A Framework for e-Health Promotion Plan: health behaviors of University students and their interest in campus health promotion experiential activities

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Abstract
The purpose of this study aimed to provide an assessment of the needs of health promotion in university students, based on body composition analysis reports, lifestyle variables and the interest in health promoting activates. The researcher design and development a systemic approach to guide and process health promotion practice which is an e-Health promoting plan to facilitate the participants to recognize one's body composition analysis reports, and further more to encourage one to join the campus fitness center to sustain their physical fitness in good condition. A framework for e-health promotion plan will be exposed and discussed in this study. The result of this study can provide school-based health care providers to create their own interventions plan to assist students keeping a good lifestyle behavior.

Keywords: e-Health promotion plan, health behaviors, campus health promotion experiential activities

Introduction

Health is seen as a resource for everyday life, not the objective of living. Everyone can prevent illness if one can take action to maintain one's health behavior. Health promotion is the process of enabling people to increase control over and improve their health and also a strategy for improving the health of a population by providing individuals, groups and communities with tools to increase control over and improve their health. Recently, health promotion issues have moved beyond the traditional treatment of illness and injury by centering its efforts on the social, physical, economic and political factors that goes beyond healthy lifestyles to wellbeing.

Literature Review

Health promotion development from The Ottawa Charter for Health Promotion (1986) can be summarized as the following issues: narrow focus on risk prevention scarcely referring to health promotion, single individual behavior interventions, progress towards a more interdisciplinary and integrative approach and comprehensive approach. According to the Ottawa Charter five action areas for health promotion were identified as: building healthy public policy, creating supportive environments, strengthening community action and developing personal skills. There is evidence of a correlation between adoption of the Ottawa Charter's framework of five action areas and health promotion programmed effectiveness. Research evidence was identified by searching electronic databases from 1998 to 2013 to prove a systematically identify and synthesize factors influencing the phases of WHP interventions: needs assessment, planning, implementation and evaluation. (Fry etc, 2016, Rojatz etc, 2016).

Baum & Fisher (2014) indicated that the increasing rates of chronic conditions have resulted in governments targeting health behavior such as smoking, eating high-fat diets, or physical inactivity known to increase risk for these conditions. A good way to improve personal health status is by persuading individuals to change their health behavior.

Golden & Earp (2012) have been applied social ecological models in to the health promotion interventions by created a coding system to identify the ecological levels that health promotion programs target and then applied this system to 157 intervention articles from the past 20 years of Health Education & Behavior. The results showed that interventions that focused on certain topics (nutrition and physical activity) or occurred in particular settings (schools) more successfully adopted a social ecological approach.

Body Composition Analysis

InBody 570 is an eight point tactile electrode system with thumb electrodes which applies a quantitative value to the various components of the body's composition. It applies a quantitative value to the various components of the body's composition and can be used to understand outputs on all of the InBody body composition results. These values represent the weight of each compositional component that comprises the examinee's total body weight and following six parts information: Body

composition analysis, Muscle-Fat Analysis, Obesity Analysis, Segmental Lean Analysis, ECW/TBW Analysis and Body Composition History.

Body composition analysis included following information: (1) Intracellular Water, Extracellular Water and Total Body Water, (2) Dry Lean Mass: Dry Lean Mass is the total body mass minus the water and the fat mass. (3) Body Fat Mass: Body Fat Mass indicates the total quantity of lipids that can be extracted from fat and all other cells. (4) Lean Body Mass: Lean Body Mass refers to the entire body weight with the exception of Body Fat Mass. (5) Body Weight: Body weight is the total sum of these three components.

Muscle-Fat Analysis included following information: (1) Muscle-Fat Analysis, Weight. (2) Skeletal Muscle Mass and (3) Body Fat Mass.

Obesity Analysis included following information: BMI and Percent Body Fat.
Segmental Lean Analysis included two bar graphs for each body part in the Segmental Lean Analysis graph. The display of the two bar graphs allows for a more effective and informed assessment of the current distribution of the lean mass the examinee has. The two graphs have different meanings, respectively. Results sheet interpretation can be found in the https://www.inbodyusa.com/pages/results-sheet-interpretation.

A Conceptual Framework

Designing a school-based health promoting plan need a holistic approach that includes an e-health interventions plan, a campus fitness center and to empower participants exercise motivation. The goal of e-health interventions plan is to create an interesting training course to empower students' participants. The campus fitness center located in near students activity space and it is opened by appointment through online system. Two student workers are taking in turns to service the students during opening time and to check and maintain the sports equipment in the fitness center. A school-based health promoting plan is shown in the figure 1 below.

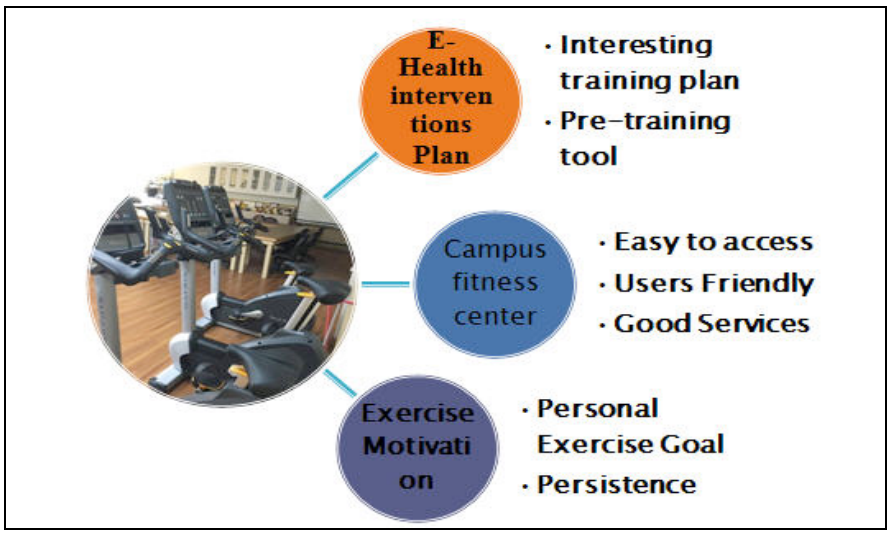

Figure 1: school-based e-Health Promoting Plan

The four stages of e-health interventions plan follow a chronological order in which the previous stage prepares the participants' body and mind in good condition for further processing during the during the following stage. In stage one, participants have to register as an online e-coach system members, only registered members can log in to e-coach system to save personal information, personal body composition analysis results sheets and uploaded personal exercises log. An e-coach system is shown as figure 2 below.

Figure 2: e-coach system

In stage two, participants have to finish body composition analysis (pre-test) and uploaded the full page report to the online system. Stage tree, participants have to keeping exercises during twelve weeks and uploaded personal exercise log to system. Stage four, participants have to finish body composition analysis (post-test) and uploaded the full page report to the online system. A sample body composition analysis sheet is shown as figure 3 below.

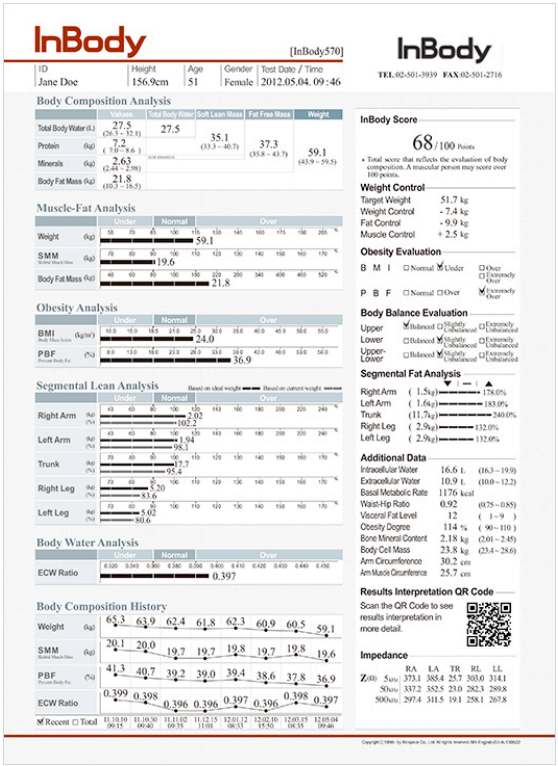

Figure 3: A body composition analysis sheet sample

In stage tree, participants can choice one of exercise plans which included plan A: treadmill training , plan B:flywheel training and plan C:weight training to fit exercise tool in the fitness center and have to register as an online e-coach system members. An e-health intervention plan is shown as figure 4 below.

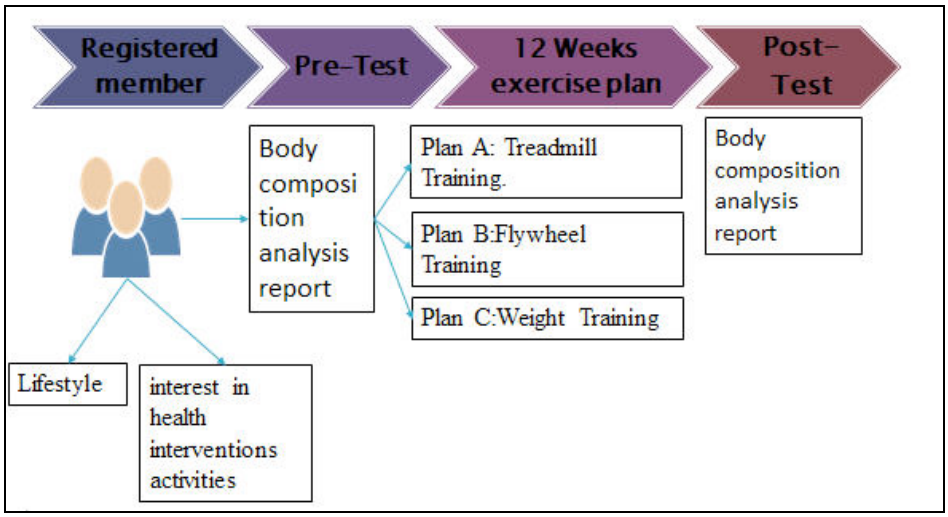

Figure 4: e-Health Intervention Plan

In stage four, participants can examine personal exercise logs and compare the results of two body composition analysis reports during the exercise period. An e-coach personal exercise log is shown as figure 5 below.

Figure 5: e-coach personal exercise log

Conclusion

Health promotion and education is a profession focusing on the behaviors, systems, environments, and policies affecting health at a variety of levels. With the supported of school, the campus fitness center can be set up and serviced to students. In this study, a school-based health promoting framework is created to improving students' understanding of health knowledge and skills and how to apply them for daily life.

Overall, integrated health promotion in the school business included students in the project group and had a supportive and effective principal can speed up the health promotion plan and good practice on the campus.

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The Ottawa Charter for Health Promotion (1986)
http://www.who.int/healthpromotion/conferences/previous/ottawa/en/

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