

To the Graduate Council:

I am submitting herewith a thesis written by Danielle Leigh Dimond entitled "Utilization of an Adaptable Wellness Program Model to Create a Stress Management Initiative Based Upon Action Research Methodology for Freshman Students." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Recreation and Leisure Studies.

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**UTILIZATION OF AN ADAPTABLE WELLNESS  
PROGRAM MODEL TO CREATE A STRESS  
MANAGEMENT INITIATIVE BASED UPON  
ACTION RESEARCH METHODOLOGY FOR  
FRESHMEN STUDENTS**

A Thesis Presented for  
the Master of Science  
Degree  
The University of Tennessee, Knoxville

Danielle Leigh Dimond

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## **ABSTRACT**

The purpose of this study was to examine the effectiveness of two models, namely an adaptable wellness programming model and an action research model, when creating and administering a stress management initiative for campus recreation settings that will have a positive effect on freshmen participants at the University of Tennessee. Eight freshmen from the University of Tennessee (6 females, 2 males) volunteered to complete a five week stress management initiative entitled the FROSH! (FResh Out of Stress, & Healthy!) Program which was based upon action research methodology. Program participants completed an exit interview and exit interview questionnaire after the program to determine if their levels of perceived stress had changed and to measure the effect that the program had on each individual. The Perceived Stress Scale was also administered before and after the program to detect any changes in perceived stress levels that participants experienced, but the sample size was too small to detect any significant changes in perceived stress levels. E. T. Stringer's Categorizing and Coding procedure was used to decode responses from all meetings as well as from the exit interviews. Results indicate that the FROSH! Program was rewarding in various ways for participants, and 86% of participants said that their stress levels had lowered by the conclusion of the program. All participants thought that setting weekly goals was helpful in lowering their stress levels. Furthermore, the revised adaptable program model was perceived to be successful in creating the stress management initiative. It is recommended to increase the number of participants for future programs, and also to test

the success of such action research-based wellness programs in campus recreation centers.

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# CHAPTER I

## INTRODUCTION AND GENERAL INFORMATION

Wellness Programming has evolved over the years, with the wellness movement originating during the 1950's in the United States (Leafgren & Elsenrath, 1986). Leaders in the wellness industry such as Doctors Halbert L. Dunn, John Travis, and Don Ardell contributed to the movement, holding lectures on health and wellness at churches, publishing books such as the *Wellness Workbook* and *High Level Wellness: An Alternative to Doctors, Drugs, and Disease*, and writing articles on wellness as well. The first university wellness program was created in the 1970's by Dr. William Hettler at the University of Wisconsin-Stevens Point (Leafgren & Elsenrath, 1986). According to Leafgren & Elsenrath (1986), the goal of wellness is "educating individuals to choose lifestyles that facilitate health and well-being, rather than lifestyles that foster the potential for illness....," and wellness programs within campus recreation centers have provided such opportunities (p. 7).

Recent research conducted by Young and Ross (2000) denotes that wellness programming is forecasted to grow in consumer demand, and remains one of the top five trends in "recreational sports in the 21<sup>st</sup> century" (as cited in Stier, Schneider, Kampf, Haines, & Wilding, 2005). Furthermore, Dr. Stier and others (2005) collected 269 surveys from campus recreation Directors from the National Intramural Recreation and Sports Association (NIRSA) affiliated universities, and found that fitness and wellness activities are considered the number one trend in campus recreation. Institutions such as the University of Miami offer various wellness programming services such as massage

therapy, personal training, resources on health, nutrition programs, and acupuncture (Body, 2006). The James Madison University Recreation Center provides massage therapy as well as wellness seminars for stress management, body image, and dancing (“Wellness Programming,” n.d.). Fitness activities are also held at James Madison University among other campus recreation centers such as group fitness classes and personal training, and one-day workshops related to fitness activities such as circuit training, speed and agility training, and core training concepts are also offered at Madison (“Fitness,” n.d.).

Though there is a great emphasis on the development of wellness programming within institutions, a lack of scholarship exists for program design. McGill (1986), however, created an adaptable wellness programming model for small liberal arts colleges which has not been tested to date for its effectiveness. It is essential for practitioners in the recreational field to merge theory and practice in order to validate programming and services, and the present study serves to expand upon the pre-existing adaptable wellness model and test its effectiveness in a large university setting.

Stress management initiatives within campus recreation are one target program area that can be explored through wellness programming (McGill, 1986). Freshmen, in particular, are likely to suffer from stress (Dyson & Rank, 2006; Miczo, Miczo, & Johnson, 2006; O’Hare & Sherrer, 2006), and therefore are one target population program providers may desire to market services to. Brown and Ralph (1999) conducted a study on levels of stress among first semester freshmen students utilizing the Dismiss Your School Anxieties (DYSA) program within the University of Manchester, and the

results revealed the levels of stress and anxiety for freshmen students increase the probability 2:1 that they will drop out of school in comparison to second and third year students. Other negative outcomes of stress experienced by freshmen exist, such as abusing alcohol (O'Hare & Sherrer, 2006), and acquiring physical ailments and depression (Dyson & Rank, 2006). Literature supports the need for stress management programs directed toward freshmen students (Brown & Ralph, 1999; Dusselier, 2005) and claims that though researchers agree that interventions are necessary for student programming, few programs have been created, and there exists a lack of models available for such programs (Brown & Ralph, 1999). This study utilizes a revised version of McGill's Adaptable Wellness Model as well as Ernest T. Stringer's Action Research Model (2007) to create a stress management program for freshmen students in hopes that their stress levels will have lowered by the conclusion of the program and that the program will have a positive effect on all who participate.

### **Problem Statement**

The purpose of this study was to examine the effectiveness of two models, namely an adaptable wellness programming model and an action research model, when creating and administering a stress management initiative for campus recreation settings that will have a positive effect on freshmen participants at the University of Tennessee.

This study hopes to contribute to the dearth of scholarship in the area of wellness programming for campus recreation, develop a contemporary model for wellness programming, and test the effectiveness of an action research wellness initiative.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **Wellness Models**

There appears to be a lack of theoretical framework development for wellness program designs within campus recreation settings. Susan McGill, a student from Slippery Rock University, however, created an adaptable wellness model based upon wellness program designs within numerous small liberal arts college campus recreation settings in the 1980's (1986). Recurring themes emerged from those institutions whose wellness programs were successful (McGill, 1986). Based upon these findings, McGill constructed an "... interactive and dynamic..." wellness model which incorporates both an educational and service component, and can be seen in Figure A-1 (McGill, 1986). The model is designed to "... enhance the college community" by serving as the foundation for the creation and implementation of wellness initiatives at small liberal arts colleges (McGill, 1986, p. 5).

Both the education and service components are important to the development of a wellness program (McGill, 1986). Participants must not only learn valuable information on health and wellness, but also must be able to apply the knowledge to make behavioral changes (McGill, 1986). Though overlooked in the past, these components are essential to wellness programs in order for participants to make lifestyle changes (McGill, 1986). Programmers may combine both as a single unit when teaching, or separate each component as well (McGill, 1986).

First, McGill illustrates the importance of distributing a needs assessment to the target population (McGill, 1986). This method of data collection within a university setting serves to allow students to identify the areas of wellness they need to improve upon, and to inform the wellness committee and wellness director of the same (McGill, 1986). Some needs assessment data collection tools mentioned in McGill's research are the Health Style: A Self-Test Questionnaire, General Well-Being Questionnaire, and The Health and Lifestyle Questionnaire (McGill, 1986).

Second, it is recommended to identify the dimensions of wellness which will be focused on for the intervention (McGill, 1986). Some areas which programmers may consider could be "... physical, spiritual, [or] emotional..." depending upon the focus of the study and the results from the needs assessment (McGill, 1986, p. 3).

Thirdly, goal setting is advised (McGill, 1986). Both long term and short term goals should be created, and the literature suggests programmers should identify "... specific objectives to accomplish in three, four, or five years..." (McGill, 1986, p. 38). The data from the needs assessment is useful during this stage in order to construct goals that are sensitive to the needs of the population. Health risk appraisals or lifestyle assessment questionnaires may be used to gather the initial information as well (McGill, 1986). Needs assessments are significant because they serve to justify the continuation of a program in campus recreation centers (McGill, 1986).

Planning is the next element of McGill's model (1986). The needs assessment data will help to formulate the target program which should be utilized based upon the needs of the population (McGill, 1986). McGill suggests incorporating numerous

programming formats, such as “... the use of workshops, speakers, classes, and media” when planning activities for a wellness initiative (McGill, 1986, p. 44).

The final stage of the adaptable wellness model is the evaluation component (McGill, 1986). The evaluation serves to identify whether the overall wellness program and target wellness programs have met their goals, resulted in any impacts, and succeeded in what they originally intended to do (McGill, 1986). Evaluation techniques can identify whether programs are successful in reaching target populations, and can serve as a basis for making improvements for future programming (McGill, 1986). Programmers will be able to assess whether participants’ attitudes, abilities, and understandings changed as a result of participating (McGill, 1986). Outcomes can also be assessed to evaluate whether the program is effective and should continue to be provided or expanded (McGill, 1986).

Initially, program success was measured based upon the number of participants who attended, but current research acknowledges the importance of the behavioral changes that take place as a result of a program (McGill, 1986). Pre- and post- tests as well as surveys have been used to measure these changes, with the pre-test-post-test control group and the post-test-only control group designs being most popular (McGill, 1986). These are often utilized to explore the causal relationships of phenomenon and to decrease the likelihood of conflicting explanations (McGill, 1986).

In the event the former evaluative techniques cannot be used, quasi-experimental designs may be utilized (McGill, 1986). Ideally, the researcher should randomly select the sample from the population of interest, but a nonequivalent control group design may

be used if the sample cannot be randomly selected (McGill, 1986). The pre-test-post-test and quasi-experimental designs are best to use, but if cost and time are a concern, researchers may want to consider using other designs (McGill, 1986).

Researchers should also consider when to administer evaluations which may be continuous, periodic, or completed once at the end of the program (McGill, 1986). Continuous evaluations are most informative but can be costly, and periodic evaluations are most used and gather data throughout the length of the program (McGill, 1986). Lastly, one-time evaluations are not recommended, but are more cost-effective than the above designs (McGill, 1986).

Though McGill discusses the importance of randomly selecting participants to take part in wellness initiatives, the researcher does not address the method of how to market to the target population in order to generate interest among those who wish to participate. Furthermore, since the Adaptable Wellness Model has not been utilized to date, methods for participant recruitment have not been tested.

Present-day campus recreation centers acknowledge the importance of marketing to gain the interest of target populations when providing a program, however marketing continues to be a perceived problem (Stier, Schneider, Kampf, Wilding, & Haines, 2007). A recent study collected data from 10 university wellness programs and found that marketing is extremely important, yielding participation from students (Stier et al., 2007). Stier and others (2007) conducted a study that surveyed 269 Directors of campus recreation centers located in the United States to identify areas of concern for university recreation in three categories: conflict, equipment, and miscellaneous. Fifty percent of

the Directors surveyed agreed that “marketing and promotional efforts (on-campus)...” were serious concerns (Stier et al., 2007, p. 55).

Research encourages Directors to support, promote, and market programs, while inspiring students to do the same (Stier, 2007). It is important that all those involved in the marketing processes adhere to a plan to promote the initiatives, and students should be chosen to carry out these efforts (Stier, 2007).

Not only is it imperative that administrators and students promote the programs, but collaboration is also key for successful campus recreation programs (Leafgren & Elsenrath, 1986). Involving all Student Affairs Divisions will aid in the continuation of the programs, and “... orientation programs, business operations, career services, admissions, and food service...” will often lend support to campus recreation programs (Leafgren & Elsenrath, 1986, p. 13). Additional resources, such as those in the community and in the academic realm, should be notified in hopes of gaining further support for programming efforts (Leafgren & Elsenrath, 1986).

McGill’s adaptive wellness model fails to address the importance of both marketing and collaboration which are imperative to consider for present-day wellness programming efforts in campus recreation centers. The new wellness program model as expanded upon by the present researcher incorporate both marketing and collaboration areas for greater program success. See Figure A-2 to view the Revised Wellness Implementation System.

## **Stress: Freshmen Students**

### **Operational Definition of Stress**

For the purposes of this study, stress is defined as the inability for a person to cope with demands, and results from changes that necessitate adaptation (Dyson & Renk, 2006). Miczo, Miczo and Johnson (2006) examined the perceived stresses first year college students experienced in relation to interpersonal support from family, where stress was defined as the "...process in which environmental demands tax or exceed the adaptive capacity of an organism, resulting in psychological or biological changes that may place persons at risk for disease" (Miczo et al., 2006, p. 99).

Various studies have found that first year students encounter "...academic demands, interpersonal demands, and demands of daily living" which contribute to stresses from adapting to college life (Miczo et al., 2006, p. 99). A recent study conducted by Cushman and West (2006) surveyed 364 college students to identify their perceptions on college burnout and the causes of such, and students felt the amount of class work contributed heavily to feelings of burnout, and first year students in particular felt coursework accumulated because of time constraints and the choices they made.

Interpersonal demands are also sources of stress for freshmen students. Numerous studies listed expectations as a major stressor for college students (Cushman & West, 2006; Dyson & Renk, 2006; Miczo et al., 2006). Freshmen do not believe they can meet the expectations of parents, friends and those they create for themselves (Dyson & Renk, 2006). Also, students perceive professors' expectations to be unrealistic, as students cope with "assignment overload" (Cushman & West, 2006, p. 27). Brown and

Ralph (1999) administered a six week stress reduction program (Dismiss Your School Anxieties) at Manchester University for freshmen, where they discovered the sources of stress stemmed from building new friendships, and unrealistic expectations of one's parents.

Transitioning to the college environment is a common stressor for students as well (Brown & Ralph, 1999; Dyson & Renk, 2006; Murff, 2005; Reisberg, 2000). Freshmen students undergo stress as they mature from adolescents into adults, a phase experienced by individuals 18 to 25 years in age who are in the process of creating their identities (Dyson & Renk, 2006). Freshmen struggle to adapt to the new environment as they long for "... personal security, ...acceptance, ...comfort, and [a] social support network" (Dyson & Renk, 2006, p. 1232). This study also concluded that stresses arose from changing living assignments and separating from home (Brown & Ralph, 1999). Students today experience a much faster pace of life than those of 20 to 30 years ago because of engagement in more activities on a daily basis, including full-time jobs and recreation activities (Reisberg, 2000), and lack of time management can take a toll on students (Brown & Ralph, 1999).

The harmful effects of stress, both short-term and long-term, are detrimental, and should be considered. Severe stress for college students "... reduces work effectiveness, contributes to bad habits, and results in negative long-term consequences, including addictions, crime, absenteeism, poor academic performance, school dropout, professional burnout, and, ultimately, career failure" (Dusselier, 2005, p. 16). This can also lead students to contemplate suicide, and use alcohol and tobacco as well (Dusselier, 2005).

Desperation and sorrow often accompany stress associated with transitioning to college life, and "... neuroticism, loneliness, and interpersonal mistrust may contribute to the development of depression" (Dyson & Renk, 2006, p. 1234).

A scarcity of research exists that examines how freshmen, sophomores, juniors and seniors are individually affected by the students' stress levels (Cushman & West, 2006). Furthermore, a lack of literature also exists for campus recreation stress management initiatives. This study aims to provide data on the sources of stress for a small group of freshman students at the University of Tennessee during the fall of 2009. Also, an action research-based stress management program will be administered to assess its effectiveness in hopes of utilizing the program design within campus recreation centers for future wellness programming efforts.

### **Action Research for Wellness Programming**

Though social and behavior sciences in the past have utilized the scientific method to make sense of human events, this method has not succeeded in foreshadowing and changing the behaviors of individuals and groups of people (Stringer, 2007). Application of theory from the academic realm has not been found to have an important significance on everyday demands which "...teachers, health workers, and human service practitioners often..." face (Stringer, 2007, p. 5). Because of this, researchers have begun to use action research for programming efforts to improve the quality of life for individuals who participate in programs (also known as stakeholders), and help those stakeholders solve their problems (Stringer, 2007).

Researchers have said that “...action research can be described as ‘action to bring about change in some community or organization or program’ and ‘research to increase understanding on the part of the researcher or the client, or both (and often some wider community)’” (Totididis & Prilleltensky, 2006, p. 49). Furthermore, Stringer (2007) discusses how “action research is a collaborative approach to inquiry or investigation that provides people with the means to take systematic action to resolve specific problems” (p.8). Others have identified this process as what individuals typically are accustomed to when making a change, where a person plans what he/she is going to do, follows through with it, and then reflects upon their success (Roberts & Dick, 2003). Action research embraces the idea that the researcher should be the facilitator instead of the director, and should guide the stakeholders while they identify the problem, explain why it occurs, create plans to make changes, implement the plans, and reflect on the progress made (Stringer, 2007). All these elements are combined in a cyclical three-step process Stringer has labeled as *Look*, *Think*, and *Act* (see Figure A-3).

Ernest Stringer’s Action Research Model was utilized during the present study to test the effectiveness of such a model on the success of a stress management initiative for eight freshmen students at the University of Tennessee. The model is designed “...to provide the means for people to engage in systematic inquiry and investigation to “design” an appropriate way of accomplishing a desired goal and to evaluate its effectiveness” (Stringer, 2007, p. 6). This systematic process encompasses three areas within the framework: Look, Think, Act (See Figure A-3).

### **Look: Stringer's Model**

In the first phase (Look), participants discuss their daily personal experiences with one another in order to more clearly understand their situations and work together to aid in the process of identifying possible solutions to the issues. This allows participants to feel as though they will be able to control certain areas of their lives (Stringer, 2007). The principal investigator asks broad, neutral questions that allow him/her to examine participants' experiences, such as grand tour questions (e.g. "Tell me about your thoughts on UT so far"), and typical questions (e.g. "Describe a typical day for you at UT").

Focus group sessions are often held during the "look" phase, and ground rules are agreed upon by the group in an effort to make each person feel comfortable sharing his/her opinions and viewpoints during the sessions (See Figure A-7 for a list of the ground rules from the FROSH! Program). Each small group should decide upon a leader and recorder who will record their group's responses to questions and share the information with the larger group. Charted summaries are to be created from each small group before the leaders present. Once all groups have shared, participants are then supposed to "...identify common features across the charts, identify divergent issues or perspectives, [and] rank issues in order of priority, using some form of voting procedure" (Stringer, 2007, p. 75). Lastly, participants are to make an action plan which includes the issue of most concern and identify which "tasks, persons, timelines and resources" will be used to accomplish the plan (Stringer, 2007, p. 75). A person should be chosen to oversee the tasks, and a time and place to meet again and evaluate the progress which has been made should be decided upon.

Surveys may be conducted during this phase, but the principal investigator should avoid the tendency to choose an instrument that mirrors his/her viewpoints and interests. It is recommended that one question be created for each issue, questions remain short, and all questions have phrases that are familiar to the participants. Ideally, a pilot test would be conducted to test the instrument to identify whether anything should be changed.

One alternative procedure was used during this study to help participants gain a better understanding of the stress they experience and to help them formulate a plan to lower their stress levels related to certain items. Stringer recommends asking the participants six questions which begin with the words ‘why, what, how, who, where and when’ to help participants identify their problems and possible solutions to those issues. During the present study, participants received a worksheet to complete that included the questions mentioned above and served to help them discover the sources of their stress and think of ways to make changes to begin to alleviate those stresses (See Figure A-9).

It is suggested to have meetings in places that are familiar to those participating in the sessions. Stringer notes that “initial meetings may be held in people’s homes, cafes, offices, community centers, or any other venue where the stakeholder group itself is comfortable” (Stringer, 2007, p. 91). People will speak more honestly, engage in conversation more, and will be more likely to attend meetings in an environment that is familiar territory and is comfortable for them.

A letter should be dispersed to the group that identifies the researcher as a facilitator who has the authority to handle disagreements within the meetings if they

arise. If a letter is not distributed, a verbal affirmation is acceptable. Though the facilitator is supposed to remain neutral, he/she should solve problematic situations in the event they occur.

Working in small groups (no more than 6 people) enables all participants to have their views voiced, and it prevents certain people from dominating conversation in the larger group. Group activities should be explained and timed, and each group should summarize their responses on a chart before presenting the information verbally to the larger group.

When a group decision is being made, it is important for the group to reach a consensus rather than deciding upon the majority vote. This will discourage competition and create a supportive environment for the group.

### **Think: Stringer's Model**

There are two methods for distilling data in Stringer's model. The first was utilized in the present study and is named the Categorizing and Coding procedure, while the second consists of Analyzing Key Experiences (Stringer, 2007). Both methods help to organize and interpret participants' key experiences to analyze the data and clarify meaning, and researchers may use one or both of the procedures during the data analysis phase.

The former method is composed of various steps. It is important during this procedure to use the verbatim principle, unveiling the meaning behind comments by using phrases and words that were stated directly by the participants. During the first stage of the Categorizing and Coding Procedure, it is recommended to review

information relevant to the issue at hand as well as the research questions from the study. The second stage consists of identifying "...discrete ideas, concepts, events, and experiences... to isolate the elements of which... [the participants'] experience is composed" (Stringer, 2007, p. 100). Individuals analyzing the data should identify each unit of meaning consisting of "...a word, a phrase, a sentence, or a sequence of sentences" that best captures the participants' experiences (Stringer, 2007, p. 100). All units of meaning should be cut and pasted onto note cards which should include the interview session the comment was pulled from. This process of organizing the data is referred to as "unitizing" the information. Next, unitized data should be grouped into related categories, and the categories should be named. Large amounts of information may be grouped within few categories as the data is distilled. During the fourth phase of the Categorizing and Coding Procedure, themes ("...issues or experiences that people have in common") are compared between different groups of participants (Stringer, 2007, p. 102). Categories and subcategories are analyzed and compared to identify any commonalities between the groups of individuals. The following phase consists of creating a category system that clearly presents the categories constructed. Lastly, "themes, categories, and subcategories..." are presented in the form of a report or presentation to the participants (Stringer, 2007, p. 103).

The second method of interpreting the collected data is by Analyzing Key Experiences. This process identifies significant events, also known as "moments of crisis" or "turning-point experiences," which "...may appear as moments of crisis, triumph, anger, confrontation, love, warmth, or despair that have a lasting impact on

people” (Stringer, 2007, p. 103). Researchers should uncover the meaning behind elements within these experiences by studying the events to see how the situations affect the main issues which participants face. There are various steps within this process as well. Stringer notes that it is first important to review pertinent information related to the issue while revisiting the research questions as well. Next, important events and/or experiences that seem meaningful to participants are identified. The third stage is to analyze the valuable features of each experience, followed by studying the detailed elements of each feature, and the final stage is creating themes based upon the experiences, features and elements from each stakeholders. During the last stage, common experiences and features should be compared across the various groups of participants.

Once either procedure is chosen for distilling the data, the second process of analysis and interpretation is to Enrich the Analysis (Stringer, 2007). Data from other sources such as individuals who experience similar issues, also known as stakeholders, or information from literature may be used to provide evidence for issues of main concern.

Four approaches are taken to help participants uncover the core concerns embedded in complex issues, understand situations better, and find strategies to cope with these issues. The four frameworks consist of utilizing “...interpretive questions, organizational review, concept mapping, and problem analysis” to extend participants’ understanding of the issues (Stringer, 2007, p. 108).

### **Interpretive questions.**

Facilitators may provide participants with certain questions that help them to better understand their situation. These questions lead with the words ‘why, what, how, who, where, and when’. Facilitators may wish to ask the questions on several occasions to participants to help them clarify their understanding of events. Additional questions may be asked if the problems are more complex in nature.

Facilitators should write the responses to the questions on a chart for the group to see. By doing so, participants are able to see the results.

### **Organizational review.**

If problems exist in several areas of the organization under study, the researcher may consider observing certain aspects of the institution. The following items should be taken into consideration: vision, mission, goals, objectives, roles, responsibilities of people, rules and procedures, resources, operation, and problems, issues and concerns (Stringer, 2007, pp. 110-111).

### **Concept mapping.**

The third framework consists of concept mapping techniques which allow participants to make connections between various elements related to the core problem. By visualizing the many aspects that could affect a problem, participants are able to see how elements relate to one another and contribute to a problem. This process may be particularly useful for those individuals who are struggling to cope with a major problem related to drug use, eating disorders, or similar situations.

To begin this process, the facilitator should post words or phrases on a board that relate to the core issue, and also post the major problem in the center of the board. All participants should be able to see these items. Next, figures should be linked that appear to affect one another. Participants should be asked if there are any other elements that need to be added to the list in order to make certain all participant views are considered. The only relevant opinions that should be considered during this process are those of the participants, and not those of other professionals or individuals.

### **Problem analysis: antecedents and consequences.**

The Antecedents and Consequences phase is often times referred to as the Causes and Effects phase. Events and experiences that were believed to cause the issue are considered, and the consequences of the problems that arose are also identified. Participants consider the “...core problem, major antecedents to the problem, other significant factors related to those antecedents, major negative consequences, [and] other significant consequences” during this phase (Stringer, 2007, p. 114).

### **Meeting organization.**

Participants should be included in the process of setting all meeting agendas. The facilitator and participants create a purpose for each meeting as well as meeting activities. According to Stringer, the facilitator should ensure that he/she describes the purpose of the meetings, allows “...participants to introduce themselves...” and state which groups they are active members of, provide a summary of the meeting activities that are planned, and lastly, provide participants the opportunity “...to discuss, clarify, and modify the agenda” (Stringer, 2007, p. 117).

Participants should also be involved in the process of analyzing information collected during the meetings. Facilitators should provide a written version of observances that were made during meetings to all groups of participants before upcoming meetings. Facilitators should verbally summarize information that was observed during past activities, and present these findings on a chart. Participants should identify whether the information appears to be accurate and representative of the group, or the information appears to represent a small number of participants and is not applicable to the whole of the group.

The next phase of data analysis may be carried out by a ‘working party’ because of the amount of time it takes to complete the tasks. From the charts that were created in the previous phase, participants should choose those elements that are most relevant to the problem. Categories should be constructed that group these elements together in a way that makes sense to the participants. There are various ways that participants can arrange the categories that were created. One way is to color code items that are related, while another method is to place items on cards to be organized by commonalities in piles. The last method of organizing categories is to post items on a wall and have them arranged by moving the pieces into related groups.

Ideally, the ‘working group’ would create a written report of all findings. Information can also be presented in a creative manner to better represent the ideas and experiences of all participants through “...song, dance, drama, poetry, humor, role plays, or other forms of presentations...” (Stringer, 2007, p. 121).

### **Act: Stringer's Model**

After participants have reflected upon the core problem and the elements that are involved, the next task is to create an action plan, carry out tasks, and evaluate one's progress in terms to see if goals are being met and positive changes are being made. In the Act phase within Stringer's Action Research Model, participants "...work creatively to identify *what* they will do to gain a more positive outcome, and *how* they will go about the tasks they have set themselves" (Stringer, 2007, p. 125).

Three stages are included in the Act phase: Planning, Implementing Activities, and Reviewing (Stringer, 2007). During the first stage, participants should prioritize which issues they will act on first. There is a process that is to be used to decide upon which issues should be considered first where participants "...identify the major issue(s) on which their investigation focused, review other concerns and issues that emerged from their analysis, organize the issues in order of importance, rate the issues according to degree of difficulty (it is often best to commence with activities that are likely to be successful), choose the issue(s) they will work on first, [and] rank the rest in order of priority" (Stringer, 2007, pp. 127-128). Goals and objectives should be created to form an action plan, and all groups of participants should be included in this process. The six questions that should be considered during this time are those that Stringer notes throughout his text, consisting of the "...why, what, how, who, where, and when" related to the issue (Stringer, 2007, p.128). An action plan can be presented in a table to help participants organize their thoughts and plans. It is recommended to record the action

plan on a chart or board for the group to see. Outcomes should be considered to think of what will result from the changes that are being made.

A quality check should be conducted to make certain that all participants feel comfortable sharing with one another in the group. Group members should be careful to accept people for who they are, and create an environment that is encouraging, supportive, comfortable, and makes all members feel better about themselves.

Facilitators should also evaluate whether participants are involved in planning the activities and setting the agendas for sessions, as well as how effective the plans are to allow participants to share information.

When participants decide upon an action plan, "...enthusiasm and energy are generated as... [they] set off to perform their designated tasks" (Stringer, 2007, p.133). However, participants are expected to experience some form of anxiety when making changes and attempting to achieve their goals, and the facilitator should encourage them during this time. It is the facilitator's responsibility to provide support and resources for participants so they feel successful. Facilitators should provide positive responses to participants when comments are made. Furthermore, facilitators should complete tasks with participants, and not for participants. Doing so improves the confidence of participants rather than making people feel incapable of completing an activity.

Communication should be maintained outside of the meetings, and Stringer recommends that facilitators provide opportunities for participants with similar goals to communicate. Social meetings are encouraged as well, such as eating and drinking together.

Facilitators should give gifts to those in the group whenever possible. Gifts may be presented in the form of “...news, information, snacks, a telephone number, or a flower” (Stringer, 2007, p. 137).

Another important feature to this phase is to create links among participants by finding common social networks that exist among people. These networks can be introduced to participants by the facilitator, or can emerge from the participants talking to one another and forming relationships. Participants should link with individuals who will support their efforts toward making changes to resolve problems.

Reviewing is another important component to the Act phase. Participants are expected to meet regularly to “review the plan[,].... report on progress[,].... modify sections of the plan, if necessary[, and].... celebrate successes” (Stringer, 2007, p. 140). The above processes are said to “...motivate people by highlighting accomplishments or reassuring them if they have failed to make significant progress, [while providing]... a context that reinforces... [participants’] sense of community” (Stringer, 2007, p. 140). Participants should evaluate their progress and change their plans as needed during this stage.

Kurt Lewin, a social psychologist, is often recognized as the creator of action research. In his paper entitled ‘Action Research and Minority Problems’ (1946) he spoke of using a cyclical system for planning and action composed of “...a circle of activities that could be repeated in spirals, with each circle consisting of analysis, fact-finding, conceptualization, planning, execution and evaluation” (Totikidis & Prilleltensky, 2006, p. 49). Other researchers have expanded upon the model over the years. Grundy and

Kemmis (1981), Susman (1983) and Prilleltensky (2001) each created cyclical models that contain four to five activities in order for researchers and individuals or communities to better understand the individual or community, or to bring about positive changes through action in a community, organization, or program. In 2001, Prilleltensky constructed the Community Wellness Model which is based on the idea that in order to be well, one must balance "...personal, relational and collective strengths" (Totikidis & Prilleltensky, 2006, p. 50). The model was used in an action research project for a wellness promotion initiative at Victoria University in Melbourne for the Melbourne community and for professionals/service providers.

One study conducted to test the effectiveness of Stringer's Action Research Model was conducted by Mary Agnello. Dr. Agnello, an associate professor of secondary education at Texas Tech University, implemented Stringer's Action Research Model (2004) within a social studies course for twenty postbaccalaureate education students (Agnello, 2007). The course was created to increase the students' awareness of educational issues in the Texas school system, inspire them to take action in influencing the creation of public policy, and teach them how teachers can successfully lead an action research-based course (Agnello, 2007). Agnello's course was successful in changing the behaviors of several students, influencing one student to engage more socially and politically in public policy, and another to write a letter to a representative, and yet a third who plans to use action research to teach in the future (Agnello, 2007).

The FROSH! Program, a wellness initiative created for freshmen students for this study, will utilize Stringer's action research model in order to help the program

participants make positive lifestyle changes to lower their perceived levels of stress.

The revised Adaptable Wellness Program Model originally created by Susan McGill will also be used simultaneously during the program to ensure that an educational and service component is incorporated in program design. This will not only ensure that educational resources are provided to participants to assist in helping to lower their stress levels, but it will also encourage participants to take action and make lifestyle changes in hopes of alleviating their stress as well.

## **CHAPTER III**

### **MATERIALS AND METHODS**

#### **Subjects**

Participants for this study were freshmen students from The University of Tennessee in fall, 2009. Initially, first semester freshmen were the target population of interest, but two of the subjects were completing their second year as freshmen therefore causing the target population to change to include all freshmen at the university. The snowball effect was used to gather several members for the stress management program after the initial eight expressed interest in participating. Thirteen students participated in one or more sessions during the program, but only eight completed the program by attending most meetings (3 to 5 sessions) and by taking the Perceived Stress Scale at the beginning and end of the FROSH! Program.

#### **Study Design**

The present study was based upon a qualitative study design, and a volunteer sampling technique was utilized to recruit program participants.

A needs assessment was not distributed to the freshmen population to justify the need for stress management programming in the present study. Though McGill's model illustrates the importance of distributing a needs assessment to the target population in order to conduct a risk appraisal to identify the areas of health and wellness the population is in need of improving upon, time constraints did not allow for enough time to distribute a survey to collect data on the stress levels of all freshmen students. Support

from previous literature served as justification of the need for stress management programming for freshmen students.

A Wellness Committee was established before the FROSH! (FRESH Out of Stress, & Healthy!) Program participants were recruited, and a committee meeting was held to utilize the Benefits Approach to Leisure Recreation Production Process chart to aid in the creation of short term and long term goals for the program. See Figure A-15 to view the BAL Chart which was created for the present study. The committee was composed of the RecSports Fitness Director, RecSports Assistant Director of Programs, Professor from the Recreation and Leisure Studies Department, and the University of Tennessee Wellness Director. Several other individuals were asked to be a part of the committee but declined the request to take part in the group.

Various marketing techniques were used to inform all first semester freshmen students at the University of Tennessee of the opportunity to participate in a stress management initiative entitled the FROSH! (FRESH Out of Stress, & Healthy!) Program. Professors in the First Year Studies classes fall of 2009 informed their students of the opportunity to participate in the program. Also, flyers were posted in the freshmen residence halls to further inform students of the stress management program. Lastly, an e-mail was sent to all freshmen to ask if any students would be interested in learning more about the FROSH! Program and how to participate. Of those who were interested in participating, another e-mail was distributed to inform them of what the program consisted of and the expectations of participants, from which point they were asked to notify the researcher if they were still interested in participating.

Participants granted their consent to join the program by sending an e-mail to the researcher stating they wish to take part in the initiative. Eleven students responded to a second e-mail stating that they wish to join. All individuals who expressed interest were invited to join the program. One member asked it if would be alright if her friend joined as well, and another individual who worked at the UT Student Recreation Center was asked to join, resulting in a net gain of two more freshmen program participants (n=13). Though thirteen students were interested in joining the FROSH! Program, eight members were the only members to attend most meetings (3 or more out of the 5), complete the Perceived Stress Scale before and after the program, and undergo an Exit Interview as well as take the Exit Interview Questionnaire. Because of this, the eight students were considered the only members of the FROSH! Program.

The Perceived Stress Scale (Cohen, Kamarck & Mermelstein, 1983) was administered in two waves to FROSH! members, both before and after the program to compare perceived stress levels of participants preceding and following the FROSH! Program. See Figure A-4 to view the Perceived Stress Scale which was utilized for the current study. The instrument was found to have a coefficient alpha reliability of .86 in a study conducted by Cohen and others in 1983 where it was said to be a significant predictor of appraised stress levels for college students (Cohen, Kamarck & Mermelstein, 1983).

All participants who wished to join the program were sent the Perceived Stress Scale via e-mail before the program began, and each person was asked to send the survey back to the principal investigator preceding the first meeting. Those participants who did

not complete the survey electronically and send it back to the researcher were given the instrument to complete by hand at the beginning of the first program session that they came to.

The Perceived Stress Scale was also administered at the conclusion of the program during the Exit Interview Sessions. Participants signed up for a 10 minute session to meet individually with the program facilitator to complete the survey a second time. Participants were given time to complete the instrument by hand, and they also completed an Exit Interview Questionnaire while participating in a 5 minute oral interview session.

Because of the small number of participants, the principle investigator was unable to detect significant differences between the group's pre- and post- overall mean perceived stress scale scores. Future studies should include more participants to strengthen the power of the dependent t-test when comparing scores from the Perceived Stress Scale before and after a stress management program.

Incentives for participating in the program consisted of free food during all program sessions, and anticipated lowered stress levels by the conclusion of the program. IRB approval was granted, and each participant received and signed the informed consent form before their first meeting (see Figure A-19).

### **Wellness Program Design: McGill's Adaptable Wellness Program Model**

The education and service components within McGill's Adaptable Wellness Program Model were combined as a single unit during the FROSH! Program. Once the program facilitator transcribed the meeting sessions, any information that participants

seemed to want to learn more about or any topics of concern among the group were taken into consideration, and the facilitator gathered resources to share with participants that they could hopefully use to help gain a firm grasp on making behavior changes to lower their stress levels. Resources for personal finance and time management were distributed to participants during the FROSH! Program. Participants were given blank budgeting sheets, lists of books for managing personal finances, a copy of a time management log to use if they chose to. Also, the FROSH! Logs and binders were given to each participant to use if they chose to in order to write down their progress week to week on whether they were achieving their goals they set to lower their stress levels.

The dimensions of wellness which were focused on in the study were physical, emotional, and social. Initially, the intended dimensions were only to be emotional and social, but since the participants requested to exercise during two of the meetings, a physical component was added to the program.

Goal setting was completed prior to recruiting participants for the study. A Wellness Committee was created to set the goals, and the group also generated ideas for resources to use on campus when collaborating and marketing. Before the goals were created, all committee members thought of the resources available on campus, primarily for collaborating and marketing purposes, in order to think of ways to promote the program and gain institutional support. The Benefits Approach to Leisure (BAL) Recreation Production Process Chart was used to identify projected inputs, throughputs, outputs, and outcomes for the FROSH! Program (see Figure A-15). The BAL chart serves to justify future funding and programs, in the event positive outputs and outcomes

are a result of the program. This form of planning is also helpful when marketing and creating objectives for programs.

The inputs, or items such as resources, facilities, and participant expectations that are important for program development were first listed on the BAL chart. The FROSH! Wellness Committee was told that marketing and collaboration would be important to consider during this process since the new model focused on those two elements, and the committee decided to list marketing and collaboration as inputs on the chart.

The throughputs, or elements that interact with the “structural components” (for the purposes of this study, the FROSH! Program), were then decided upon. Throughputs can be seen in Figure A-15. This process was extremely helpful in identifying ways to promote the FROSH! Program on campus. The committee members knew of the First Year Studies Program at the university and suggested to contact Anton Reece, the Director of the Student Success Center, to speak to him regarding opportunities to promote the program during the freshmen classes. Also, another committee member suggested contacting someone from the Panhellenic Council to ask if the program could be redeemed for Pan Points. The chart was a useful way to map out ideas from the committee and present the information for the study.

The first stage of outputs in the chart consists of the benefits and/or positive and negative events that arise from the interaction of the throughputs with the system. The projected benefits from both marketing and collaborating were to inform freshmen of opportunity to participate in a stress management program that will help them lower their stress levels.

A second stage of throughputs consists of further interactions that occur within the system that affect the second stage of outputs, or outcomes. Some of the projected throughputs from the first cycle were not utilized, such as contacting the sorority and fraternity groups to collaborate with them, and also posting a message in the Daily Beacon. The FROSH! Program Facilitator was able to contact the Associate Director of Residential Life to talk to him about posting flyers in the residence halls. Furthermore, the facilitator met with the Director of Student Success Center to describe the study and ask if there was a way to promote the program within First Year Studies classes. A summary of the program was created using Microsoft PowerPoint and was given to both individuals when the facilitator met with them to discuss the program.

Once the BAL charts were completed, the committee then thought of short- and long- term goals for the program. Short-term goals generated by the committee were to inform participants of resources on campus related to stress management, to make everyone feel comfortable sharing in the meetings, and to lower the stress levels of those participants who participate. The long-term goals created by the FROSH! Wellness Committee were to be achieved in one, three and five years.

The last component to McGill's model is the evaluation stage. The Program Facilitator decided to use periodic evaluations during the program, completing one during the third meeting and one after the final meeting as well. This was done to gain feedback from participants regarding what they thought was going well, what they disliked about the program, and what suggestions they had for future sessions and future programming. Participants were asked to respond verbally during the third meeting.

For the final evaluation session, participants completed an exit interview where they answered eight questions orally, and completed a written 13-question exit interview questionnaire (See Figure A-16 for the exit interview questions, and Table A-1 for the Exit Interview Questionnaire).

### **Wellness Program Design: Action Research**

The initial meeting was held at the Starbucks on campus in Hodge's Library, where the facilitator and the students had the opportunity to meet in a non-threatening environment to begin to build companionship, sign an informed consent form, and discuss what they would like to see happen during the program.

The following sessions were held as focus groups within a group study room in Hodge's Library on campus, or a room in the University of Tennessee Student Recreation Center. Participants had the ability to choose where they wished to hold all other meetings, and they chose to remain in the library for the second and third meetings. They suggested finding a group study room to hold the sessions in, and the facilitator reserved the rooms for two meeting dates. The sessions began with the facilitator asking the stakeholders what their opinions were on the daily agendas. Stakeholders had the opportunity to suggest changes to be made for that day. Also, the subjects formed three groups of two to five individuals which were to be their units for thinking together on issues and reporting back to the larger group during two meetings. The facilitator prepared many types of questions for program sessions, including "...grand tour[,] typical[,] specific[,] task[,] extension[,] encouragement[, and] example..." questions (Stringer, 2007, pp.70-71). All sessions were tape recorded, and stakeholders were

assigned a number and letter which was used to identify each individual during the meetings. Refer to Figure A-5 for each session's agenda.

All three components of Stringer's model (Look, Think, Act) were utilized for program design and will be explained in subsequent paragraphs.

Most of the elements in the Look phase of Stringer's model were incorporated in the FROSH! Program. Participants discussed stressful activities and situations that they encountered during all sessions, and many participants had suggestions for others as to what they could do to handle their stressful issues. A grand tour and typical question was asked during the first meeting. The facilitator explained the reasoning behind establishing ground rules for the program, and the participants were asked who would like to volunteer to record the rules on poster board. One participant offered to write down the rules, and the facilitator asked the group to share what the group could do to create an ideal environment for people to share their views and thoughts. Refer to Figure A-7 for the FROSH! Ground Rules.

Small groups were used during the program for the second and fifth sessions, and each group chose a group leader who recorded group responses to read them to all members in the program. During the second program session, each participant received a worksheet to complete which was used to help them identify the 6 questions Stringer mentions which are important when analyzing issues (see Figure A-9). This information was to serve as a way to create an action plan for participants so they could formulate strategies for lowering their levels of stress. After each participant had completed the sheet, three small groups of 3 to 4 people met to discuss their responses. The chosen

group recorder and leader wrote down all that the group talked about and shared that information with the larger group. Participants were told that they would discuss their progress at future meetings.

During the second FROSH! Program session, Stringer's method for sharing information in a systematic manner to "...identify common features..., identify divergent issues or perspectives, [and] rank issues in order of priority, using some form of voting procedure" was utilized (Stringer, 2007, p. 75). Participants were asked to complete the FROSH! Stress Survey where participants rated potentially stressful items on a likert scale to see what stresses the group members shared (see Figure A-6). Many of the terms that the participants mentioned during the first meeting were included in the survey, and all questions were succinct. Two individuals were asked to volunteer to record everyone's responses on charts that were arranged on the wall. The participants were then asked if anything appeared surprising to them or if the results were what they expected. Finally, the group was asked to arrange the items in order of most to least stressful.

Throughout the course of the program, participants came to a consensus for many decisions, and the facilitator did not use a voting system to decide upon activities. At the conclusion of every meeting, the group was asked where they would like to hold the meeting for the following week. Most everyone agreed upon the meeting locations. Consensuses were also taken in terms of the activities that the group wanted to engage in. The group decided that they wanted to have ice breakers at the beginning of each meeting, which they found fun. Also, once the participants knew the facilitator could

teach Zumba exercise classes, many group members asked if they could experience a Zumba class during the program. Two classes were held for the participants, and several of them had positive comments regarding the experience. Furthermore, participants chose which type of food they would like to have week to week.

In order to help participants identify the key elements involved in the problems that cause them stress, interpretive questions and concept mapping procedures were utilized. Problem analysis and organizational review were not used during the study because of lack of time. During the second meeting, all participants were given a worksheet that had interpretive questions (See Figure A-9). Once each participant had completed the worksheet, everyone broke up into three smaller groups to talk about their responses with one another. One group member was chosen by the group as the recorder and presenter. After about 5 minutes, participants shared with the larger group. The facilitator did not write the responses on a chart as recommended by Stringer, but participants were able to listen to all small groups when they presented the information they discussed.

A concept map was formed during the second meeting to identify those stressors that the participants felt were most apparent in their lives. The terms from the FROSH! Stress Survey were written on pieces of poster board and posted on the wall in one of the group study rooms at Hodge's Library on campus. Participants were asked if they wanted to add any other stressors to the list on the survey, and one participant suggested adding 'Lack of Time' as another source of stress, so this term was added to the survey as well as to the pieces of poster board on the wall. The core issue, stress, was posted in the

center of the items that appeared to bring stress to participants as mentioned during the first meeting. Two participants volunteered to record everyone's scores on each of the pieces of poster board. This was asked of them so the group could see all responses and comment on what they found surprising or fairly accurate in terms of stress brought on by being a freshman student, and the stress that the group experienced as well. Next, participants were asked to rank the items in terms of which brings them the most stress to the least stress.

Another important component of the Think phase in Stringer's model is to allow participants to engage in the planning process for meeting activities. At the end of each meeting, the facilitator summarized the activities that were originally planned for the following meeting, and participants had the opportunity to comment on what they preferred to do.

During the end of the first meeting, participants suggested to have another ice breaker activity at the beginning of the next meeting, as well as hold a Zumba class sometime during the program, since they learned the facilitator can teach the Latin dancing-based group fitness class. Instead of having participants talk about the stresses they had as originally planned for the second meeting, they preferred to talk about how they could make changes to deal with the stress they experienced. Participants commented on how they talked about their sources of stress during the first session and did not need to do so again in the second session. The second meeting was planned to be held in the UT recreation center, but when the participants were asked where they would like to hold the next meeting, they requested to meet in the library again. When asked

what food they would like next week, participants agreed upon chicken nuggets and pizza. The facilitator implemented all the above requests, and participants seemed to be pleased that their ideas were taken into consideration.

Various aspects of the Act Phase were used during the FROSH! Program. Though participants did not complete all tasks included in the planning stage in the Act Phase, they were to identify one or more item(s) that they feel stress them out most on one of the handouts that was distributed to the group, and from there they were to think of the steps they would need to take to lower their levels of stress. Participants created weekly goals during the second, third and fourth meetings which they wrote down on paper to keep for themselves, and they wrote a second copy for the facilitator to keep. The pieces of paper were brought out during the meetings following when they were created so participants could read them to evaluate whether they reached their goals during the previous week. Action plans were not created but may be useful for future wellness programming. Another element that was not included was having participants create outcomes. One process that was included was the addition of all six questions (who, what, when, why, where, and how) on an activity sheet that was distributed during the second meeting (see Figure A-9).

The facilitator tried to remain as encouraging and positive as possible during the sessions. Words of praise were generously rewarded to those who met their goals, and words of encouragement and support were shared to those who tried to reach their goals but did not for various reasons. Instead of making negative comments, the facilitator asked questions to help participants sort through their problems and concerns.

Resources were given to participants on several occasions. Since participants requested to learn more about personal finance, the facilitator found two budgeting sheets on the internet to give to all participants. Furthermore, the facilitator provided the names of several books that appeared to be good resources to use when managing money. A list of resources on campus related to stress management were provided in each FROSH! Log binder during the first meeting. Time management sheets were distributed to participants as well. Participants seemed to appreciate the information that was provided to them.

Gifts were given to participants, such as information regarding a course that freshmen could take to help them choose a major, free food during all the sessions, and a binder which included an activity log which was optional to use during the program.

### **Research Questions**

The following research questions were created for the study:

RQ1: Will participants demonstrate behavioral changes during the program that lower their stress levels?

RQ2: What program elements were perceived to have the greatest value by participants?

RQ3: What common stressors were identified among the participants?

### **Data Collection and Analysis**

The Categorizing and Coding Procedure (Stringer, 2007) was utilized in the present study to analyze participant comments from each meeting as well as from all exit interviews. Stringer (2007) notes that the "...major task of this procedure is to identify

the significant features and elements that make up the experience and perception of people involved in the study” (p. 98). One key element in Stringer’s method of analysis is the use of the verbatim principle, where data is presented that describes the subjects’ experiences through terms participants utilized during the sessions in an effort to develop an accurate account of their responses. When implementing this procedure, participant comments are to be reviewed to choose the most pertinent information to analyze (Stringer, 2007). Next, “...the discrete ideas, concepts, events, and experiences... incorporated into their description[s]...” should be identified by highlighting “...word[s],... phrase[s], ...sentence[s],... or a sequence of sentences...” within a typed manuscript from the audio recordings (Stringer, 2007, p. 100). Similar word strings and ideas should be grouped together, and themes should emerge based upon these similarities.

The procedure was used during the FROSH! Program to identify themes and sub-themes within the verbatim transcripts from all meetings, and it was also used to identify commonalities among participants’ responses across each question from the exit interviews. Meetings were audio recorded by the principle investigator who transcribed the sessions within two days after each meeting had ended. Once transcripts had been created, the facilitator coded manifest or visible surface content to form sub-themes (Riddick & Russell, 2008). During this process, key words, phrases, word strings, and sentences were identified within the transcripts and were then grouped together to form units of meaning (or sub-themes). These items were highlighted on a Microsoft Word document, grouped by similarity to form sub-themes on another Word document, and

then grouped a second time to create overarching themes based upon emerging patterns of similar topics and those themes found in former studies (see the themes and sub-themes section in Chapter 4 to view results). Themes were created throughout the course of the FROSH! Program when transcripts were analyzed, and comments from each meeting were added to the themes that previously existed or contributed to new ones that emerged. The transcripts were analyzed and coded within the week that each meeting was held, completing all categorizing and coding procedures before subsequent meetings took place.

Categorizing and coding was also used to interpret data from exit interviews across questions, but themes and sub-themes were not reported. Instead, similar comments were grouped together and reported in the results section of the final report.

Though the present study is qualitative in nature, quantitative data analysis was utilized to define the results for the Perceived Stress Scale. The overall stress level for each respondent was assessed by calculating the summation of points from all questions on the scale. For each question, the points assigned to each response were reversed (i.e. 0=4, 1=3, 2=2, 3=1, 4=0), except for several positive questions where the points granted matched the score itself (i.e. 0=0, 1=1, 2=2, 3=3, 4=4). A mean score was taken from all the respondents' overall perceived stress values to identify whether their stress had significantly changed by the conclusion of the program.

Quantitative data was also analyzed from the FROSH! Stress Survey which was administered during the second program session (See Figure A-6). Face validity was utilized to estimate the accuracy of the scale when measuring perceived levels of stress

for freshmen students, and inter-item reliability was also calculated, producing a cronbach alpha coefficient of .79 when one item was extracted.

The mean scores of the responses from the Exit Interview Questionnaire were analyzed to identify whether participants felt strongly, either positively or negatively, about a particular element of the program, and also to measure the extent to which the program was valuable to them.

The stress levels of participants were thought to be dependent upon the effectiveness of the FROSH! program, and the success of the wellness program was expected to be a reflection of the modified adaptable wellness model originally created by McGill (1986) as well an iteration of the action research model constructed by Stringer (2007).

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

#### **Themes and Sub-themes**

The Coding and Categorizing Procedure (Stringer, 2007) was used to identify themes and sub-themes within the verbatim transcripts from all meetings. The principle investigator identified word strings, key words and key phrases in the transcripts while grouping comments (units of meaning) together when a common pattern was identified. Units of meaning were highlighted on a Microsoft Word document while being grouped by similarity on another Word document, eventually forming sub-themes which were then analyzed and grouped to create overarching themes based upon emerging patterns of sub-themes and related comments. The transcripts were analyzed and coded within the week that each meeting was held, completing all categorizing and coding procedures before subsequent meetings took place.

Based upon content analysis, the following themes and sub-themes emerged. The most relevant participant comments related to the themes were chosen to be discussed in paragraphs which follow.

Theme 1: Academic-related Stress

Sub-theme 1: Management of academic workload

Sub-theme 2: Professors

Theme 2: Interpersonal-related Stress

Sub-theme 1: Family

Theme 3: Stress related to money

Sub-theme 1: Scholarships

Theme 4: Stress related to sleep

Theme 5: Physical Activity as a Stress Reliever

Sub-theme 1: Zumba

### **Theme 1: Academic-related Stress**

Participants commented on their stress related to academics throughout the program. Three out of the eight participants mentioned how the constant amount of class work they had to complete on a regular basis was a stress. When asked what made the participants nervous as UT students, two of them agreed that they were nervous because of all the work that needed to be done regularly that overwhelmed them. The same two participants felt as though a future challenge for freshman year would be a heavier course workload than they were accustomed to. One participant said that she was mostly stressed over getting homework assignments and English papers which “...set something off in [her]... brain [to make her think], ‘oh man, there’s another thing I have to do now’.” A final participant commented on how the class work for engineering was constant, and she never felt like she had a break.

It became apparent that some students struggled to manage their academic workload based upon the former meeting comments, as well as those which follow. Participants talked about how homework and tests were stressful for them. When participants were asked if there was anything over the next several weeks they felt was going to be challenging, three of them mentioned the number of pages they had to write for papers. One participant said she was “...mostly stressed... because of [how involved

her English papers were, and]... homework assignments” also stressed her out. Tests were also a common area of concern during the program. Four out of the eight participants talked about how testing brought them stress. A participant shared with the FROSH! Program members how her small group “...talked a lot about tests and how they’re stressful for a lot of reasons.” Two FROSH! members agreed that finals made them nervous as UT students because their “... faces...[were] constantly in a book” to prepare for the tests.

The second sub-theme that emerged was the stress that was brought upon participants by their professors. Three out of the eight participants mentioned how professors brought them stress. One commented on how “foreign teachers [were]... not helping the stress deal,” while the two others forecasted that professors would contribute to challenges ahead during their freshman year.

## **Theme 2: Interpersonal-related Stress**

Four out of the eight FROSH! participants found family matters stressful. When working in small groups, two of the participants stated that parents stress them out the most because they call too much. Another member said she anticipated her trip home for Thanksgiving would be “...stressful, because all the family expect[ed her] to see them,” and two other participants found their trips home to be stressful. One of the students said that she “...didn’t get to sleep in at all over break” because her family would wake her up to cook, do work, or clean, and she commented on how “it was terrible.” The other participant claimed that her mom made her shop on black Friday as perceived which was

irritating to her. When asked if there was anything that made the participants feel nervous as a UT student, two members proclaimed that their parents brought them stress.

### **Theme 3: Stress related to money**

Five out of the eight participants found monies to bring them stress. One student commented on how “finances stress [him]... out a lot, especially because [his]... parents complain” that he spends money on expensive food. Two participants said that not having enough money made them nervous as University of Tennessee students. Another member commented on how she was stressed when her boyfriend didn’t have a job since she was paying for everything, which became a large portion of her overall stress, and a great amount of her stress related to money. Two participants stated that not having enough money, spending too much, or spending until there was nothing left and then spending more stressed them out the most.

One sub-theme identified was the stress brought upon students from worrying about losing their scholarships. While in small groups, three students talked about their concerns:

We mainly talked about how money is a big stress for us and how we have scholarships where the money [we receive] is dependent upon the grades we’re getting, so it’s stressful because [I am] going to lose all my scholarships if I don’t make good grades...

#### **Theme 4: Stress related to sleep**

Sleep appeared to be a source of stress and stress relief for participants. One participant stated that she felt like she was getting enough sleep during the week, but on the weekends all she wanted to do is sleep, and she commented on how it was hard to go through this cycle. Another said "...it really sucked" when she would sit through one of her classes half asleep because she hadn't gotten enough sleep since she was up late doing homework while having to wake up early for sport conditioning and another commitment. A third student said that she didn't get to sleep in at all over the Thanksgiving break, and "it was terrible." Lastly, one student said she was unable to relax before her test because of staying up all night to study.

However, there were others who found sleeping to be a stress reliever. One participant said that sleeping when home for Thanksgiving break was the "...number one stress reliever for ...[her]." When the group was asked how they were going to deal with their finals week since they appeared to be nervous about it, two participants said they were going to go home and sleep once the week was over.

#### **Theme 5: Physical activity as a stress reliever**

Zumba was the sub-theme within the last thematic category. Seven out of the eight participants enjoyed participating in the Zumba classes which were held twice during the program, and various comments were made during the meetings regarding the activity.

One participant said that Zumba "[made her]... happy, really got [her]... blood flowing, and [she] really liked it because it was fun." She commented on how dancing

was one way to relieve stress as well, and how she felt like she needed to exercise after a long weekend of studying which was why she looked forward to attending the program session for Zumba that week.

Two participants made various comments on how Zumba was a prime way to relieve stress for freshmen. The following is a comment that was made during the last session from one member within a small group:

What strategies can you think of that would help lower the high stress levels you or someone may experience in one or more of the above situations? To avoid the Freshman 15, we suggest Zumba. To help lower your nervousness as a UT Freshman, we suggest Zumba. Ways to... [cope with challenges for freshman year would be to] stay on top of things and ... once in a while... get away [by participating in] Zumba.

All participants had not taken Zumba before, and they requested to have the facilitator teach the class on two occasions.

**R1: Will participants demonstrate behavioral changes during the FROSH! Program that are perceived to lower their stress levels?**

As a resultant of participating in the FROSH! Program, seven out of eight participants said they experienced a change in their stress levels, and six felt they could better manage future stresses because of behavior changes they made during the duration of the program as well as what they learned from participating.

The perceived stress levels of participants were assessed by computing pre- and post- data from the Perceived Stress Scale. All participants' perceived stress scores had

lowered by the conclusion of the program (see Table A-4 for a list of participants' pre- and post- scores).

Participants commented on how their stress levels had lowered because of the behavioral changes they made during the FROSH! Program while in the Exit Interviews. Seven participants said that their stress levels had changed since the beginning of the program, and six of those individuals said that their stress levels had lowered.

Participants were asked whether their stress levels had changed since the beginning of the program during the exit interview, and one participant commented on how the program helped her prioritize her time:

At the beginning of the year, before this, I would like put my homework aside and be like, Oh I can do this later, and I'd go hang out with friends and stuff and then I'd just ya know, wait and do my homework. Now I figure it's a bad idea, and after this I thought, oh no I can't, I've got homework to do, ya know, or we can get together and do homework instead of just watching TV or going out, so yes, it's lowered my stress, it's awesome.

Another participant stated that his stress levels had lowered during the exit interview, and he stated, "I just stress about money less because I thought about it and I took steps to lower my stress levels." The same participant commented on the extent that his lowered stress was a result of participating in the program:

I think it (lowered stress) was certainly a result of participating, because if I hadn't participated in the study then I wouldn't have really thought about trying

to take steps to make the stress go away. I wasn't making any progress in terms of lowering my stress, it was just stressful.

Five participants felt that their stress was lowered by thinking more about the issue. Participants thought the following reasons helped them to lower their stress levels: thinking about their stress in general, thinking about ways to lower their stress levels on a daily basis, thinking about their priorities and organize them, thinking about what they're doing currently and what they're doing right, or thinking about taking steps to alleviate their stress.

Seven out of eight participants agreed that the program will help them more successfully manage the stress in their life because of what they learned during the program. There were varying reasons as to why they felt this way. Two participants found that the program helped them learn how to prioritize. As one participant stated, "organizing and prioritizing, big, this is what this program did, organization and prioritizing," while the other said that "making a list of things to do" was helpful because "...when you look at everything comparatively you're like, oh, that's not such a big deal, and you don't have to worry that much about it." A third participant noted,

I think that a lot of what we talked about helped me to put everything into perspective and think more about things that stress me out and how to handle them, and different resources I can go to on campus, and just people around me in general.

Another said, "I am going to get in gear next semester, start out early doing these things, and make sure I keep it up." One thought that the program taught him how to control his

stress, but he felt that if he were actually able to control the stress he has, then it would help him better manage his stress. Another participant said that the financial resources that were distributed during the program had helped her. The seventh participant said that she is going to try to continue to write her goals down, and that the program helped her figure out that she does not want to major in engineering, because of talking to some of the engineering students in the group. Lastly, the eighth group member replied,

...the program kinda teaches you a method or technique for managing your stress by thinking about it once a week,... observing... your stress level, [and thinking of]... the causes and how can you eliminate those causes. Learning to do that helps for the future.

**R2: What program elements were perceived to have the greatest value by participants?**

Participants found goal setting to be rewarding. When asked if their stress levels had changed since the beginning of the program, one participant replied that “they have lowered to some extent because I’m really scatterbrained most of the time, and having to write down goals I need to accomplish really helps me out.” Another participant said, “I actually did the things I wrote down, [and] writing them down was helpful.” Writing goals down appeared to help another participant:

I’m definitely a person that when I write something down I need to do it or I’m going to be really ashamed of myself, so thinking about it in the beginning of the week helped me to do things later on in the week.

Furthermore, a third participant made the following comment:

With the weekly goals, I knew what I needed to get done, when I needed to get it done, and it was like, this first, this first, this first, and that was good stuff. I liked it. I'm gonna keep it up too.

Results from the Exit Interview Questionnaire provided evidence that the participants were positively impacted from the study. The mean score for the question "I feel the FROSH! program was valuable" was 4.5 out of 5. Also, the statement, "I will be able to more successfully manage the stress in my life because of the program," produced a mean of 4 as well. A mean score of 4.375 was generated for the statement, "setting goals helped to lower my stress levels" as well. All participants mentioned that it was helpful to set weekly goals in an effort to lower their levels of stress during their exit interview sessions. Two participants felt that writing down their goals was helpful. Participants mentioned that setting goals helped them to prioritize tasks, and thinking about the tasks that they needed to complete in general was helpful. One participant commented on how "...finding out about Zumba was really helpful..." and she planned on attending the Zumba classes the following semester. Also, another participant said that "...it was the first time [she]... had ever come in... the TRECS, so it made [her]... want to come back."

Three participants found the logs to be useful during the program. One participant claimed, "I used them the majority of the time just to recap how my stress levels were changing and what I was doing right in order to keep my head even and stuff," and she agreed that they were useful. The logs helped participants see what they needed to accomplish for that week which was helpful toward reaching their goals.

The exit interview questionnaire produced a mean score of 4.5 for whether the participants felt that the program was valuable. Furthermore, a mean score of 4 was produced for whether the participants will be able to more successfully manage the stress in their life because of the program.

A participant commented on how the program helped her to organize and prioritize:

Organization and prioritizing. I knew what I needed to get done and when I needed to get it done. It just helps a lot. I know procrastination will still be there, just a little bit, but not as much because I'll know what I need to get done. When asked what the most valuable aspect of the program was, one student said:

Being able to hear what people said about what's stressing them out [was most valuable] because talking about what I'm feeling helps me to realize what's stressing me out, cause sometimes I can't really tell if I don't talk it out, so, that was helpful.

Two participants found Zumba to be particularly useful to lower their levels of stress. When thinking of strategies to help lower high stress levels for themselves or for other freshmen students, two participants felt that Zumba would be useful to lower stress related to the "Freshmen 15" theory, nervousness, and it would help them stay on top of things. They claimed that "Zumba is the answer to a lot of things," and "Zumba's the answer to life."

### **R3: What common stressors were identified among the participants?**

Participants identified situations related to academics as being major stressors in their lives. Stress related to issues with parents was also evident during the meetings.

The freshmen identified homework, tests, scholarships, professors, papers, too much work, finals, procrastinating, and academics in general as stressors in their lives. Participants mentioned stressful events related to the above items during the meetings, and all were classified under academics for all intensive purposes (see themes and subthemes Chapter 4).

The group completed an activity where the students ranked their overall stress levels since they started their first semester at UT related to the items they mentioned which seemed to bring them stress. Academics (related to homework assignments, their major, constant work, online homework, changing majors, maintaining a certain GPA, grades and foreign professors) had the highest mean score (3.6) when compared to the other items (see Table A-3). Furthermore, when the students ranked all the items from greatest to least sources of stress, academics was listed as the number one stressor on the list (see Figure A-17).

Similarly, other stressful events seemed to emerge from interpersonal experiences involving mostly family (see themes and subthemes in Chapter 4). The category “People in my life” was ranked fourth along with money and anxiety when participants ranked items that stressed them out from most to least (see Figure A-19).

Data gathered from the study supports previous literature on common stressors that freshmen experience. Two themes that emerged during the meeting sessions were

stress related to academics and interpersonal relationships. Former studies have also shown that first year students experience "...academic... [and] intrapersonal demands" which cause stress for freshmen (Miczo et al., 2006, p. 99). FROSH! participants spoke about stressful encounters with their parents, whether it be from when they visited home during the Thanksgiving holiday, or when the parents expressed their expectations related to achieving a certain GPA or pursuing a particular major. Other intrapersonal relationships that seemed to strain participants were foreign professors who were perceived to lack effective communication skills, and the pressure placed on students from professors during exam time. Numerous studies listed expectations as a major stressor for college students (Cushman & West, 2006; Dyson & Renk, 2006; Miczo et al., 2006). Some students were concerned with their course load and test taking strategies, so perhaps a wellness program on how to manage one's course load as a freshman would be beneficial in the future.

Students from the study were concerned with not having enough time in the day to get everything done. This supports the findings from Cushman and West's study (2006) which found that first year students felt coursework accumulated because of time constraints. FROSH! Participants received resources on time management during the program which hopefully helped them manage their time better to accomplish everything that they needed to get done. Also, writing down their goals helped participants manage their time during the week to fit in the items that they wanted to accomplish. Future programs should provide opportunities for freshmen to evaluate how they spend their

time, and think of how they would ideally like to spend their time, then create an action plan to reach their goals.

### **FROSH! Stress Survey**

A survey constructed by the principle investigator (see Figure A-6 to view the FROSH! Stress Survey) was found to have significant reliability, depending on the items that were included in the scale. The scale was not tested before it was utilized in the present study. Based on the current findings, the alpha coefficient was .794 for all items in the scale included but one which was extracted (see Table A-1). The reliability of the instrument significantly improves if item 8, stress related to monies (spending money on gas, credit card use, spending money all at once when I get paid, needing to get a job to make money), is extracted from the items. Because of this, the scale may well represent the stresses that the group of freshmen students experienced as a whole.

Face and content validity were utilized to identify whether the FROSH! Stress Survey accurately measured the shared sources of stress that a group of freshmen students have at the University of Tennessee. The instrument appeared to measure those stresses that FROSH! Participants had which they spoke of during the first meeting. Because the items in the survey were mentioned by two or more participants, they were chosen to be included in the instrument. Furthermore, previous literature states that freshmen experience stress from academics, interpersonal relationships, and daily demands of living, all which are incorporated in the FROSH! Stress Survey (Miczo et al., 2006). Procrastinating, anxiety and cafeteria food were three items, however, that were not identified as stressors of freshmen students in the literature which was reviewed. It is

possible that the instrument did not accurately measure all the common sources of stress that participants experience since the survey was created based upon data collected from one meeting session. Though it appears that many items in the survey are common types of stressors for freshmen in general as supported by past literature, other sources of stress may exist among the FROSH! participants that were not included in the survey.

Furthermore, it was discovered that the items that most stressed the students were academics (mean of 3.6, standard deviation of .516), procrastinating (mean of 3.1, standard deviation of .994), and time (mean of 3.01, standard deviation of .762), while those that stressed them least were the large number of people at the University of Tennessee (mean of 1.2, standard deviation of .422) and parking experiences (mean of 1.2, standard deviation of .632). See Table A-3 for a list of mean scores related to each item from the FROSH! Stress Survey.

### **Ranking of Possible Stressful Items**

Participants completed an activity where the students ranked their overall stress levels since they started their first semester at the University of Tennessee related to the items they mentioned during the first meeting. The students were asked if the items represented stress they experienced, and to add any other items that weren't already included. One participant suggested adding "lack of time" to the list, and everyone else agreed. See Figure A-17 for a list of the ranked items.

FROSH! Participants listed academics as the number one stressor, while placing procrastinating as the second item, and lack of time as the third. Five out of the eight participants mentioned a stressful experience related to academics during the first

meeting such as maintaining a high GPA, having frustrations completing homework assignments, and struggling to handle the amount of course work given to the students. Refer to Figure A-18 to see a list of responses related to academics that brought participants stress.

One student commented on how he had a problem procrastinating during the first meeting, but many of the participants felt stressed often when waiting until the last minute to do things. This is evident in the FROSH! Stress Survey results, where procrastinating received a 3.1 out of 4 for the mean score. During one of the small group sessions, two group members felt that procrastinating stressed them out most because they were not able to manage and organize their time well.

The third ranked item was lack of time. This item was added at the beginning of the activity and was not discussed during the first meeting, but all participants agreed that it was a stress for them. Two students talked in their small groups about the one item which stressed them out most, namely, how there was not enough time in the day. Many students seemed to be stressed about how to effectively manage their time, while others seemed to have good methods of time management, and several students shared their strategies for managing time. Participants appreciated the ideas and the resources which were shared with them during the program.

The following categories were ranked fourth on the list: people in my life, anxiety, and money. Participants could not agree on a single fourth ranked item, so they chose to include all three in the list.

Parking experiences and the large number of people at UT were ranked last on the list. One of the reasons why this may have been the case was because the majority of participants did not have cars on campus, and most had gotten used to the amount of people by the time the program had commenced. Those who had parking concerns felt very strongly about the issue, however. Overall, both topics did not appear to stress many participants.

Several students commented on how many of the elements in the chart affected one another. One student stated that "...the majority [of items]... can be classified under academics, 'cause... if you didn't have hard classes, then you wouldn't have procrastinating, and you wouldn't be losing sleep because you're procrastinating, and you wouldn't be worried about your time." Another agreed, saying, "yeah, that branches everything off of academics... pretty much: procrastination, sleep, anxiety is a big one... and time." In the future, it may be useful to organize the items in a concept map format to connect those items that participants feel affect one another. This would help participants to see the larger picture and how many elements can affect one's stress.

## **Discussion**

The purpose of this study was to examine the effectiveness of two models, namely an adaptable wellness programming model and an action research model, when creating and administering a stress management initiative for campus recreation settings that will have a positive effect on freshmen participants at the University of Tennessee. All first semester freshmen at the University of Tennessee were sent an e-mail regarding the opportunity to participate in the FROSH! (FResh Out of Stress, & Healthy!) Program,

and a convenience sample was utilized to select participants for the study. Program sessions were held on five consecutive Monday evenings, and the meetings lasted for approximately one hour. Thirteen students participated in the program, but only eight attended most sessions and completed an exit interview. During the program, the principal investigator facilitated discussions related to stress that the students experienced, gave participants resources related to stress management, and also organized small group activities for participants to work together to complete. Students were able to change the agendas based upon what they wanted to do week to week. All sessions were tape recorded and transcribed, as well as the exit interviews.

Ernest Stringer's Action Research Model (2007) was utilized as the foundation for the program, and results from the exit interviews and exit interview questionnaires demonstrate the success of the FROSH! Program to help eight freshmen students lower their levels of stress. The participants found various aspects of the program to be beneficial, primarily the act of setting weekly goals, receiving useful resources from the facilitator, participating in Zumba, and talking to others who were also experiencing stress. Seven of the eight participants felt their stress had lowered by the conclusion of the program.

The Revised Adaptable Wellness Programming Model modified from Susan McGill's model (1986) was perceived to be successful in organizing and creating the FROSH! Program. The majority of the elements included in the model were taken from McGill's original work, but the marketing and collaborating section was a significant addition to the former model.

## **Stringer's Action Research Model**

### **Look, think, act.**

Various aspects of Stringer's Look, Think, Act model may have had a positive impact on FROSH! Program participants. In the Look phase, the six question framework was used to help participants identify the source of their stress. Similarly, Mary Agnello used the model within her social studies course to create a class syllabus, and found the questions to be a useful guide (Agnello, 2007). In an effort to identify the "...most pressing educational issues," Agnello had students complete two questionnaires, one consisting of an open-ended question ("What are the most important educational issues in our society at the present?"), and another to find what students learned during the course (Agnello, 2007, p. 219). One of the questions in the second questionnaire referred to whether participants will apply what they learned for future teaching. This question was similar to the question in the FROSH! Exit Interview, which asked participants if they believed they would be able to more successfully manage the stress in their life because of what they learned during the program. Students aspiring to become teachers from Agnello's class commented on how they will teach differently in the future because of what they learned during the program (2007). Only one student said that the class material would not influence his teaching techniques. Lastly, students worked in groups in the social studies class to share their comments from one of the questionnaires (Agnello, 2007). Similarly, participants of the FROSH! Program met in small groups to discuss the responses from one of the log sheets. Stringer emphasizes the importance of working in small groups within his action research model, and one of the elements of

Agnello's class that students found most meaningful was learning their peer's insights, discussing matters openly with one another, and having a high level of participation from the students (Agnello, 2007).

During the Think phase, both the current study and Agnello's study utilized similar aspects of Stringer's Action Research Model. Stringer discusses how participants enjoy the ability to be involved in the planning process of activities and meeting agendas (Stringer, 2007). In the social studies class, the teacher "...worked with the students, sought their input, and responded to their questions with more data and assignments" (Agnello, 2007, p. 218). Agnello observed the students' enthusiasm and excitement from how prepared they were for the classes. In the FROSH! Meetings, participants had the opportunity to tell the facilitator which activities they would like to participate in, and the facilitator also provided them with resources related to subjects they wanted to learn more about (namely finances and time management). Participants appeared to be excited about the Zumba classes and planned activities as well. Though a method for data analysis was not included in Agnello's article, the teacher read journal entries from the students and made observations during class sessions (Agnello, 2007). It is recommended that future wellness programs have participants complete journals or logs for the benefit of the participants as well as the program facilitator. The three FROSH! participants who used the logs in the present study found them to be helpful. Also, one student commented on how participants should be held accountable for completing the logs.

The Act phase was also utilized in both studies. Stringer emphasizes the importance of prioritizing issues to be able to identify those that should be acted on first (Stringer, 2007). Agnello had her students identify the educational issues that appeared to be of most concern in Texas, and she constructed a list of 59 problems that were most pressing from the students' responses (Agnello, 2007). One of the more dedicated students decided to improve the school funding formula in an effort to convince a representative to change a public policy, an issue of concern (Agnello, 2007). Participants within the FROSH! Program ranked those items that were found to bring them stress, identifying those sources of stress that appeared to be of most concern to them.

Not only is it important to choose which items will be acted upon, but it is also important to continually assess one's progress when making changes and setting goals. In Agnello's study, the teacher found that "continual evaluation of lessons as beneficial, redundant, or useless to promote the serious work and mission of social studies leads to distilling and streamlining of how to address classroom and social needs efficiently" (Agnello, 2007, p. 222). Her action research-based methods of allowing participants to comment on the class syllabus and lesson plans allowed students to engage in decision-making, and she was able to meet the students' needs. In the FROSH! Program, participants engaged in two evaluations of the program: one in the middle of the program, and one at the conclusion of the program. It is recommended that future programmers incorporate multiple evaluations during the course of the program in order to meet the needs of participants.

### **Practical application.**

In an effort to merge theory and practice as well as establish credibility for wellness programs, fitness and wellness professionals should consider utilizing models as the basis for target programs. Stringer's Action Research Model is one such framework that has proven to be successful at helping freshmen make behavior changes to lessen their levels of stress, as confirmed by the present's study's findings.

One of the most important elements in Stringer's model appeared to be the goal-setting component which helped students to measure their success week to week in terms of the activities they were or were not engaging in that would contribute to lowering their levels of stress. It also was helpful to have a facilitator who was supportive and allowed the students to engage in the process of deciding upon meeting activities.

Withstanding the growing demand for wellness programs in campus recreation centers, and considering how wellness programming is one of the top five trends in recreational sports for the 21<sup>st</sup> century, university recreation centers should consider implementing similar stress management programs for students (Stier et. al, 2005).

### **The Revised Wellness Model Implementation System**

The Revised Adaptable Wellness Programming Model successfully created a stress management program that could be utilized in a campus recreation center. Susan McGill's original framework included a solid structure to work upon, consisting of a thorough and detailed process to create a wellness program.

The marketing and collaboration element, as well as the planning and evaluation phases were very important in the revised model. The FROSH! Wellness Committee was

extremely useful when generating ideas for marketing techniques on campus, as well as creating goals for the program. Not only did the committee suggest the FROSH! Program be considered as a freshman course at the University of Tennessee, but two of the participants recommended the program be offered as a First Years Studies course also. Current research identifies marketing efforts on campus to be of serious concern for campus recreation programs, and programmers should identify ways to promote their programs to yield successful levels of participation (Schneider et al., 2007).

The evaluation session during the third meeting was useful to allow participants to voice their opinions, and a lot of positive feedback was received within that session. The exit interviews as well as the exit interview questionnaire were both imperative to discover the participants' views related to action research methods and program success.

## **CHAPTER 5**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **Conclusion**

Evidence from the exit interview sessions suggests that many of the participants' stress levels had lowered at the conclusion of the program. A larger sample size is needed to compare the perceived stress scores from the Perceived Stress Scale to detect any changes in stress levels from before and after the program.

The program appeared to be successful at changing the behaviors of several participants, leading to lower levels of stress. Several FROSH! members were able to change their behaviors by rearranging their priorities and managing their time better. Setting goals and evaluating their progress week to week seemed to help them think more about the issues and gain control of their situations. Participants felt good about sharing their accomplishments with the group. Some participants commented on how they plan to continue to attend Zumba classes, since the class seemed to be a very enjoyable experience.

The program seemed to positively impact all participants, and participants also found the program to be valuable. Seven out of eight participants agreed that the program will help them more successfully manage the stress in their life because of what they learned during the program, and there were other positive responses from participants which were made during the exit interviews explaining the valuable components of the program. Furthermore, all participants felt that the FROSH! Program would be beneficial to other freshmen students in the future.

The action research model utilized for the study appeared to successfully engage all participants, create a meaningful experience for all those in the program, and make people feel comfortable talking to one another about their thoughts and goals related to stress. Similarly, the Revised Adaptable Wellness Model was successful in creating a stress management program for freshmen students, particularly with the addition of marketing and collaborating techniques. It is recommended that the models be utilized for wellness programming in campus recreation centers in the future.

### **Recommendations**

There are various recommendations to improve the delivery of the current Action Research Model. Charts should be used during all sessions to record information from small group discussions. This would help to clarify information and help others to absorb the information. Furthermore, the facilitator should maintain communication with the group outside of the program sessions. It would be beneficial to create a Facebook group for all FROSH! Members to join so participants can talk to one another during the week, and the facilitator can maintain communication with the group between meetings. An action plan should be completed by all participants to systematically plan how they are going to reach their goals. Lastly, in order to prevent skewed responses based upon social desirability for the post-test, the principle investigator should arrange for another person to administer the instrument to participants, or consider electronically administering it instead. A control group could also be chosen to complete a pre- and post- test to compare their results with participants' scores, justifying whether the program had an effect on participants' stress levels.

One of the elements that should be included in future wellness initiatives on campus is a needs assessment which should be distributed to the target population to gather data on the needs and desires of the group. McGill's model has not been utilized until now, and there is a lack of theoretical models for wellness programming within campus recreation centers to date. Practitioners in the field should consider merging theory and practice when organizing programs, especially with the heightened emphasis on benchmarking and outcomes in the recreation field.

It is recommended to test the effectiveness of other models to implement a stress management program at campus recreation centers for future studies. Researchers should administer two programs, one based upon action research and another based upon a second method of programming, to compare the successes of both with two groups of freshmen students. Participants' perceived stress levels should be assessed before and after the programs to identify whether their stress had changed at the conclusion of the programs. A control group would also be useful in identifying whether the change in stress levels was a direct resultant of participating in the programs.

Researchers may also consider utilizing a different iteration of the action research model to implement stress management programs. Craig Mertler (2006) created a model which illustrates the cyclical nature of action research while graphically portraying all the steps involved in the process. See Figure A-18 to view Mertler's Action Research Model.

## **Threats**

Various threats exist for the validity and reliability of the study. Attrition and selection bias were both threats to the internal validity of the study since those who volunteered were not bound to commit to the program, and participants may have shared similar characteristics, skewing the data (Riddick & Russell, 2008). Other threats exist for the external validity of the study. The Hawthorne Effect may have skewed the results, as the subjects could have expected to lower their stress levels from participating in the program, when in actuality, their stress levels may be similar to what they were at the beginning of the program. Several threats to reliability exist. In order to test the reliability of the Perceived Stress Scale for the freshmen participants, more individuals would need to take the instrument to produce a better indication of its strength. Also, respondents may have been "... tired, anxious, and/or [may have] misinterpret[ed] or guess[ed] at questions," skewing the data collected for the Perceived Stress Scale, Exit Interview, and Exit Interview Questionnaire (Riddick & Russell, 2008, p. 181). Inter-rater reliability should be used in future studies to compare themes and subthemes from meeting transcripts from two or more researchers. Lastly, the only forms of validity that were used to test the strength of the instruments in this study were face and construct validity. A jury opinion would have increased the strength of validity for the FROSH! Stress Survey and should be considered for future studies. Content, criterion, and convergent validity should be utilized in the future to establish the validity of the Perceived Stress Scale as well.

## **Limitations**

One of the limitations and delimitations of the study is that generalizations from the results of the FROSH program cannot be made to the freshmen population because the unit of analysis is the individual and not the group. It would be helpful to use the data gathered from the needs assessment to create the short and long term goals for wellness programs, and it is suggested that the wellness committee consider the implications of such data for future programming. Wellness practitioners could expand upon action research methods used in this study and utilize the Community Wellness Model created by Prilleltensky in 2001 for health promotion programming. The lack of literature on wellness programming does not contribute to the body of knowledge for recreation professionals, and serves as a limitation for the study. Another limitation was the small sample size ( $n=8$ ) which limited the strength of reliability from the Perceived Stress Scale and FROSH! Stress Survey. The more participants involved in the study would yield more reliable results, perhaps producing data which could more accurately determine whether the stress levels of participants had changed by the conclusion of the program. Furthermore, the principle investigator had all participants complete the post-test in her presence, and social desirability may have influenced the respondents' scores.

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## **APPENDIX**

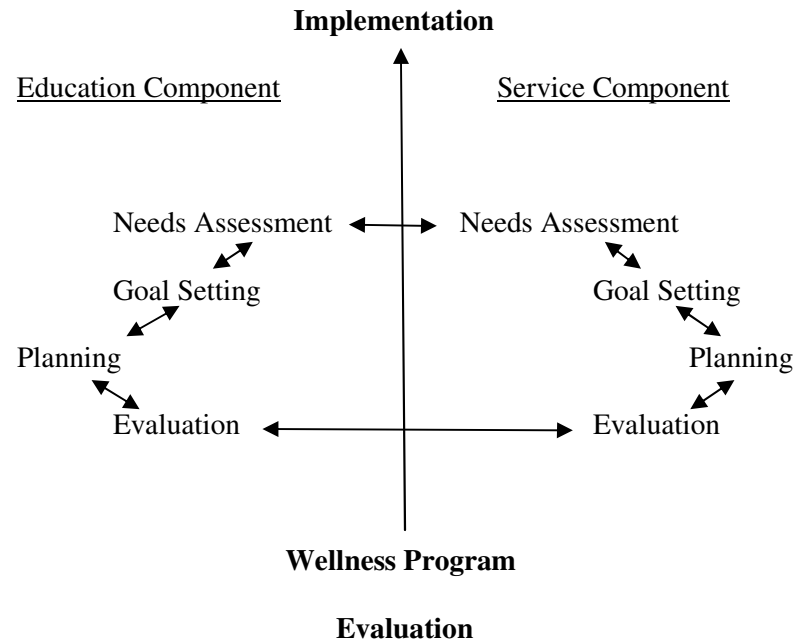


Figure A-1. A Wellness Program Implementation System (McGill, 1989). This figure illustrates the Adaptable Wellness Model that Susan McGill created for Small Liberal Arts Colleges.

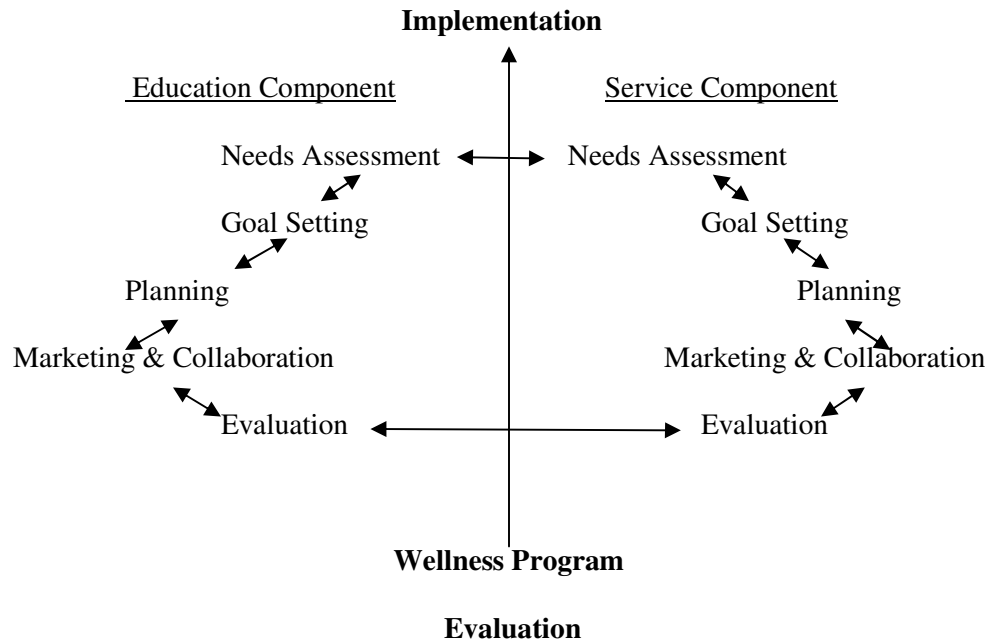


Figure A-2. Revised Wellness Model Implementation System. This figure illustrates the modified Adaptable Wellness Program Model based upon Susan McGill's framework which was utilized in the present study.

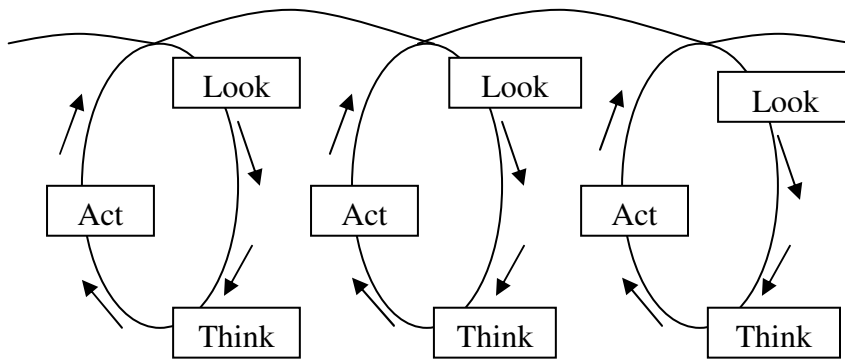


Figure A-3. Stringer's Action Research Model: Look, Think, Act. This figure illustrates Stringer's Action Research Model which was utilized in the present study.

## Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them, and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

For each question choose from the following alternatives:

- 0. Never
- 1. Almost never
- 2. Sometimes
- 3. Fairly often
- 4. Very often

- \_\_\_1. In the last month, how often have you been upset because of something that happened unexpectedly?
  - \_\_\_2. In the last month, how often have you felt that you were unable to control the important things in your life?
  - \_\_\_3. In the last month, how often have you felt nervous and "stressed"?
  - \_\_\_4. In the last month, how often have you dealt successfully with irritating life hassles?
  - \_\_\_5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?
  - \_\_\_6. In the last month, how often have you felt confident about your ability to handle your personal problems?
  - \_\_\_7. In the last month, how often have you felt that things were going your way?
  - \_\_\_8. In the last month, how often have you found that you could not cope with all the things that you had to do?
  - \_\_\_9. In the last month, how often have you been able to control irritations in your life?
  - \_\_\_10. In the last month, how often have you felt that you were on top of things?
  - \_\_\_11. In the last month, how often have you been angered because of things that happened that were outside of your control?
  - \_\_\_12. In the last month, how often have you found yourself thinking about things that you have to accomplish?
  - \_\_\_13. In the last month, how often have you been able to control the way you spend your time?
  - \_\_\_14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
- 

**Thank you for your time!**

Figure A-4. Perceived Stress Scale. This figure illustrates the instrument that was used for the pre- and post- test for FROSH! participants.

### **Agenda: Action Research Group Session 1**

1. Welcome everyone and review broad agenda **5 minutes**
  - a. *Purpose of meeting:* Complete informed consent form, share the purpose and goals of the FROSH! program that were discussed by the FROSH! Wellness Committee, agree on ground rules for program
  - b. The researcher will tell the group a little bit about herself
    - i. Where she completed her undergraduate degree; what she's studying at UT; her interest in wellness programming as a fitness graduate assistant for RecSports; what she hopes to do with her degree
2. Ice breaker: Question Ball game (Everyone will stand in a circle and toss a beach ball that has questions written on the outside of the ball. When someone catches the ball, he/she will answer the question which the right thumb is on. This will help to ease any tension they are experiencing by laughing a little and getting to know one another a little better. Each person will also say where he/she is from when he/she catches the ball.) **5 minutes**
3. Complete informed consent form **10 minutes**
  - a. Each participant receives the form, and the researcher reads the form to the group.
  - b. All participants will sign the form
4. Randomly assign the alpha-numeric codes **5 minutes**
  - a. Each participant will choose code by picking out one piece of paper from a hat that has a code on it. This will be used for identification purposes throughout the program.
  - b. Explain procedures for talking in group (say your code before commenting)
5. Share purpose and goals of the program with the group **5 minutes**
6. Agree on ground rules for the program **10 minutes**
  - a. Explain to the group that it is important to make each person feel comfortable sharing his/her opinions and viewpoints with the group. What makes you feel comfortable sharing your opinions? How will we accomplish this?
  - b. Participants should be respectful and not judge others in the group.
7. Questioning (all questions will be individually written on large sheets of poster board and presented to the group when asked)
  - a. What are your thoughts on UT so far? **5 minutes**
  - b. Why are you here to participate in the study? **5 minutes**
  - c. What do you hope to gain from this experience? **5 minutes**
  - d. Describe a typical day for you at UT. **5 minutes**

Figure A-5. FROSH! Meeting Agendas. This figure illustrates the revised meeting agendas which were agreed upon by FROSH! participants.

8. Researcher will conclude the meeting by ... **5 minutes**
  - i. Asking the group what food they would like to have at the meeting for the following week
  - ii. Inform them of my ideas for the agenda for next meeting, and ask them whether they think it will be beneficial for them. If needed, we will make adjustments to the agenda based on what they want the agenda to include.
  - iii. Asking the group where they would like to hold the meeting next week
  - iv. Thanking everyone for participating in this week's session.

Figure A-5, cont. FROSH! Meeting Agendas

## Agenda: Action Research Group Session 2

1. Review broad agenda and give an overview of the day
  - a. *Purpose of meeting:* Provide opportunities for the group to become more comfortable with one another, rank common stressors among the group, talk about ways to alleviate stresses, create goals to lower stress levels
  - b. Everyone will have the opportunity to use their creativity today and draw and to work in small groups to share their thoughts and experiences
2. Ice Breaker: Sentence Completions **10 minutes**
3. Questions:
  - a. The researcher will ask the participants to think about their responses but not to share their answers with anyone until they break into groups: The question asked will be... “If you had to rank your overall stress levels since you’ve started your first semester at UT, what would you say your levels have been on a scale of 1 to 4? One being you did not experience any stress, 2 being you were sometimes stressed, 3 being you were stressed often, and 4 being you were stressed all the time.”
    - i. Each participant will complete the FROSH! Stress Survey **5 minutes**
    - ii. Participants pass in sheets and the facilitator explains what is to happen next. The facilitator asks to have two volunteers to write everyone’s responses on the charts on the wall.
    - iii. Once all responses are recorded, the facilitator will ask if there is anything that appears to be surprising, or if the results are what they expected to see.
    - iv. The researcher will ask everyone as a large group to decide upon common stresses that were found in the large group. These themes will be written by the researcher individually on large strips of paper. The researcher will read all responses to the large group to make sure they do not want to add any more. Once the group feels that all points have been made, they will be given the strips of paper, and as a large group will rank them in order of what stresses them out most as a group, from the greatest to least causes of stress. **15 minutes**
    - v. The researcher will ask them why they chose the ranking the way that they did. **5 minutes**
  - b. The researcher will ask participants to think about what brings them most stress. “Who, What, When, Why, Where, How” log sheet will be handed out to all participants to complete.
    - i. Next, the group will break into 3 small groups (3-4 people in each). Share their responses with each other and tell others in small group how they’re going to lower their stress levels. Tell them that one person will be the spokesperson from each group.

Figure A-5, cont. FROSH! Meeting Agendas

- ii. One person from each small group will share with the large group. Participants will be told to hold responses until each small group has shared. Everyone will be told that as each group shares, the other groups should think of things that may help to lower stress levels related to issues that are shared, either that they personally have experienced, or things other people have done that seem to help. The facilitator will encourage people to jot notes if they want during that time. **5 minutes**
  - iii. The large group will have the opportunity to share their thoughts or experiences for how to go about lowering stress related to the items that were mentioned when the small groups shared. **10 minutes**
- 4. Create goals for the upcoming week **5 minutes**
  - a. Provide goal sheets from log to participants
  - b. Explain that the log is optional. FROSH! members can write down thoughts, progress, difficulties during the week, and what they did, and whether it was effective in lowering their stress.
- 5. Researcher will conclude the meeting by...
  - a. Sharing the plans for the next meeting's agenda with the group and asking what they would like to see/do differently.
  - b. Asking what food the group would like next week.
  - c. Informing them that next week they will be sharing ways in which they've lowered their stress levels as related to the stressors we've listed this week, and thinking of ways they can lower their personal stress levels
  - d. Asking everyone where they would like to hold the meeting next week
  - e. Thanking everyone for participating!

Figure A-5, cont. FROSH! Meeting Agendas

### **Agenda: Action Resource Group Session 3**

1. Review broad agenda and give an overview of the day **5 minutes**
  - a. *Purpose of meeting:* Becoming more comfortable with each other from the ice breaker; Learning several resources for budgeting and time management; Identifying whether participants were able to reach their goals they set last week; Identify strategies that the participants used to try to reach their goals of lessening stress last week, and whether they were successful; Each participant will create another goal to achieve for the following week and think of strategies to reach that goal.
2. Ice Breaker **10 minutes**
3. Budgeting/Time Management Resources **5 minutes**
  - a. Pass out sheet which includes the titles of books; 2 budget sheets
  - b. The facilitator will say the following material to the group: “Is it true that some of you don’t feel like there’s enough time in the day, or in general? B2 mentioned that his English teacher gave the class a time table to see how much time is spent studying each week, and I wanted to give you Time Management charts. Maybe you can use one to see how you spend your time currently, and the other you can use to plan out your weeks. Maybe there is a way you can use your time differently to lower your stress.”
  - c. The facilitator will also make the following comments: “During the last meeting, one group said that they feel like they don’t have enough time, and they are not getting their time managed/organized which causes them stress. They said that one solution would be time management and getting their priorities straight. H8, it sounds like you budget your time and money. You think about how much you have, and then plan to use time and money accordingly. Is that right? How does that make you feel? H8, do you have any tips for the group?”
4. Questions (All questions will be written on large poster board and displayed when asked)
  - a. Can you tell me about your experiences last week when trying to accomplish your goals? **10 minutes**
  - b. What did you do that helped you reach your goals? **10 minutes**
  - c. What did you do that you thought would help you reach your goals, but actually did not work well? **5 to 10 minutes**
  - d. If you did not reach your goals, why do you believe that is? **5 to 10 minutes**
  - e. Any suggestions for others that may help them reach their goals? **5 to 10 minutes**
  - f. Is anyone going home for Thanksgiving? How is that going to affect your stress?

Figure A-5, cont. FROSH! Meeting Agenda

5. Program Evaluation #1 **10-15 minutes**
  - a. Facilitator will ask group what their thoughts are on the FROSH! Program so far
    - i. Anything they particularly like?
    - ii. Anything they dislike?
    - iii. Any suggestions and/or further comments?
6. Researcher will conclude the meeting by...
  - a. Sharing the plans for the next meeting's agenda with the group and asking what they would like to see/do differently.
  - b. Asking what food the group would like next week.
  - c. Informing them that next week they will be sharing whether they accomplished their individual goals to reduce their stresses, and what strategies were helpful in doing so.
  - d. Informing everyone that we will hold next week's meeting in the TRECS building, Room 228.

Figure A-5, cont. FROSH! Meeting Agendas

### **Agenda: Action Research Group Session 4**

1. Review broad agenda and give an overview of the day **5 minutes**
  - a. *Purpose of Meeting:* Becoming more comfortable with one another from the ice breaker; Identifying whether participants were able to reach their goals they set last week; Identifying strategies that the participants used to try to reach their goals of lessening stress last week; Each participant will create another goal to achieve for the following week and think of strategies to reach that goal; Signing up for exit interviews; Participating in a Zumba class to see if it lowers stress
2. Ice Breaker **5 minutes**
3. Everyone will take a look at their piece of paper that listed their goal(s) for last week
4. Questions
  - a. Can you tell me about your experiences last week when trying to accomplish your goal? **10 minutes**
  - b. What did you do that helped you reach your goal? **10 minutes**
  - c. What did you do that you thought would help you reach your goal, but actually did not work well? **5-10 minutes**
  - d. If you did not reach your goal, why do you believe that is? **5-10 minutes**
  - e. Any suggestions for others that may help them reach their goals? **5-10 minutes**
  - f. Were there any obstacles that prevented you from reaching your goal? **5-10 minutes**
5. Each participant will create another goal for the following week, or keep the same goal he/she had from last week. Once again, each person will write his/her goal(s) down on two sheets of paper: one for them to keep, and one for the researcher to collect until next week. **5 minutes**
6. Sign up for exit interviews **3-5 minutes**
7. Zumba! **25 minutes**
8. Researcher will conclude the meeting by...
  - a. Sharing the plans for the next meeting's agenda with the group and asking what they would like to see/do differently.
  - b. Asking what food the group would like next week.
  - c. Informing them that next week they will be sharing whether they accomplished their individual goals to reduce their stresses, and what strategies were helpful in doing so.
  - d. Informing them that next week they will be working in small groups. Everyone will sign up for their final interviews which will take place during the first week of December. The schedule for interview times is listed on the following page and is entitled "Final Interview Sessions: FROSH! Program."
  - e. Telling everyone that we will hold next week's meeting in the TRECS 228

Figure A-5, cont. FROSH! Meeting Agendas

### Agenda: Action Research Group Session 5

1. Review broad agenda and give an overview of the day **2 minutes**
  - a. *Purpose of Meeting:* Identifying whether participants were able to reach their goals they set last week; Talking about how they can further lower their levels of stress; Meeting in small groups to discuss various topics and presenting the information to the larger group; Participating in a 30 minute Zumba class for fun
2. Everyone will take a look at their piece of paper that listed their goal(s) for last week
3. Questions
  - a. Can you tell me about your experiences last week when trying to accomplish your goal? Were you successful? Why/why not? **10 minutes**
4. Participants will gather in the small groups they were in from focus group session 2.
  - a. Groups will discuss the following questions as a group, then think of a fun and creative way they wish to present the information to the group (for example, drawing pictures of how they feel, acting out a scenario, etc.). All questions will be typed for each group, and groups will be supplied with makers and poster board in the event they wish to use the materials. **15-20 minutes**
    - i. Have you heard of the “Freshman 15”? If so, how does it make you feel?
    - ii. Is there anything that makes you nervous as a freshman at UT?
    - iii. Do you see any challenges ahead for freshman year?
    - iv. What strategies can you think of that would help lower the high stress levels you or someone may experience in any of the above situations?
5. As one large group, the researcher will ask each group to demonstrate/tell everyone their responses for question 1. After all groups have spoken, everyone will be able to talk openly and make comments as a large group on the question if they wish. Question iv. will be asked after comments have been made for question 1. **10 minutes**
6. As one large group, the researcher will ask each group to demonstrate/tell everyone their responses for question 2. After all groups have spoken, everyone will be able to talk openly and make comments as a large group on the question if they wish. Question iv. will be asked after comments have been made for question 1. **10 minutes**
7. As one large group, the researcher will ask each group to demonstrate/tell everyone their responses for question 3. After all groups have spoken, everyone will be able to talk openly and make comments as a large group on the question if they wish. Question iv. will be asked after comments have been made for question 1. **10 minutes**

Figure A-5, cont. FROSH! Meeting Agendas

8. Researcher will conclude the meeting by... **5 minutes**
  - a. Reminding everyone that this week we will be holding final interviews where each person will individually answer various questions related to the program. The researcher will confirm each person's time by reading the sheet to everyone which contains the times of the scheduled interview sessions.
  - b. Thanking everyone for participating in the FROSH! Program.
9. Zumba! in one of the Group Fitness Studios **30 minutes**

Figure A-5, cont. FROSH! Meeting Agendas

## **FROSH! Stress Survey**

**The following are items that were mentioned during our first meeting:**

**If you had to rank your overall stress levels related to the items below since you've started your first semester at UT, what would you say your stress has been on a scale of 1 to 4?**

- 1: You did not experience any stress
- 2: You were sometimes stressed
- 3: You were stressed often
- 4: You were stressed all the time

\_\_\_ Large number of people at UT (much bigger than high school, difficult to keep up with what everyone's doing)

\_\_\_ Parking experiences (Thinking I won't be able to find a parking space, having to park far away from my dorm, getting a ticket for something that's not that serious)

\_\_\_ People in my life (parents, situation with significant other, professors, etc.)

\_\_\_ Cafeteria food (limited healthy options)

\_\_\_ Anxiety (test anxiety, anxiety in general)

\_\_\_ Academics (Homework assignments, my major, constant work, online homework, changing majors, maintaining a certain GPA, grades, foreign professors)

\_\_\_ Sleep (tired from the week on the weekends and all I want to do is sleep, getting up early, staying up late to complete homework assignments)

\_\_\_ Monies (spending money on gas, credit card use, spending money all at once when I get paid, needing to get a job to make money)

\_\_\_ Procrastinating (waiting until the last minute to do things)

\_\_\_ Being involved in activities (Involved in a lot of stuff, volunteering a lot)

\_\_\_ Lack of time

\_\_\_

Figure A-6. FROSH! Stress Scale. This Figure illustrates the survey that was given to participants during the second meeting.

1. Don't freak out/respond negatively
2. Don't judge people negatively based upon what they say versus what they are.
3. Don't interrupt someone while they're talking
4. Ice breakers will help group feel comfortable sharing
5. Many members share to encourage others to share

Figure A-7. Ground Rules agreed upon by FROSH! participants during the first meeting. This figure illustrates the rules that participants agreed upon which would help everyone to feel comfortable sharing with the group.

- Talking with everyone
- Learning how to organize and prioritize
- Being around people who are experiencing similar problems
- Learning that someone older such as the program facilitator is experiencing similar problems and is handling it
- Having resources available
- Having someone who is knowledgeable in stress management trying to help bring people to a stress-free level
- Having someone “on your team”
- Listening to other people talk about their stress to learn ways to relieve stress
- Taking a break from everything to have fun and to participate in Zumba
- Lowered stress levels in general

Figure A-8. Aspects of the FROSH! Program that Participants found Valuable

## **FResh Out of Stress, & Healthy! Log**

**What stresses me out most is...**

---

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**Use the following items to find the source of your stress. Think Deeply!**

Who is involved?

What is the problem?

When is it a problem?

Where does the stress occur?

Why is there stress?

**What changes are you going to make to lower your stress? What steps are you going to take to make these changes to lower your stress?**

Figure A-9. Why, What, How, Who, Where and When Worksheet. This figure illustrates the worksheet that was completed by all participants during the second meeting to help them identify the sources of their stress.

Table A-1

*FROSH! Exit Interview Questionnaire*

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**Please read the following statements and circle the number of the response that corresponds to how you feel about the subject.**

---

1. My stress levels have been reduced as a result of participating in this project.

**1                      2                      3                      4                      5**

**Strongly Disagree**

**Strongly Agree**

2. Setting goals helped to lower my stress levels.

**1                      2                      3                      4                      5**

**Strongly Disagree**

**Strongly Agree**

3. The weekly logs were useful to help lower my stress levels.

**1                      2                      3                      4                      5**

**Strongly Disagree**

**Strongly Agree**

---

Table A-1. Exit Interview Questionnaire

---

4. Working in small groups during the program was useful.

1 2 3 4 5

**Strongly Disagree**

**Strongly Agree**

5. Setting “ground rules” during the first meeting helped me to know what not to do during the sessions to upset others when they share information with the group.

1 2 3 4 5

**Strongly Disagree**

**Strongly Agree**

6. Meeting at Starbucks made me feel more comfortable than meeting in TRECS.

1 2 3 4 5

**Strongly Disagree**

**Strongly Agree**

7. I feel that the FROSH! Program was valuable.

1 2 3 4 5

**Strongly Disagree**

**Strongly Agree**

---

Table A-1, cont. Exit Interview Questionnaire

---

8. I think the FROSH! Program would benefit other freshmen students.

**1**

**2**

**3**

**4**

**5**

**Strongly Disagree**

**Strongly Agree**

9. I believe other freshmen students would participate in the program if it was offered at the UT Recreation Center.

**1**

**2**

**3**

**4**

**5**

**Strongly Disagree**

**Strongly Agree**

10. I will be able to more successfully manage the stress in my life because of the program.

**1**

**2**

**3**

**4**

**5**

**Strongly Disagree**

**Strongly Agree**

---

Table A-1, cont. Exit Interview Questionnaire

---

11. I increased the number of days I worked out weekly. \*\*

**1**

**2**

**3**

**4**

**5**

**Strongly Disagree**

**Strongly Agree**

\*\*If you did, please list the number of days you worked out before the FROSH! Program, and the number of days you workout now:

---

12. I feel like I can better manage my time during the week because of the FROSH! Program.

**1**

**2**

**3**

**4**

**5**

**Strongly Disagree**

**Strongly Agree**

13. I do not feel as stressed about academic coursework because of the FROSH! Program.

**1**

**2**

**3**

**4**

**5**

**Strongly Disagree**

**Strongly Agree**

Table A-2

*Reliability of FROSH! Stress Survey with Item Extracted (Monies)*

| Possible Stressful Items        | Scale<br>Mean if<br>Item<br>Deleted | Scale<br>Variance if<br>Item Deleted | Corrected<br>Item-Total<br>Correlation | Cronbach's Alpha<br>if Item Deleted |
|---------------------------------|-------------------------------------|--------------------------------------|----------------------------------------|-------------------------------------|
| Large # of People at UT         | 23.45                               | 23.692                               | .493                                   | .783                                |
| Parking Experiences             | 23.45                               | 26.136                               | -.100                                  | .825                                |
| People in my Life               | 21.75                               | 18.958                               | .686                                   | .746                                |
| Cafeteria Food                  | 22.55                               | 24.692                               | .050                                   | .824                                |
| Anxiety                         | 21.85                               | 17.892                               | .794                                   | .728                                |
| Academics                       | 21.05                               | 22.136                               | .718                                   | .763                                |
| Sleep                           | 22.05                               | 17.914                               | .861                                   | .720                                |
| Procrastinating                 | 21.55                               | 21.692                               | .347                                   | .794                                |
| Being Involved in<br>Activities | 22.55                               | 18.692                               | .629                                   | .754                                |
| Lack of Time                    | 21.60                               | 22.711                               | .358                                   | .788                                |

*Note:* Significant at the  $p < 0.05$  level.

Table A-3

*Mean and Standard Deviation of Each Item in the FROSH! Stress Survey*

|                                 | N  | Mean | Std. Deviation |
|---------------------------------|----|------|----------------|
| Large # of People at<br>UT      | 10 | 1.20 | .422           |
| Parking Experiences             | 10 | 1.20 | .632           |
| People in my Life               | 10 | 2.90 | .994           |
| Cafeteria Food                  | 10 | 2.10 | .876           |
| Anxiety                         | 10 | 2.80 | 1.033          |
| Academics                       | 10 | 3.60 | .516           |
| Sleep                           | 10 | 2.60 | .966           |
| Monies                          | 10 | 2.50 | 1.080          |
| Procrastinating                 | 10 | 3.10 | .994           |
| Being involved in<br>Activities | 10 | 2.10 | 1.101          |
| Lack of Time                    | 10 | 3.05 | .762           |

Table A-3

| Inputs        | Throughputs                                                                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Marketing     | Contact residence halls to distribute flyers, Request to post a message in The Daily Beacon                                                                                   |
| Collaboration | First year studies announcement to instructors, Residence hall directors of freshmen dorms, Fraternities/sororities, Student newsletter, announcements for first year classes |

Figure A-15. BAL Recreation Production Process Chart. This figure illustrates the first section of the BAL chart that the FROSH! Wellness Committee created.

| 1st Stage Outputs                                                                                               |
|-----------------------------------------------------------------------------------------------------------------|
| <p>Inform freshmen of opportunity to participate in a program that will help them lower their stress levels</p> |
| <p>Inform freshmen of opportunity to participate in a program that will help them lower their stress levels</p> |

Figure A-15, cont. BAL Recreation Production Process Chart. This figure illustrates the second section of the BAL chart that the FROSH! Wellness Committee created.

| Throughputs                                                                                                                                                                                                                                                                | 2nd Stage Outputs                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Collaborate with Sam Whalen regarding marketing opportunities for residence halls, contact the Student Success Center to see what marketing opportunities exist, contact Jerry Adams, Associate Director of Residence Life, to distribute flyers in residence halls</p> | <p>Freshmen students will read the flyers in the residence halls to learn about the FROSH! Program and will contact Danielle Dimond to learn more information about it, Students will learn some detrimental effects of stress for college students from reading the flyers, freshmen will hear of the FROSH! Program from professors announcing the opportunity to participate in the First Year Studies Classes</p> |
| <p>Collaborate with Katie Downey regarding fraternities/sororities, collaborate with the Student Success Center for the First Year Studies Program</p>                                                                                                                     | <p>Sororities will offer students pan points for participating in the FROSH! Program, Students will learn of the FROSH! Program from announcements that are made in sorority/fraternity meetings and the First Year Studies classes</p>                                                                                                                                                                               |

Figure A-15, cont. BAL Recreation Production Process Chart. This figure illustrates the third section of the BAL chart that the FROSH! Wellness Committee created.

## Exit Interview Questions

1. Have your stress levels changed since the beginning of the program, and if so, how? To what extent do you feel reduced stress was a result of your participation in the study?
2. Was it helpful to set weekly goals in an effort to lower your levels of stress?
3. Did you feel that the weekly logs were useful?
4. What was the most valuable experience you gained from participating?
5. What did you not like about the program?
6. Do you think the program would be beneficial for other freshmen students in the future? If so, how?
7. Do you believe other students would participate if the program was offered at the UT Recreation Center? If so, why?
8. Do you believe you will be able to more successfully manage the stress in your life learned during the program? If so, how?

Figure A-16. Exit Interview Question. This figure illustrates the questions that were asked during the Exit Interview sessions.

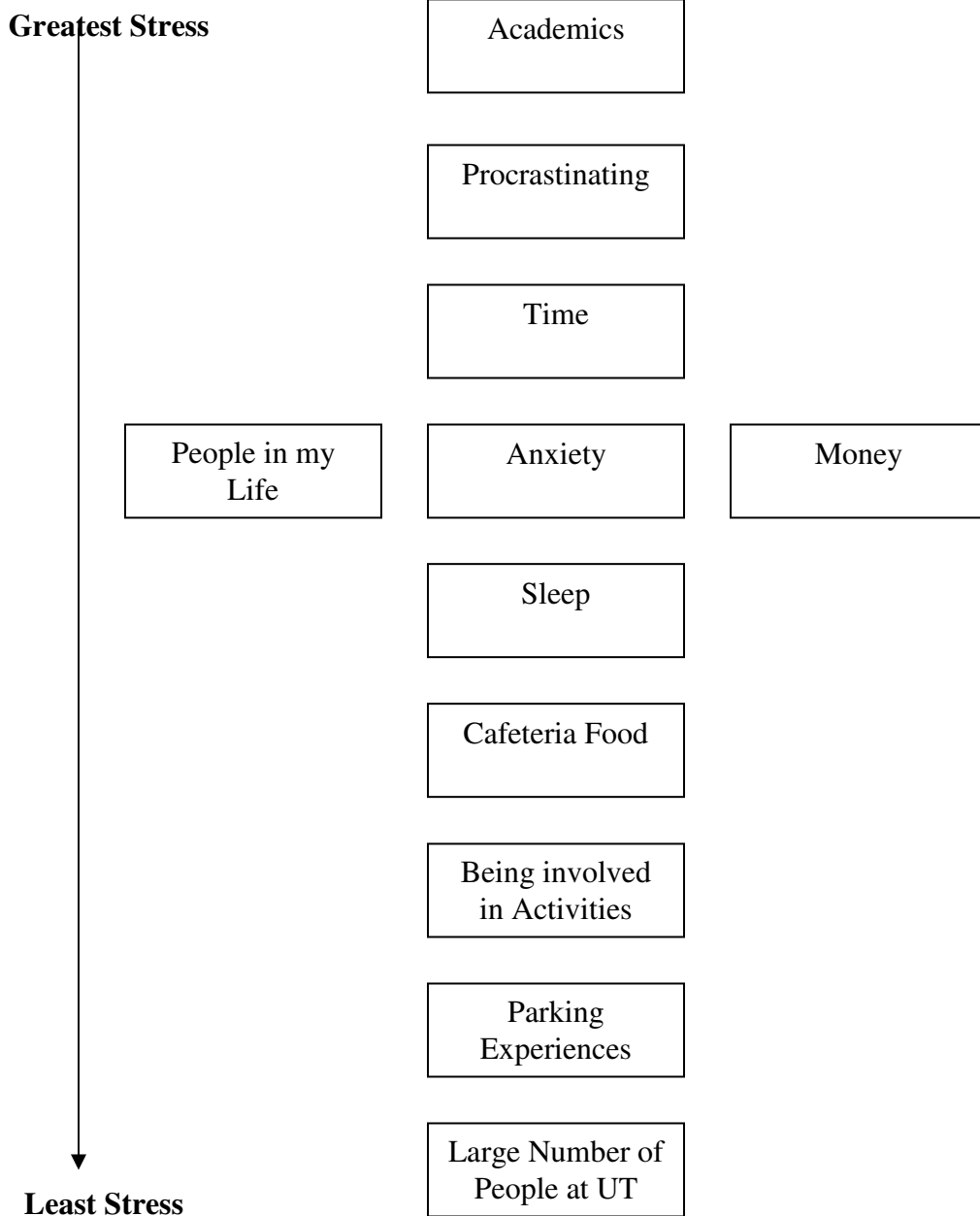


Figure A-17. Ranked Overall Stress Levels since First Semester at UT related to Items that seemed to Stress Participants. This figure illustrates the chart that the group of FROSH! participants created which ranks the above items from their greatest to least sources of stress.

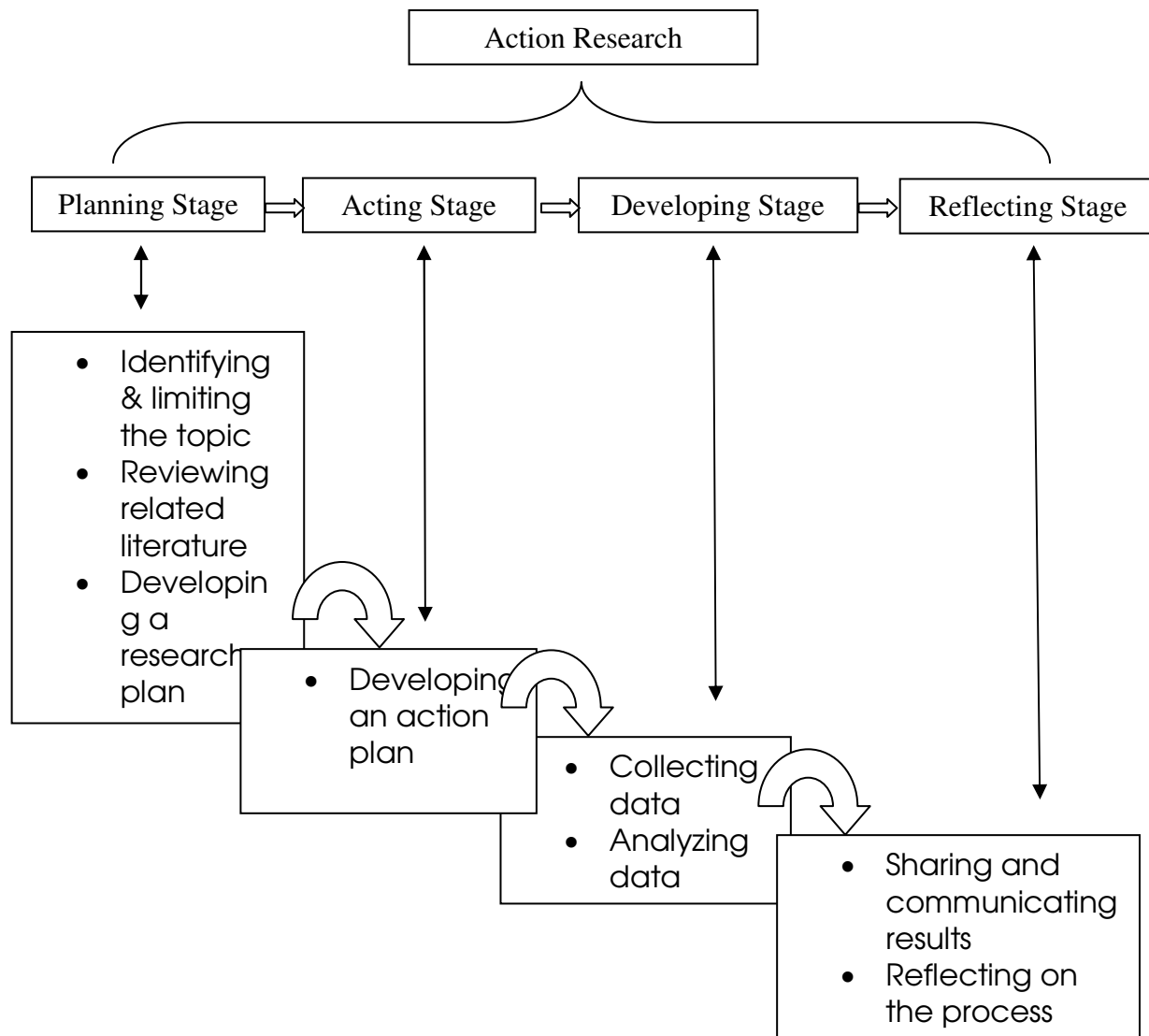


Figure A-18. Craig Mertler's Action Research Model (Mertler, 2006). This figure is an alternative action research model which is recommended to utilize for future campus recreation wellness programs.

**Project Title:** “Utilization of an Adaptable Wellness Program Model to Create a Stress Management Initiative Based Upon Action Research Methodology for First Semester Freshmen Students”

**Principal Investigator:** Danielle Dimond, MS Candidate for Recreation and Leisure Studies

**Address:** 1914 Andy Holt Ave.

**Phone:** (703)434-9369

Knoxville, TN 37996

**Email:** [ddimond@utk.edu](mailto:ddimond@utk.edu)

**Faculty Sponsor:** Dr. Steven Waller

I am a Graduate Student pursuing a Masters’ degree in Recreation and Leisure Administration. For my thesis, I am interested in investigating the perceived stress levels of first semester freshmen students at The University of Tennessee, and I plan to implement a stress management program entitled FROSH! (FResh Out of Stress, & Healthy!) to assist students identifying their stresses and learning how to cope with them.

You have been selected as a prospective participant for this research project. As a study participant, you will be asked to:

1. Attend five one-hour long sessions that will be held Monday evenings from 7:30 to 8:30 pm on November 9, November 16, November 23, November 30, and December 7. Students will participate in discussions related to topics on stress, and they will have an active role in deciding upon meeting activities.
2. Electronically complete the Perceived Stress Scale both before and after the FROSH! Program. The scale consists of 14 questions that assess the level of stress people feel they have experienced within the past month.
3. Voluntarily write in a weekly log to record your goals, monitor your progress on reaching those goals, and recording any other thoughts you have during the weeks of the program. It is encouraged for you to bring the logs to the program sessions. These logs will not be collected by the principal investigator.
4. Be tape-recorded during all sessions, and during an individual exit interview. Identity will be kept confidential. An alpha-numeric code will be used to identify your responses during the sessions. The audio tapes will remain confidential, and will be stored in a locked file in Dr. Steven Waller’s office. All tapes will be destroyed at the conclusion of the program.

There is minimal risk associated with participation in the FROSH! program. Though all efforts will be taken to keep everyone’s identity confidential, there exists the possibility that students may share the information that is discussed within the meetings with

Figure A-19. Informed Consent Form

outsiders. Also, some discussions may be sensitive to students, and may evoke some negative emotions in the group. If anyone feels uncomfortable because of something that is discussed, he/she may visit the Student Counseling Center to talk to a professional. Students may also be encouraged to visit the Student Counseling Center if the researcher thinks a student should talk to a professional about an issue.

There are various benefits to participating in the study. Participants will enjoy free food during each program session. Upon completion of the FROSH! Program, it is hoped that participants will have lowered their stress levels and learned coping strategies to alleviate their stresses. Students may also make new friends by participating in the program.

Please contact Danielle Dimond or Steven Waller if you have any questions regarding the research and/or FROSH! Program. You may also contact the Compliance Officer and IRB Administrator, Brenda Lawson, if you have any questions about your rights as a participant: (865) 974-7697.

Steven N. Waller, Ph.D., D.Min  
Assistant Professor, Recreation & Leisure Studies  
865-974-1279  
E-mail: swaller2@utk.edu  
Danielle Dimond  
703-434-9369  
E-mail: ddimond@utk.edu

Participation is voluntary, and you may withdraw from the study without any consequences at any time.

**Statement of Consent:**

I have read the Informed Consent Form and agree to participate in the FROSH! program as a part of the research conducted by Danielle Dimond for her thesis project entitled, "Utilization of an Adaptable Wellness Program Model to Create a Stress Management Initiative for First Semester Freshmen Students."

Your Printed Name:

---

Your Signature:

---

Printed Name of Staff Witness:

---

Figure A-19, cont. Informed Consent Form

Table A-4

*Participants' Overall Mean and Standard Deviation Pre- and Post- Scores from the Perceived Stress Scale*

| Participant | Pre-Mean | Post-Mean | Difference | Pre-SD | Post-SD |
|-------------|----------|-----------|------------|--------|---------|
| J10         | 2.21     | 1.86      | .35        | .97    | 1.17    |
| M12         | 2.21     | 1.14      | 1.07       | 1.25   | 1.10    |
| I9          | 1.79     | 1.07      | .72        | .97    | .73     |
| H8          | 2        | 1.64      | .36        | .88    | .63     |
| F6          | 1.71     | 1.14      | .57        | .83    | .95     |
| C3          | 2        | 1.5       | .5         | .78    | .81     |
| E5          | 1.71     | .79       | .92        | 1.14   | .97     |
| B2          | 1.5      | .57       | .93        | 1.22   | .85     |
| Total Means | 1.89     | 1.21      | .68        | 1.01   | .90     |

Table A-4

## **VITA**

Danielle Dimond was born in Fairfax, Virginia, to the parents of Chuck and Kathryn Dimond. She has three siblings: Wesley, Bonnie and Greg. While growing up in Manassas, Virginia, she attended Stonewall Jackson High School. She obtained her Bachelor's Degree in May 2008 from James Madison University with a degree in Kinesiology where she gained valuable experience working as a Group Fitness and Wellness Instructor and Personal Trainer at the James Madison Student Recreation Center. She completed a practicum at the ACAC Fitness and Wellness Center in Charlottesville, Virginia, and an internship at the Verizon Business Health and Wellness Center in Ashburn, Virginia. After receiving her undergraduate degree, she completed her Master's Degree in Recreation Administration August 2010 while attending The University of Tennessee where she was a Graduate Assistant for the Fitness Program at the recreation center on campus.