                   | Friends uninterested in working out                                                                                                                               |
|                   | Busy schedules: them, friends' schedules incompatible for workouts; stress from workload; too busy during exams to exercise                                       |
|                   | Keeping late hours: staying up late; eating late                                                                                                                  |
|                   | The "T" limits walking                                                                                                                                            |

**Table 3: Student health handout topics**

| <b>Relevant topics</b>                                                                                                   | <b>Moderately relevant topics</b>                                        | <b>Non-relevant topics</b> |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------|
| Physical health (meningococcal meningitis exercise, nutritious eating, common cold antibiotics)                          | Diabetes, Breast/cervical cancer detection                               | Heart conditions           |
| Student services (academic support, UTK Meal plans, Student health service, Counseling center, Student health insurance) | Short-term medical insurance, Nontraditional students, City of Knoxville |                            |
| Mental health (depression, anxiety, stress, suicide prevention)                                                          |                                                                          |                            |
| Personal care (cosmetics, hair care, sunscreen)                                                                          | tanning                                                                  |                            |
| Sexual health/safety (sexual assault prevention, HIV, self-defense)                                                      |                                                                          |                            |

**Table 4: Health issues, concerns UTK should address**

| <b>QUESTION—What health issues or concerns do you think UTK should address?</b> |
|---------------------------------------------------------------------------------|
| Body image                                                                      |
| Cancer treatment/prevention                                                     |
| Depression                                                                      |
| Mental health                                                                   |
| Physical fitness                                                                |
| Sexual health (STDs, HIV-AIDS)                                                  |
| Smoking cessation/anti-smoking                                                  |
| Stress                                                                          |

**Table 5: Multidisciplinary health communications: Select journals cited**

|                                           |                                                                          |
|-------------------------------------------|--------------------------------------------------------------------------|
| Addictive Behaviors                       | Journal Of Communication                                                 |
| Adolescence                               | Journal of Community Health Nursing                                      |
| American Behavioral Scientist             | Journal of Educational Psychology                                        |
| American Journal of Health Behavior       | Journal of Environmental Health                                          |
| American Journal of Health Studies        | Journal of Genetic Counseling                                            |
| American Journal of Preventive Medicine   | Journal of Health Behavior                                               |
| Applied Developmental Science             | Journal of Health Communication                                          |
| Archives of Sexual Behaviors              | Journal of Holistic Nursing                                              |
| BMC [BioMed Central] Medical Education    | Journal of Humanistic Counseling, Education and Development              |
| British Medical Journal                   | Journal of Nursing Scholarship                                           |
| College Student Journal                   | Journal of Pediatric Nursing                                             |
| Communication Education                   | Journal of Public Relations Research                                     |
| Communication Quarterly                   | Journal of Science and Medicine in Sport                                 |
| Communication Studies                     | Journal of Sex Research                                                  |
| Communication Theory                      | Journal of Sport & Social Issues                                         |
| Eating Disorders                          | Journal of the Academy of Nurse Practitioners                            |
| Health Communication                      | Journal of the American College of Nutrition                             |
| Health Education                          | Journal of the American Dietetic Association                             |
| Health Education & Behavior               | Journal of the American Medical Association                              |
| Health Expectations                       | Mass Communication & Society                                             |
| Health Promotion International            | NASPA [National Association of Student Personnel Administrators] Journal |
| Human Communication Research              | Obesity                                                                  |
| JEP[Journal of Exercise Physiology]online | Professional Psychology: Research and Practice                           |
| Journal of Advanced Nursing               | Public Health Nursing                                                    |
| Journal of American College Health        | Public Relations Review                                                  |
| Journal of Athletic Training              | Qualitative Health Research                                              |
| Journal of Broadcasting                   | Qualitative Research Reports in Communication                            |
| Journal of College Admission              | Sex Roles                                                                |
| Journal of College Student Development    | Social Science & Medicine                                                |



**Table 6: Participant profiles**

| <b>Age range</b>                       | <b>Ethnic makeup</b> | <b>Year in school</b>               |
|----------------------------------------|----------------------|-------------------------------------|
| 18 yr-olds (6)                         | Caucasian—13         | Freshman—8                          |
| 19 yr-olds (7)                         | African American—3   | Sophomore (entering)—5 <sup>§</sup> |
| 20 yr-olds (3)                         |                      | Sophomore (exiting)—3               |
| <b>Total number of participants—16</b> |                      |                                     |

---

<sup>§</sup> Some dissertation interviews took place during summer; thus, five participants who self-identified as sophomores were entering their sophomore year the following fall, three participants were entering their junior year.

**Table 7: Relating research questions to interview questions**

| <b>Research questions</b>                                                     | <b>Related interview question**</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RQ1) What health messages do female undergraduates encounter?                 | 4. How do you define health?<br>8. Tell me about a time when you and your friends discussed health.<br>11a. Have you seen any kinds of health-related information on campus?                                                                                                                                                                                                                                                                                                       |
| RQ2) What are the sources of health messages female undergraduates encounter? | 5. What do you do/who do you turn to when you have a health question?<br>6. How easy/how difficult is it to find out what you need to know?<br>7. What specific things here on campus make it easier or more difficult to find out what you need to know?<br>9, 11b. If so, talk about what they were and how you responded to them?<br>8. Tell me about a time when you and your friends discussed health.<br>10. What health issues or concerns do you think UTK should address? |
| RQ3) How do female undergraduates respond to health messages?                 | 6. How easy/how difficult is it to find out what you need to know?<br>12. What would make a health message catch your attention                                                                                                                                                                                                                                                                                                                                                    |
| Biographical questions <sup>††</sup>                                          | 1. Tell me what it's like to be a student here at UTK?<br>2. What do you do in your free time?<br>3. What (else) do you do to stay healthy?                                                                                                                                                                                                                                                                                                                                        |

\*\* Repeated interview questions indicated relation to more than one research question.

†† According to McCracken (1988), opening biographical questions enable the researcher to discover details about participants' lives. "Collecting these details in this way helps both to cue the interviewer to the biographical realities that will inform the respondent's subsequent testimony and to make sure that all of this material is readily at hand during analysis" (p. 34)

**Table 8: Attention-getting health messages**

| <b>QUESTION—What would make a health message capture your attention?</b>           |
|------------------------------------------------------------------------------------|
| <i>Daily Beacon</i> [campus newspaper] article                                     |
| Entertaining outdoor venue (music, food & water giveaways)                         |
| Exercise demos positioned as stress relievers                                      |
| Expand freshmen orientation mention of student health & connect to student success |
| Free food                                                                          |
| Free food offer/provide nutritious alternatives                                    |
| Posting on home page of UTK Web site                                               |
| Nutritionist to answer student questions                                           |
| Peer promos (for T-Recs, Student Health Services, Student Success Center)          |
| Promotions in non-health venues on campus                                          |

**Table 9: Experiences that enable, inhibit health simultaneously**

| <b>Experience</b>           | <b>Enabling aspects</b>                  | <b>Inhibiting aspects</b>                              |
|-----------------------------|------------------------------------------|--------------------------------------------------------|
| Coursework responsibilities | Intellectual value                       | Leads to sleep deprivation, stress, poor eating habits |
| T-Recs                      | Proximity as campus-based facility       | Distance from some dorms                               |
| Cafeteria                   | Steamed vegetables                       | Lack of fruit/variety                                  |
| The Strip                   | Distance from some dorms means long walk | Unhealthy food options                                 |

## Appendix C: Healthy Handout

### Staying Healthy

With more than 26,000 students and 6,000 faculty and staff members, being part of the campus community means encountering many individuals every day. Taking a few simple steps—especially during colds and flu season—can help prevent catching an illness and possibly passing it on to others.

Seasonal flu is a common respiratory infection spread by sneezing, coughing, and human contact. Most people have a natural immunity to the virus, as well as access to the vaccine. But, every year, 5 to 20 percent of the U.S. population gets sick with flu or a related illness, according to the Centers for Disease Control. In addition, the risk of a larger flu outbreak—as a result of new virus strains—has grown in recent years.

Now more than ever, it is important to follow these easy steps:

1. **Get a flu shot:** The flu vaccine will prevent infection in 70 to 90 percent of healthy persons. UT offers flu shots at the Student Health Service. Vaccines also may be available through your primary care physician or the local health department. For updates about Knox County's resources, visit [www.knoxcounty.org/health/](http://www.knoxcounty.org/health/).
2. **Avoid close contact :** Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.
3. **Cover your mouth and nose:** Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick.
4. **Clean your hands:** Washing your hands often will help protect you from germs.
5. **Avoid touching your eyes, nose, or mouth:** Germs often are spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.
6. **Stay home when you are sick:** If possible, stay home from work or school when you are sick. You will help prevent others from catching your illness. Be sure to get plenty of sleep, drink lots of liquids, and avoid using alcohol or tobacco.
7. **Seek medical attention:** If you develop flu symptoms, contact your primary care physician or the Student Health Service. Some medications may be available to relieve your symptoms.

**The flu is identifiable by several common symptoms:**

- Fever (usually high)
- Headache
- Extreme tiredness
- Dry cough
- Sore throat
- Runny or stuffy nose
- Muscle aches
- Stomach symptoms, such as nausea, vomiting, and diarrhea, also can occur but are more common in children than adults
- A fever and “achy feeling” are early indicators of the flu. Complications of the flu can include bacterial pneumonia, dehydration, and worsening of chronic medical conditions.

For more information on seasonal flu, visit <[www.cdc.gov/flu/keyfacts.htm](http://www.cdc.gov/flu/keyfacts.htm)>

**Health Care and Medical Emergencies**

In the event of a medical emergency involving any student, faculty, or staff member, immediately call 911 or 974-3111, or pick up a Blue Light Phone to alert first-response medical care.

Non-emergency resources for students include the Student Health Service, Counseling Center, and UT Medical Center:

**Student Health Service**

1818 Andy Holt Ave.

General information: 974-3135, Appointment desk: 974-3648

Hours: 8–11:45 a.m. and 1–4:30 p.m., weekdays

**Counseling Center**

900 Volunteer Blvd.

974-2196

Hours: 8 a.m.–5 p.m., weekdays

Walk-ins: 10–11:30 a.m. and 1–3:30 p.m., weekdays

**UT Medical Center—Emergency Center**

1924 Alcoa Hwy.

544-9401

Hours: 24 hours, seven days a week

Students can receive medical treatment at UT Medical Center after 5 p.m. weekdays and on weekends. A valid student ID is required.

Source: <http://safety.utk.edu/health/stayhealthy.shtml> & <http://safety.utk.edu/health/>

## **Appendix D: Sample approval letter**

April 9, 2008

Cheryl Ann Lambert  
University of Tennessee  
School of Advertising and Public Relations  
476 Communications Bldg. Knoxville, TN 37996-0333

Dear Cheryl Ann:

This letter comes in response to the research study you are conducting about how female college freshmen sorority members seek and perceive health information. I will provide you with access to the names and email addresses of freshmen residents of Humes and South Carrick Hall who are sorority members, age 18-and-older.

It is my sincere hope that this study will meet its stated objective of facilitating enhanced campus health communications. I wish you the best on your research, and please let me know if I can be of further assistance.

Sincerely,

Megan Fields, Advisor  
University of Tennessee  
Panhellenic Building  
1531 Cumberland Avenue  
Knoxville, TN 37996-1504

## **VITA**

Cheryl Ann Lambert is a doctoral candidate in the college of communication and information at the university of Tennessee-Knoxville. Her primary area of study is public relations; her secondary area is health communications. She has two years of experience as an adjunct instructor at Robert Morris College in suburban Chicago and two-and-a-half years of experience as a graduate teaching associate at the University of Tennessee-Knoxville. She has a master's degree in journalism from Temple University and a bachelor's degree in English from Illinois State University.