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# **Physical Wellness Self-Monitoring Project**

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#### Introduction

The rationale for this practice-based proposal is that people continue unhealthy nutritional and exercise patterns in part because they are unaware of their patterns and see no need to change. Participants will learn how to use a government web site (<a href="www.mypyramidtracker.gov">www.mypyramidtracker.gov</a>) to self-monitor their current nutritional/exercise patterns and use their pattern data to transition from pre-contemplation to contemplation to action (Norcross & Prochaska, 2002) in the implementation of self-developed nutrition and/or exercise change plans.

#### Statement of the Problem

Obesity is a critical health problem in the United States. The Centers for Disease Control (CDC) define an individual as obese if that person has a body mass index (BMI) greater than 30. Ogden, Carroll, McDowell, and Flegal (2007) found that 34% of American adults over age 20 are obese and that includes 33.3% of adult men and 35.3% of adult women. Comparatively, 16.3% of children and adolescents aged 2-19 years are obese based on BMI for age-growth charts (Ogden, Carroll, & Flegal, 2008). The current obesity rates in the United States are still significantly higher than the Healthy People 2010 national health objectives (U.S. Department of Health and Human Services, 2000) that aimed to reduce obesity rates to less than 15% of adults and less than 5% of children and adolescents. However, some states are significantly closer to the national health objectives for obesity than other states. The overall average state obesity rate in the United States for 2007 (which includes children, adolescents, and adults) is 25.6% with a range from a low of 18.7% (Colorado) to a high of 32.0% (Mississippi; Centers for

Disease Control, 2008). Thus, states with the highest rates of obesity will benefit most from physical wellness programming (diet and exercise intervention programs).

In order to begin to address the high rate of obesity in Mississippi, it is important to focus intervention programs on the subpopulations with the highest obesity rates. Nationally, the rate of adult obesity varies considerably by age and race/ethnicity. For both men and women, middle-aged adults (aged 40-59 years) had the highest reported rates of obesity (men – 40.0%; women – 41%). Comparatively, young adults (aged 20-39 years) and older adults (60 years and older) reported lower rates of obesity than middle-aged adults (young adults – 28.0% of men and 30.5% of women; older adults – 32.0% of men and 30.5% of women; Ogden et al., 2007). For women, obesity rates also vary considerably by race/ethnicity. Among middle-aged women (aged 40-59 years), non-Hispanic black and Mexican-American women reported the highest obesity rates (53% and 51% respectively) compared to 39% of non-Hispanic white women (Ogden et al., 2007). Thus, in Mississippi, physical wellness programming that targets middle-aged (aged 40-59 years) adults, and non-Hispanic black and/or Mexican-American women would begin to help address the issue of obesity.

The rationale for this practice-based proposal is that people continue unhealthy nutritional and exercise patterns in part because they are unaware of their patterns and see no need to change. The wellness self-monitoring project is being piloted on a commuter regional campus of a major Mississippi university with a small group of faculty, staff, and students. Many faculty, staff, and students on our commuter campus have poor nutritional and/or exercise patterns. Our commuter campus lacks recreational facilities and our evening classes often interrupt typical meal times resulting in faculty and students eating from vending machines or fast food restaurants. Myers and Sweeney (2004) developed the indivisible self model of wellness that includes several domains of individual wellness (physical, creative, coping, social, and essential). Our wellness-based campus suicide prevention program assumes that to engage faculty, staff, and students in all parts of primary wellness-based prevention, physical wellness (nutrition and exercise) is an excellent starting point. Participants will learn how to use a government web site (www.mypyramidtracker.gov) to self-monitor their current exercise/nutritional patterns and use their pattern data to transition from pre-contemplation to contemplation to action (Norcross & Prochaska, 2002) in the implementation of self-developed nutrition and/or exercise change plans.

## **Physical Wellness Self-Monitoring Project**

## Campus Setting

Our campus is a small regional campus (712 students) of a major public state university (16,206 students). Our regional campus is located 100 miles from the main campus which houses most university services including the college counseling center and recreational facilities. Our regional campus is a commuter campus as many students commute to campus from surrounding counties. Our regional campus student population (712 students) has the following characteristics related to academic class (undergraduate – 71%; graduate – 29%), gender (female – 76%; Male – 24%); race (White American –

68%; African American -29%; American-Indian -2.5%); and age (nontraditional students -71%; traditional students -29%; older students aged 25-49 years -63%).

# Project Instructions

Counselor education students were required as part of their counseling course to complete all parts of the physical wellness self-monitoring project (questions 1-5, all parts). However, campus faculty, staff, and students participating in the physical wellness self-monitoring project on a voluntary basis need only to focus initially with completing question 1 (baseline phase) and 5(a) (What did you learn about your physical wellness (diet and exercise) as a result of tracking your daily diet and activity on <a href="https://www.mypyramidtracker.gov">www.mypyramidtracker.gov</a>?). Participants will then decide if their current exercise/nutritional patterns require a transition from pre-contemplation to contemplation to action (Norcross & Prochaska, 2002) in the implementation of self-developed nutrition and/or exercise change plans. Thus, for faculty, staff, or students that believe that a change in their physical wellness is necessary, they are invited to complete the remainder of the physical wellness self-monitoring project instructions (questions 2-4; 5b-e).

- 1. Baseline phase (A) Go to <a href="www.mypyramidtracker.gov">www.mypyramidtracker.gov</a> (you will need to register for a login so your data can be saved) and track your daily diet (all foods you eat) and your daily activity (not just when you exercise but all activity example: include your yard work in your daily activity) for two weeks. During your baseline phase of the wellness project you will need to choose an outcome variable (DV dependent variable) for diet and/or activity. The dependent variable ideally should be a variable that the web site tracks (for example: diet DV could be fat grams or "overall diet score" and activity could be "overall activity score").
- 2. Design a wellness-based intervention to improve your diet and/or your exercise level.
- 3. Intervention phase (B) implement your newly designed wellness-based intervention plans to improve diet and/or activity levels and continue to track daily diet (all foods you eat) and your daily activity (all daily activities) throughout the intervention phase of two weeks.
- 4. Present a single-subject design poster of your wellness project should track daily values on DV for both baseline (A) and intervention phases (B).
- 5. Based on your physical wellness self-monitoring project, respond to the following questions.
  - (a) What did you learn about your physical wellness (diet and exercise) as a result of tracking your daily diet and activity on <a href="www.mypyramidtracker.gov">www.mypyramidtracker.gov</a>? What is your wellness goal in terms of physical wellness?

- (b) Describe the challenges associated with tracking your physical wellness (daily diet and activity) and how you overcame the challenges;
- (c) Describe how your wellness-based intervention plan (diet and/or exercise) will improve your physical wellness (diet and/or exercise level) and achieve your physical wellness goal(s);
- (d) Self-evaluate the outcome of your wellness-based intervention (diet and/or exercise) based on the data that you presented on the wellness project (baseline and intervention phases). Did you achieve your physical wellness goal(s)?
- (e) What did you learn about yourself during the intervention phase of your wellness project that will enable you to be more successful in maintaining your physical wellness goal(s) in the future?

## **Physical Wellness Self-Monitoring Project Challenges**

The physical wellness self-monitoring project has some inherent challenges for participants. The initial difficulty is the tedious nature of entering data daily in the online system (www.mypyramidtracker.gov). This challenge was managed by limiting the project to just 4 weeks in duration for baseline and intervention phases or just 2 weeks for baseline phase only. However, as participants become accustomed to tracking their daily nutritional and exercise pattern data, the task of entering the data becomes less arduous. The second challenge for participants involves the online system (www.mypyramidtracker.gov) periodically losing some of the stored data. This issue seems to happen on a regular basis though participants handled this challenge by maintaining a nutritional and exercise data backup journal. The third challenge frequently experienced by participants was the difficulty entering some nutritional data (finding same foods and judging serving size). Participants addressed this challenge by choosing foods most closely associated with the foods that they consumed and approximating serving size.

## **Physical Wellness Self-Monitoring Project: Student Example**

- 1. What did you learn about your physical wellness (diet and exercise) as a result of tracking your daily diet and activity on <a href="www.mypyramidtracker.gov">www.mypyramidtracker.gov</a>? What is your wellness goal in terms of physical wellness?
  - "I already knew that my diet and exercise was not where it needs to be, I just did not know how bad it was! The 2005 Dietary Guidelines Recommendations for me showed that I am deficient in my intake of vegetables, fruit, milk, and meat and beans. Going to school has caused me to frequent the McDonald's just up the

street a little too much! My average physical activity score (ranges from 0-100 points) for the two week baseline was 37.6, which is poor. I concentrated on my physical activity and the wellness goal that I selected was to develop a daily exercise plan that I would participate in for the two week intervention phase." (Student Example #1)

2. Describe the challenges associated with tracking your physical wellness (daily diet and activity) and how you overcame the challenges.

"When I began tracking my food intake and physical activity, I felt that it was going to take too much time to sit down at my computer every day and try to remember everything I ate and everything I did. Sitting in front of the computer and trying to remember everything was difficult, so I began writing things down in a journal. This turned out to be less time consuming and not nearly as stressful trying to make sure that I did not forget any food item and any little activity I did." (Student Example #1)

3. Describe how your wellness-based intervention plan (diet and/or exercise) will improve your physical wellness (diet and/or exercise level) and achieve your physical wellness goal(s).

"My daily exercise plan included doing the 'Ten Minute Trainer' workout program for 20 minutes each day. The 'Ten Minute Trainer' workout program includes five workouts: total body, lower body, abs, cardio, and yoga flex. I also committed to getting back in a routine of walking forty-five minutes a night with my husband." (Student Example #1)

4. Self-evaluate the outcome of your wellness-based intervention (diet and/or exercise) based on the data that you presented on the wellness project (baseline and intervention phases). Did you achieve your physical wellness goal(s)?

"My average physical activity score (ranges from 0-100 points) for the two week baseline was 37.6, which is poor. After the two week intervention phase, I had many more days of the physical activity score being 100 than before (average was 100 points). I feel that I successfully achieved my wellness goal of developing a daily exercise plan." (Student Example #1)

5. What did you learn about yourself during the intervention phase of your wellness project that will enable you to be more successful in maintaining your physical wellness goal(s) in the future?

"These workouts were not hard and that it was not difficult to stay committed to exercising daily. After the first several days, after the soreness wore off, I could tell a difference in the way that I felt. I seemed to be able to sleep better at night, too. This was a welcome change, because I started having a problem being able to

get a restful night's sleep. Also, walking each night with my husband made me feel better and gave us time to talk and catch up on things that happened that day. Now that this project is completed, I will need to stay committed to this routine and strive to continue it as long as possible. I have realized that anything as important as your health can cause you to 'sit up and take notice' and develop an attitude of commitment and dedication. Completing this wellness project has been a very positive thing for me. As the saying goes, 'change is good.' I would like to add to that by saying, 'change you can live with is even better." (Student Example #1)

# Physical Wellness Self-Monitoring Project: Encouraging Participation on a Commuter Campus

A major dilemma of the physical wellness self-monitoring project will be how to encourage faculty, staff, and students on our commuter campus to participate in the project. Students that have participated in the physical wellness self-monitoring pilot project thus far have done so as part of their course assignment requirements. The challenge of the physical wellness self-monitoring project is how to get faculty, staff, and students to participate on a voluntary basis. The proposed plan to encourage voluntary participation involves a grassroots effort whereby a small group of faculty, staff, and students on campus will individually present their experiences with the physical wellness self-monitoring project as well as the outcome of their self-developed physical wellness intervention plan (diet and/or exercise intervention) to the campus community through the campus suicide prevention web site (a different person will be featured each month).

### **Future Directions for Evaluation**

Research question # 1: Does the physical wellness self-monitoring project influence campus students' perception of their physical wellness? In order to evaluate the campuswide impact of the physical wellness self-monitoring project, it would be necessary to have a representative sample of campus students complete a wellness model inventory (Five Factor Wel Inventory - Myers & Sweeney, 2004) annually to identify change in perception of physical wellness (one of the five factors measured in the inventory). However, it is plausible that the campus students' perception of physical wellness may improve markedly yet the high obesity rate on campus remain unchanged. This limited impact on the obesity rate may occur for various reasons: (a) insufficient numbers of students engaged in physical wellness self-monitoring project whereby a significant number of students are still unaware of their nutritional and exercise patterns; (b) sufficient numbers of students engaged in the physical wellness self-monitoring project but choose not to implement a wellness-based intervention to change nutritional and/or exercise patterns; (c) sufficient numbers of students engaged in the physical wellness self-monitoring project, implement a wellness-based intervention to change nutritional and/or exercise patterns though are unsuccessful in their intervention plan.

Research question # 2: Does the physical wellness self-monitoring project reduce the rate of obesity on our commuter campus? To answer this more difficult research question, we would need to obtain Body Mass Index (BMI) measurements (based on a student's weight and height in metric units) for a representative sample of campus students annually for comparison purposes. Given that our commuter campus is predominately female, nontraditional (25 years and older) students, obtaining weight and height measurements may be a challenge. However, if our commuter campus is committed to reducing our high rate of obesity, we will need to find a palatable method to measure our campus students' height and weight annually.

It is our hope that the physical wellness self-monitoring project can help create a supportive campus culture to encourage commuter students to increase their awareness of their nutritional and exercise patterns to the point that students self-develop wellness plans to improve their level of physical wellness.

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