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Designing a Weight Gain Prevention Trial for Young Adults: The CHOICES Study

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Abstract

Background—Young adults are at risk for weight gain. Little is known about how to design weight control programs to meet the needs of young adults and few theory-based interventions have been evaluated in a randomized control trial. The Choosing Healthy Options in College Environments and Settings (CHOICES) study was funded to create a technology-based program for 2-year community college students to help prevent unhealthy weight gain. The purpose of this paper is to: 1) provide a brief background on weight-related interventions in young adults; 2) describe the study design for the CHOICES study, the conceptual model guiding the research and the CHOICES intervention; and 3) discuss implications of this research for health educators.

Translation to Health Education Practice—Our experiences from the CHOICES study will be useful in suggesting other theory-based models and intervention strategies that might be helpful in programs attempting to prevent unhealthy weight gain in young adults. In addition, this paper discusses important considerations for working with 2-year colleges on this type of health promotion work.

Keywords

Weight gain prevention; young adults; Conceptual model; intervention strategies

Introduction

Obesity has reached epidemic proportions in American adults and youth. Over two-thirds of adults and one-third of youth are overweight or obese¹⁻³. Being overweight or obese is a comorbidity for a multitude of chronic diseases including cardiovascular disease, cancer and

diabetes⁴⁻⁷. Obesity accounts for nearly 10 percent of all annual medical spending⁸ and its prevention has become a national priority.

Young adults are a particularly high-risk group for unhealthy weight gain⁹. The National Health and Nutrition Examination Survey (NHANES) data indicate that 67.1% of 20-39 year old men and 55.8% of 20-39 year old women were overweight or obese in 2010-2011². Findings from epidemiological cohort studies suggest that young adults in their early-to-mid twenties may be gaining weight at higher rates than adults in their thirties^{10,11}. Research suggests that approximately 5.5 million people are obese by the time they reach the third decade of life¹².

Nelson et al (2007)¹³ conducted one of the first studies examining the prevalence of overweight and obesity in college students. Using a nationally representative sample they found that between 1993 and 1999, the combined prevalence of overweight and obesity rose from 26.7% to 35.2% in the college population. Other research found overweight/obesity prevalence estimates ranging from 8% to 27% of the student population¹⁴⁻¹⁶.

We know much less about the prevalence of obesity in students attending 2-year community and technical colleges. In the past four decades, 2-year community or technical college enrollment has increased for those in the lowest socioeconomic status (SES) groups¹⁷. As compared to students attending four-year colleges, two-year college students are more likely to be married or have a domestic partner, be older, have dependent children, work for pay, have more credit card debt, and are less likely to have health insurance. Laska et al examined data from a survey of students from 14 Minnesota colleges and universities. The data showed that 2-year college students had a significantly higher prevalence of overweight/obesity, lower levels of physical activity, more television viewing, and a higher intake of soda and fast food compared to those attending 4-year colleges/universities¹⁸.

Due to the need for new approaches to help young adults reach or maintain a healthy weight, the National Heart Lung and Blood Institute (NHLBI) of the National Institutes of Health (NIH) released a Request for Applications (RFA) titled "Targeted approaches to weight control in young adults." The RFA specified the use of a U01 cooperative agreement mechanism with the intent of conducting two-phase clinical research studies to "...develop, refine, and test innovative behavioral and/or environmental approaches for weight control in young adults at high risk for weight gain." (RFA-HL-08-007). This RFA defined young adults as being between 18-35 years of age. Trials were encouraged to use emerging technology as part of the intervention to engage young adults in weight control studies. This RFA resulted in the creation of the EARLY trials, a consortium of seven randomized control trials testing the effectiveness of unique, technology-based interventions to reduce the risk of obesity in young adults¹⁹.

Purpose

As part of this RFA, the Choosing Healthy Options in College Environments and Settings (CHOICES) study was funded to create a technology-based program to help prevent unhealthy weight gain in 2-year community college students. The purpose of this paper is to 1) provide a brief background on weight-related interventions in young adults; 2) describe

the study design for the CHOICES study, the conceptual model guiding the research and the CHOICES intervention; and 3) discuss implications of this research for health educators.

Background on weight-related interventions in young adults

There is little research on interventions to prevent weight gain and/or initiate weight loss in young adults¹⁸. However, as shown in a representative sample of U.S. undergraduate students through the CDC's National College Health Risk Behavior Survey, 46% of 18-24 year olds reported that they were trying to lose weight (59% of females and 26% of males). Twenty-eight percent were dieting to lose weight or to keep from gaining weight (41% of females and 14% of males) and 53% of the total sample (64% of females and 42 % of males) reported exercising to lose or keep from gaining weight. Only 54% of females and 41% of males reported using both activity and diet to lose weight²⁰. Liebman et al²¹ also reported that dietary fat avoidance was a key dieting strategy for college students.

Hivert et al²² evaluated the effectiveness of an educational/behavioral intervention delivered using small group seminars delivered to medical students using a randomized trial. At the end of the 2-year intervention, there was a statistically significant difference in weight gain between the two groups with those exposed to the intervention gaining less weight. Generalizability was limited due to a small sample size (n=115) from students in a school of medicine. Donnelly and colleagues²³ evaluated a 16-month, randomized controlled exercise intervention to positively affect weight status in overweight men and women recruited from two Mid-western universities and the surrounding communities. Seventy-four men and women completed the supervised exercise program (56% retention); diet was not restricted in any way. The intervention was successful in preventing weight gain in women and achieving weight loss in men as compared to the control group. A small primary prevention intervention study (n= 40) was conducted examining the effectiveness of a one-semester college nutrition course that stressed human physiology, energy metabolism, and genetics²⁴ to prevent weight gain in female college students. The intervention had mixed results with regard to knowledge and dietary behavior change. The intervention was most effective for achieving weight change in students who were heavier at baseline; one year after the nutrition course, heavier students in the intervention group had maintained their baseline weights while heavier students in the control condition had gained weight. Many of these studies have employed only individual-level intervention methods for delivery and have not used a broader social ecological approach.

Weight loss trials have yielded similarly promising findings, but have been limited by recruitment challenges, small sample sizes and interventions of limited duration. Research analyzing data from several large NIH weight loss trials among adults has shown that young adults are generally under-represented in these samples, attend fewer sessions than other age groups, and are less likely to achieve significant levels of weight loss²⁵.

Overall, there is an urgent need for the development of weight control interventions using technology that has wide appeal with young adults. Young adults increasingly use electronic media, including smart phones, iPods and computers as a way to access information and communicate with their peers. In the past decade, virtual social networks such as Facebook

and Twitter have exploded as a way that young adults connect with each other. The use of personal electronic media as a tool for health promotion is just beginning to be explored^{26,27}. While changes to the physical environment are not an element of such electronic interventions, educational and social environmental supports are available.

One important way that electronic media is being enlisted for health promotion efforts is through eHealth interventions, defined as "...the use of emerging information and communication technology, especially the Internet, to improve or enable health and health care"²⁸. The use of web-based health interventions has grown exponentially in the last decade and their advantages include the broad reach of the technology, quick and immediate access to information, ability for asynchronous communication (with an element of anonymity) and the ability to communicate with peers as well as to be easily connected with content experts²⁹. Weight control interventions developed for delivery through interactive websites have important potential for young adults who have widely adopted mobile technologies that tap into the Internet. These web-based interventions often include self-monitoring and goal setting opportunities, chat rooms with peers and experts, information sharing and access to experts through email exchange or online chat.

To date, the effectiveness of web-based interventions to prevent unhealthy weight gain or to help with weight loss has been mixed. Neve et al (2010) conducted a systematic review of intervention trials published between 1995-2008 that used web-based approaches to achieve or maintain weight loss. Their review showed that fewer than 25% of studies showed significant change in the weight related variable. The authors suggest that the small number of studies meeting the eligibility criteria for the review and the heterogeneity of study designs made it difficult to assess the potential of web-based interventions related to a healthy weight and call for more work in this area³⁰. Importantly, there has been little work focusing on weight gain prevention in young adults using a web-based approach.

The CHOICES study

CHOICES study design

The goal of the CHOICES study is to develop and test innovative strategies to help prevent unhealthy weight gain in students attending 2-year community or technical colleges. The primary endpoint for the research is change in body mass index (BMI). The primary hypothesis is that students randomized to an intervention condition will experience a smaller increase in mean BMI post treatment, as compared to students randomized to the control condition. Students randomized to the intervention condition are invited to participate in a 24-month intervention described below. Control students receive health assessments according to the study measurement schedule as well as health promotion information on a quarterly basis from the Nation's Health *Healthy You* (www.thenationshealth.org) series on a quarterly basis. The human subjects committee at the University of Minnesota approved all intervention and evaluation protocol for the CHOICES study. Measurement periods include baseline (pre-randomization), 4, 12 and 24 months.

Three two-year colleges in the Twin Cities, Minnesota metropolitan area agreed to participate in the study. These colleges signed a Memorandum of Understanding (MOU)

with the principal investigator of the CHOICES study that outlined the expectations for the college and the university partners. Colleges were required to agree to: 1) allow project staff on campus to recruit students; 2) offer the one-credit weight management course through their college and help with logistics of making the course available to students; and 3) allow staff to conduct student measurements on campus. The university agreed to cover all costs related to conducting the research.

CHOICES study staff recruited students to participate in the study with help from the administrative offices at the colleges using a variety of approaches including email invitations, posters and table tents in the college, and information tables staffed by CHOICES staff. Students who expressed an interest in the study were prescreened for their eligibility to participate in the study. Eligibility requirements included: being between 18-35 years old; having a BMI between 20-34.9; and planning to be in the area for at least two years. Once students met prescreening criteria they were asked to provide informed consent that included an agreement to comply with their random assignment into intervention or control condition and, if randomized into the intervention condition, to participate in the CHOICES intervention, which included a one-credit course on achieving and maintaining a healthy weight, and actively engage in the CHOICES website. Students who consented were promised financial compensation for participating in each measurement period, results from their health assessments, and, if randomized to the intervention, to have fees waived for the one-credit class as well as full access to the CHOICES website. Tuition for the class was paid by the research grant.

We collected baseline data and randomized 441 students into the study. The sample at baseline was 68% female and 76% White or Caucasian (7.5% Hispanic) and 17.7% Black or African American. At baseline, more than 60% of the sample reported an income of less than \$12,000 per year. More than half (53.4%) were at a healthy weight based on a BMI between 20-24.99; 32.7% were overweight (BMI between 25-29.9) and 13.9% were overweight (BMI between 30-34.9). The sample as recruited had slightly more female and minority participants as compared to the population of students enrolled at the three 2-year colleges.

CHOICES Conceptual Model

The creation of the CHOICES intervention (www.choicestudy.org) used a program planning approach suggested by Perry³¹ that calls for using the empirical literature and qualitative approaches to understand the behavioral issue and determinants in one's population of interest. That information and understanding are used to create a theory-based conceptual model to guide the development of the intervention as well as identifying key evaluation needs. For the trial's qualitative phase we conducted an extensive formative assessment study including focus group with 2-year college students and interviews with 2-year college officials³². Intervention objectives were then developed to impact the determinants of the behaviors and intervention strategies designed to target those objectives. Pilot testing was also an essential step in program planning. We pilot tested all elements of the intervention to be delivered prior to the full randomized control trial including delivery of the course in a 2-year college and beta testing of the CHOICES website.

Our conceptual model, included in Figure 1, is informed by ecological theories of health behavior^{33,34}, social cognitive theory³⁵, and social network theory³⁶. The model posits that weight-related factors are most proximately influenced by mutable behaviors including energy intake, energy expenditure, and other health-related behaviors. These behaviors occur within the context of individual factors, the home environment and the social environment. Formative research conducted in the first 18 months of the study³² suggested that these three areas included important determinants of risk factors for unhealthy weight gain in young adults.

Under individual factors, the empirical research and our formative assessment showed that students have limited factual knowledge of recommended health guidelines (for example, recommended amounts of physical activity) and a poor understanding of the relationship between their behavioral choices, concomitant risks and benefits of those choices (for example the health risks associated with getting insufficient sleep). Their busy schedules make eating out and eating on the run a common occurrence with physical activity and adequate sleep seen as luxuries, rather than necessities, for health. In addition, many of these students have a very limited skill set related to a wide variety of behaviors important in healthy weight maintenance, including menu planning, food selection, simple meal preparation, time management and sleep hygiene. Stress levels are high in this population, impacting their eating, activity and sleep. The ability to problem solve the juggling of myriad responsibilities in their busy lives and to build behavioral skills and self-efficacy is needed to help prevent unhealthy weight gain. In addition, our formative assessment indicated that self-awareness of personal behavioral habits and ways to improve these behaviors was limited. While students acknowledged some awareness of the importance of eating well, being active, sleep and managing stress, with all of the other priorities in their lives, some additional motivation, incentives and reinforcers appeared necessary to promote change.

The larger physical environment to which the students are exposed as they move through their day (from home to school to work to picking up children at day care or visiting friends) affects their behaviors, but since our study design involved randomizing students within three 2-year colleges we were not able to intervene on the larger neighborhood physical environment. However, we were able to examine obesogenic factors operating in their home environments. Since many of these students are living on their own or with roommates, the foods available in their home are likely different than foods available in the homes in which they grew up. Having healthy foods in their homes can be challenging to young adults due to the perceived cost of such foods, their ability to shop frequently enough to keep fresh food in their home, their ability and time to prepare meals, and their own food preferences. Therefore, the determinants included in our conceptual model included improving the availability of healthy foods and appropriate food storage and preparation areas within their homes. Homes of young adults also need to include cues for choosing healthy foods and physical activity options and young adults need to learn how to set up and establish a home environment that supports healthy sleep patterns and stress management on a daily basis.

Finally, the social environment provides normative messages, opportunity for social support, role modeling, and a larger, and more complicated, network of influences that appear to

affect the health of individuals in that network both directly and indirectly³⁶⁻³⁸. As such, the determinants we attempted to influence in CHOICES included providing role models and social support for healthy behaviors and in creating perceptions of a health-enhancing subjective norm around health behaviors.

The model recognizes that moderators, including ingrained habits and preferences, depression, dieting history, weight status, gender, age, race/ethnicity, and socioeconomic status (SES) may influence the effects of the intervention and the associations posited in the model.

CHOICES intervention

Our intervention as delivered focused on four key behavioral areas: diet and nutrition; physical activity and sedentary behaviors; sleep; and stress management. It also utilized strategies shown to be effective in behavior change, including self-monitoring, goal setting, skill building, enhancement of self-efficacy, role modeling, positive social influences, reinforcement and incentives. The CHOICES intervention was twenty-four months in duration and consisted of two overlapping phases that included both a one-credit class offered through the two-colleges and a social network and support website.

Students randomized into the intervention condition participated in the one-credit course offered through their college that focused on eating, activity, sleep, and stress management as ways to help maintain or achieve a healthy weight. This course was based on an online course called “Sleep, Eat and Exercise,” (SEE) developed by the Rothenberger Institute at the University of Minnesota as a health promotion course for college students³⁹. Three course sections (online, face-to-face, and a hybrid option) were offered to accommodate students’ scheduling needs and learning preferences. Of the 203 individuals randomized to the intervention condition registering for the course, 54.2% elected to participate in the online version, 36% in the face-to-face version and 9.8% in the hybrid version. CHOICES intervention staff taught all versions of the class. Each 2-year college maintained one of their own instructors as the instructor of record, but CHOICES staff had full responsibility for all elements of course implementation including using the course management system used by the college for entering grades.

In addition to knowledge-based information relevant to the focus behaviors, the course included self-monitoring of eating, activity, sleep and time-management and goal setting related to changes in those behaviors. All versions of the course provided very practical information on preparing healthful, low cost meals, finding ways to be active during the day, practicing good sleep habits and learning stress management skills. The importance of those behaviors in maintaining or achieving energy balance and a healthy weight and problem solving barriers to achieve these health behaviors was stressed. Each face-to-face session began with a meditative or centering activity, included a healthy snack and the related recipe or product information, and an interactive didactic lesson delivered by a CHOICES interventionist. The face-to-face sessions also included hands-on cooking demonstrations, yoga sessions, and physical activity sessions. The online version included all of the didactic information and included videos demonstrating cooking skills and videos of students and experts reinforcing the messages about the targeted behaviors. The hybrid version included

the online course in addition to five face-to-face class sessions where students participated in a time management activity, cooking demonstrations, a yoga class, stress management techniques and physical activity class.

The website component was introduced as part of this one-credit course and continued as the intervention channel for 20 months following the course. The website was password-protected and open to intervention participants and their invited guests. It was designed to reinforce, inform, and encourage exchange and support between all intervention participants. Students were encouraged to track their weight and ten weight-related behaviors on the website (including breakfast, fast food, and sugar sweetened beverages consumption, plus mindful eating, screen time, time spent being physically active, sleep, and practicing stress reduction techniques). CHOICES intervention staff interacted with participants electronically or through phone calls offering encouragement and helping with problem solving. The website included articles, recipes, quizzes, videos and a way to accumulate points for study prizes (<http://www.choicesstudy.org>). Participation points served as incentives for student activity on the website. Table 1 shows elements of the CHOICES website. Table 2 shows samples of how intervention activities correspond to intervention objectives for each of the behavioral focus areas and the three levels of determinants used in the conceptual model.

Translation to Health Education Practice

Health promotion efforts in 2-year colleges, particularly with regard to weight control and weight gain prevention, are needed. Our experience in working with 2-year colleges to design and implement a randomized controlled intervention trial for their student body was successful. The colleges that we approached recognized the need for weight control programs and healthy weight-related education for their students. In our CHOICES experience they helped us recruit students, helped register students for classes and allowed our CHOICES staff to take the primary responsibility for teaching the classes. College staff helped us secure rooms for classes as well as appropriate spaces for cooking demonstrations, physical activity sessions and yoga classes. Health educators who want to work with 2-year colleges must be prepared to work closely with school administrators to identify the schools' and students' needs. It is important to conduct interviews with both the administration and the health instructors at the college to assure that there is a value-added for all stakeholders involved. Developing a memorandum of understanding with the colleges, clearly laying out expectations for both parties, was a helpful process.

We also had a good response to the CHOICES study from the students. Students were interested in learning more about how to manage a healthy weight and were also willing to be involved in a research study. Financial compensation for measurement activities and the possibility of getting a free credit hour for the CHOICES SEE class certainly were strong incentives for students. For health educators working with this population, it is very important to create programs that are highly relevant, fit in with their busy schedules and use their preferred ways of getting information, monitoring and tracking their behaviors and connecting with experts and their peers. Our one-credit course (SEE) was well received and participants especially enjoyed the experiential elements available in the face-to-face and the

hybrid sections of the course. Such experiential opportunities were more limited with an online course. With more than 50% of our participants opting for the online section, our attempt to make the online course engaging relied on the quality and presentation of the content, interesting assignments that used self-monitoring, self-reflection assignments and videos featuring college-age youth modeling the healthy behaviors that we were promoting.

An interactive health promotion website that uses tested strategies for behavior change provides another option for connecting with young adults. It is difficult to keep young adults engaged on a single website when they are bombarded with new content on the Internet on a daily basis. We believe that success is maximized by hiring a professional web design team to create the website (www.dtelepathy.com) and by hiring interventionists who are young adults. Professional web designers helped insure that the look, feel and interactive options included in the website met the high expectations of young adults who interact frequently with social media. Interventionists who are young adults were able to relate better to the students in class, had a good sense of the material on the website that would be attractive and interesting to other young adults, and were skilled in keeping online conversations active and interesting.

As we follow these students over the 2-year trial we will learn much about the challenges of retaining these individuals in the study as well as the effectiveness of strategies being tested to help these students maintain a healthy weight during these critical years. Further work with this age group around a wide range of health behaviors is important and has the potential to affect the health of these young adults as well as their future families.

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Figure 1: CHOICES Conceptual Model

¹SSB = Sugar sweetened beverage; FF = fast food; FV = fruits and vegetables²MVPA = Moderate to vigorous physical activity**Figure 1.**
CHOICES Conceptual Model

Table 1

Elements of the CHOICES Intervention Social Network Website

Intervention website components	Details
1. Self-monitoring/weight and behavior tracking *	Participants are able to monitor their weight and the following behaviors: eating breakfast, consumption of sugar-sweetened beverages, fast food, fruits and vegetables, hours of screen time, minutes of physical activity; amount of sleep, engagement in stress-reduction activities and mindful eating. Participants can elect to make this self-monitoring public for all users to see and comment on, or to make it private.
2. Goal setting and feedback	Tied into the self-monitoring participants are encouraged to set goals for the behaviors that they monitor. Participants can elect to have their goals public or private.
3. Did You Know?	This feature provides information and tips on all behavior topics on a rotating... (Describe how a new one comes up each time they refresh?) Study interventionists provide the information for this section.
4. Discussion forum *	This section is a place for participants to ask questions or start their own topic. It is open to everyone and participants are encouraged to provide responses and ideas to other's forum posts. "Expert opinion" / study staff were involved in the discussion and made sure everyone's questions were answered. Comments were associated with a user name, and participants were able to upload photos.
5. Hot Topics *	This section includes articles about study-related topics through a variety of formats, including articles, myths/facts, quizzes, polls and videos. Study interventionists provide the bulk of the information for this section but participants can comment and upload photos.
6. Events *	This section includes information about CHOICES-sponsored events specifically organized for CHOICES participants. Events occurred approx. 4 times per year, and involved such activities as a visit to a trampoline park or family apple picking).
7. Ask the Expert	This section is private and personalized. Participants can send a confidential question about a personal challenge or health issue to a study interventionist. The interventionist provided referral, information or problem-solving advice via phone or email.
8. Recipes *	This section provides recipes and photos of the dish. In addition to recipes and photos offered by the study interventionist, participants can offer their own recipes and photos. It emphasizes foods that are inexpensive, fast and healthy.
9. Incentives	This feature provides incentives for participation on the website including self-monitoring a behavior (1pt), setting a goal (3 pts), commenting on information posted on the website (1pt), posting a status update (1pt), and commenting on another participant's status update or behavior tracking (1pt) Students can redeem up to 600 points per month (for a prize valued at approximately \$100) for sports and fitness equipment, gift cards for grocery stores, and cooking utensils and appliances.
10. Personal page/profile *	With this feature, participants voluntarily post information about themselves, including information about their health successes and struggles, favorite foods and stress management activities, and a profile photo.

* Website element that allows interaction between participants

Table 2

Mapping intervention objectives to intervention strategies: Sample objectives

	Individual factors	Home environment	Social Environment
Diet and nutrition			
<i>Students will plan and prepare healthy meals</i>	<ul style="list-style-type: none"> • Students get tips on menu planning in class and on the website 	<ul style="list-style-type: none"> • Students can earn points for basic cooking equipment through participation on the website 	<ul style="list-style-type: none"> • Students participate in cooking classes/ demonstrations in class • Students and experts share healthy recipes and cooking tips on the website
<i>Students will eat more mindfully</i>	<ul style="list-style-type: none"> • Students self-monitor and set goals for eating behaviors in class and on website • Students self-monitor and set goals for mindful eating on the website 	<ul style="list-style-type: none"> • Students learn tips on creating home environments that cue and support healthy eating 	<ul style="list-style-type: none"> • Students participate in centering activities in class including meditation and guided imagery
Physical activity and sedentary time			
<i>Students will increase physical activity as part of their daily routine</i>	<ul style="list-style-type: none"> • Students self-monitor and set goals to be active in class and on website 	<ul style="list-style-type: none"> • Students can earn points for activity equipment (yoga mats, exercise balls) to use at home through participation on the website 	<ul style="list-style-type: none"> • Students participate in class physical activity sessions in face-to face and hybrid class • Students observe online demonstrations of simple time efficient physical activity options through online class and through the website
<i>Students will replace optional screen/media time with active options</i>	<ul style="list-style-type: none"> • Students self-monitor and set goals for less TV time on website 	<ul style="list-style-type: none"> • Students learn tips on creating home environments that facilitate reduced media use 	<ul style="list-style-type: none"> • Students are invited to participate in special CHOICES activity events (e.g., trampoline park, apple picking)
Sleep			
<i>Student will understand the importance of good sleep habits</i>	<ul style="list-style-type: none"> • Information on the benefits of/ barriers to sleep provided in class and on the website 	<ul style="list-style-type: none"> • Students learn tips on modifying the home environment to improve sleep environment 	<ul style="list-style-type: none"> • Students invited to complete a sleep quiz on the website and participate in an online discussion
Managing stress			
<i>Students will learn and practice relaxation techniques</i>	<ul style="list-style-type: none"> • Information on relaxation techniques and the importance of stress reduction are presented in class and on the website 	<ul style="list-style-type: none"> • Students learn ways to create relaxing home environments • Students can earn points for relaxation tapes to use at home through participation in the website 	<ul style="list-style-type: none"> • Students in the face- to face and hybrid classes take yoga • Students in the face-to-face class do a centering activities at the start of every class • Online discussions about managing stress around exam time occur