THE EFFECT OF HEALTH PROMOTION PROGRAM APPLIED TO UNIVERSITY STUDENTS ON IMPROVING HEALTHY NUTRITION AND PHYSICAL ACTIVITY BEHAVIORS

STUDY PROTOCOL

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Purpose: This study will be conducted to determine the Effect of Health Promotion Program Applied to University Students on Improving Healthy Nutrition And Physical Activity Behaviors.

Type of Study: This study was planned as a randomized controlled experimental study to determine the effect of health promotion program applied to university students on healthy eating and physical activity behaviors.

The Universe and the Place of the Study: The general population of the study will be composed of students enrolled in the formal education program at Istanbul Medipol University between January and September 2019. The study population will consist of students with a body mass index of 25-35 kg / m², a mean score of 2 and below, no regular physical activity, and no problems with the musculoskeletal system, cardiopulmonary system, metabolic system and other systems that prevent exercise.

Sample: The sample size was calculated by power analysis. In the calculation, 0,80 power value, 0,05 error level, 0,60 'relationship is predicted, sampling 45 students to the experiment and 45 students to the control group was found to be appropriate.
In the study process, 10 substitutes were selected considering that there could be subjects who could leave the research. After all; 55 people in the experimental group and 55 people in the control group were selected by sampling. The sample consisted of 110 employees.

Variables of the research:

Independent Variables: Web-based health promotion program, individual counseling and reminders for university students according to the Health Promotion Model
Dependent Variables:
- Variables related to physical activity and nutrition behaviors
• Frequency of physical activity-International Physical Activity Questionnaire score
• Number of steps
• Body Mass Index
• Healthy Lifestyle Behaviors scale nutrition and exercise subscales average score
• Meal frequency, energy, macro and micro nutrient intake of individuals

Variables related to cognitive risk behaviors
• Multi-Dimensional Health Control Scale score average
• Meaning of Health Importance Scale
• Health Status Perception Scale score average
• Self-efficacy Scale average score in regular exercise
• Self-efficacy Scale score average in the regulation of nutrition habits

Research Steps:
1. In order to identify the risky students in the study universe, a stand will be opened in the most crowded area of the campus and the most frequently used area of the campus.
2. As a result of the screening, body mass indexes are between 25-35 kg / m², the average score of nutritional behavior is 2 or less, do not perform regular physical activity and prevent exercise, musculoskeletal system, cardiopulmonary system, metabolic system and other systems without problems Students will be admitted to the study universe.

3. Assignment will be made to the experimental and control groups by making probable selection from the study population.
4. Measurements of physical and cognitive variables of experimental and control groups will be made.
5. Health Promotion Modeled Health Promotion Program (Annex-1) will be applied to the experimental group. Health promotion program; The Web-based Health Promotion Program includes individual counseling and reminder practices. The content of the Web Based Health Promotion Program is given in Annex-2. The control group will be given educational brochures to develop healthy eating and physical activity behaviors.
6. Measurements of physical and cognitive variables of experimental and control groups at 1st, 3rd and 6th months will be made.
7. The data will be analyzed and evaluated statistically.
8. Report will be written.

Study Timeline

Year	**2018**					**2019**								**2020**			
Month	7	8	10	11	12	01	02	04	06	07	10	11	12	1	2	3	4
Topic Choose																	
Literature Review																	
Topic Decide																	
Planning																	
Consents																	
project accept																	
Pilot study																	
Intervention																	
Data collect																	
Data input																	
Data Analysis																	
Report Writing																	

Data Collection Tools

- Socio-demographic characteristics data sheet
- Multidimensional Health Check Scale
- Health Importance Scale
- Healthy Lifestyle Behavior Scale
- Health Perception Scale
- Food Consumption Frequency Determination Form
- Self-Efficacy Scale for Regulation of Nutritional Habits
- Self-efficacy Scale for Regular Exercise
- International Physical Activity Survey (IPAQ) short for

Biophysiological measurements: Height and weight measurements will be done to determine the body mass index of the students. Tape measure and scale will be used for these measurements.

Possibilities to be used in the thesis study:

Web-based health promotion program will be implemented by using Istanbul Medipol University Distance Education Center system.
• File costs of the research will be covered by the researcher.

Units and Persons to Cooperate in the Execution of the Thesis if Required:

Istanbul Medipol University Non-Interventional Clinical Research Ethics Committee, Istanbul Medipol University Faculty of Health Sciences Dean, Istanbul Medipol University School of Health Sciences, Directorate of Health Services Vocational School, Istanbul Medipol University Vocational School, Istanbul Medipol University Health Culture and Sports Department

Importance of the Subject, Purpose and Scientific Basis of the Study

The university period is a period in which important changes such as the first separation from the family, the new education environment and the transition to life are experienced for young people. Adaptation difficulties in this process also lead to changes in individual life, vocational education and health behaviors. The youth's attitudes and behaviors related to health affect him / herself in particular, his / her family and society in general. Reaching the young population, which constitutes a large part of the society and is an important group that can easily adopt health behaviors, gains more importance for these reasons (Tuğut and Bekar, 2008; Straker et al., 2014).
University period is among the most risky periods in gaining negative health behaviors. Unhealthy eating behaviors, dieting and sedentary life, crime, smoking, alcohol or substance use, energy drink use, self-harm behavior, suicide attempt, risky (alcoholic, unarmed, fast, unskilled) driving, having sexuality at an early age , having unprotected sexual intercourse, escaping from home or school, dropping out of school, disinterest in classes, and risky behaviors are considered as (Atlam et al., 2017). Decreasing physical activity of young people is becoming increasingly important in developing countries. Obesity is becoming widespread especially among young people and has negative consequences in terms of nutrition problems and other diseases related to obesity. It was found that students generally do not pay attention to meals, they eat only one meal, economic difficulties are effective in the problems of inadequate and unbalanced nutrition, students staying in dormitories are not good at feeding, they only feed to feed their bellies and make unhealthy choices.
According to the World Health Organization, 23% of adults and 81% of school-age children are not active enough. In Australia, 2729 university students with an average age of 20; 53% of girls and 68% of boys do physical activity. In the study conducted in the USA, 51% of the students were found to have low physical activity levels. In the study conducted by Oğuz et al., 18.81% of the students had regular physical activity, 14.98% of the girls and 28% of the boys had regular physical activity. (Oğuz et al., 2018). Decreasing physical activity as well as increasing passive activities are an important problem. In 2011, it was stated that in 2011, one

third of the students between the ages of 10 and 24 played an average of 3 hours or more computer games on school days or watched television, and the average time spent on computer and television passed 2 hours in our country (Gözüm, 2012).
Existing studies show that young adults have poor eating habits such as high consumption of fast food, low intake of fruits and vegetables, and skipping breakfast (Hilger et al., 2016; Çakır, 2017). In a study conducted by Özdoğan et al., It was reported that 50.1% of university students did not eat three meals during the day, 84.5% skipped main meals, and the most skipped meal was breakfast (Özdoğan et al., 2012). In a study conducted in nursing students, it was reported that 62.0% of the students ate 2 meals a day and 55.0% skipped breakfast meals (Onay, 2011).
As a result of health promotion programs in which positive health behaviors related to healthy lifestyle behaviors nutrition, physical activity and non-smoking were gained, it was determined that individuals lost weight, regular physical activity and smoking cessation rates increased (Esin & Aktaş, 2012).
One of the most widely used models in gaining health behaviors is the Health Promotion Model (SGM). The health promotion model developed by Pender stems from social learning theory and explains the importance of cognitive processes that affect an individual's health-promoting behaviors. The health promotion model, which has been tested and validated on many community groups, is a model used to increase the individual's well-being (Zaybak and Fadıloğlu, 2004). The model points out the importance of cognitive processes affecting the individual's behaviors that improve health (Pender et al., 2002). The main components that affect behavior are defined as 1) Individual Characteristics and Experiences, 2) Behavior-Specific Cognitive Processes and Effects, and 3) Behavior Results. In the behavioral change process, interventions using effective methods such as strengthening the cognitive capacity of the individual, stimulus control, modeling, operant conditioning, individual counseling and group discussions are applied.
There are many descriptive studies in the literature on health behaviors of university youth. However, there are a limited number of model-based interventional studies explaining the development of positive health behaviors of students in the university period.

Research Hypotheses:

Hypothesis 1
Post-intervention BMI and weight average of students participating in health promotion model based health promotion program will be lower than pre-program and non-program group.
Hypothesis 2
The average number of meals consumed by the students who participated in the health promotion model based health promotion program after the initiative will be higher than the pre-program and non-program group.
Hypothesis 3
The daily drinking water amount of students participating in the health promotion model based health promotion program will be higher than the pre-program and non-program group.
Hypothesis 4
The average number of weekly steps of the students participating in the health promotion model-based health promotion program throughout the initiative will be higher than the pre-program and non-program group.
Hypothesis 5

The average carbohydrate consumption consumed by students participating in the health promotion model-based health promotion program will be lower than the pre-program and non-program group.

Hypothesis 6

International Physical Activity Questionnaire (IPAQ) score of students participating in health promotion model based health promotion program will be higher than pre-program and non-program group.

Hypothesis 7

Healthy Lifestyle Behaviors Scale Nutrition subscale score of students participating in health promotion model based health promotion program will be higher than pre-program and non-program group.

Hypothesis 8

Healthy Lifestyle Behaviors Scale Exercise subscale score of students participating in health promotion model based health promotion program will be higher than pre-program and non-program group.

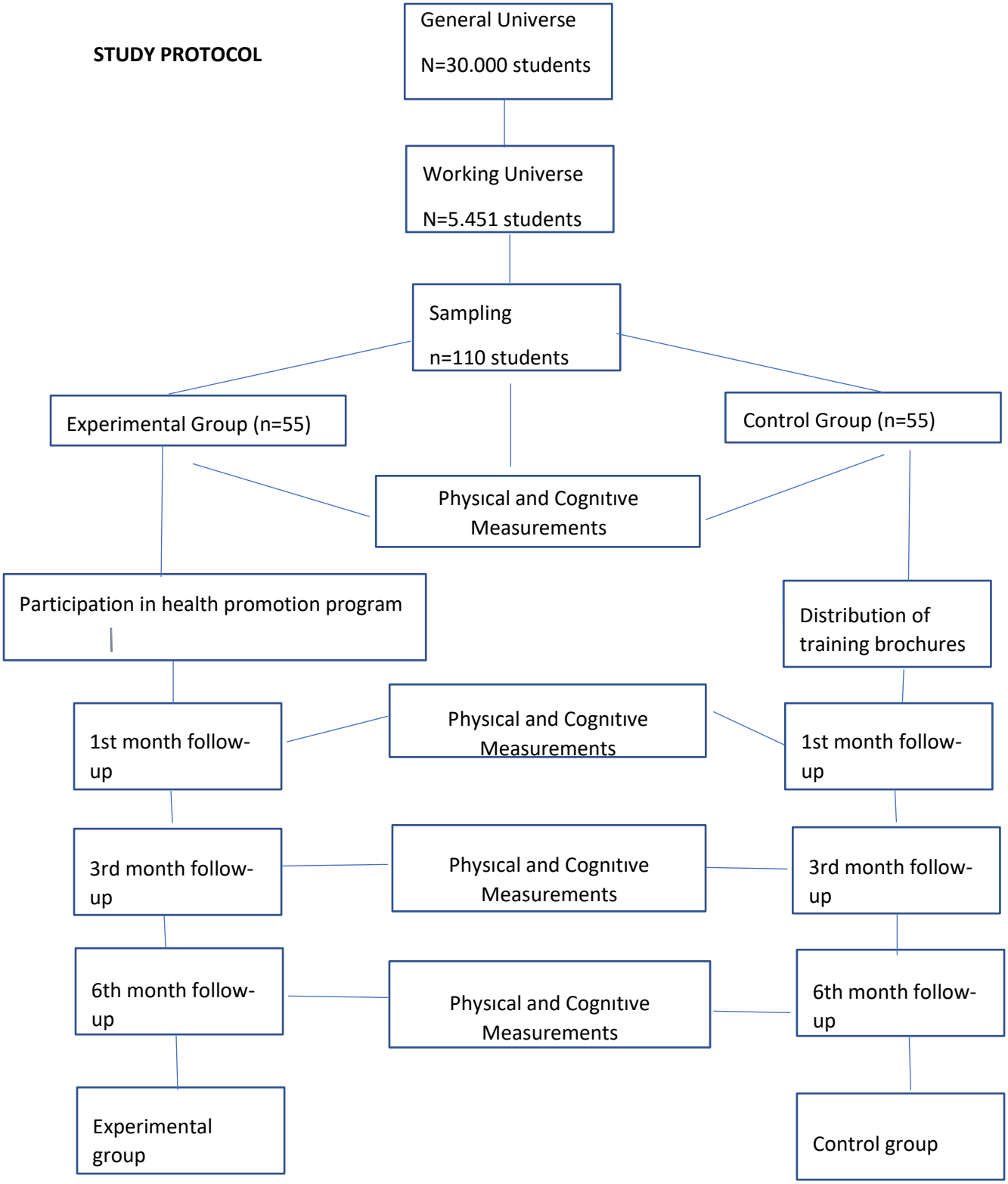
Hypothesis 9

Self-efficacy Scale for Regulation of Nutritional Habits of students participating in health promotion model based health promotion program will be higher than pre-program and non-program group.

Hypothesis 10

Self-efficacy Scale for Regular Exercise Scale score of students participating in health promotion model based health promotion program will be higher than pre-program and non-program group.

STUDY PROTOCOL



EVALUATİON

VARİABLES OF THE RESEARCH

Independent Variables: Web-based health promotion program, individual counseling and reminders for university students according to the Health Promotion Model

Dependent Variables:

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ANALYSİS OF DATA

In the evaluation of the data, the data is planned to be realized in a computerized version with SPSS 22.0 (license obtained by Istanbul Medipol University Information Technologies Department, IP: 10.201.2.15 connection is provided over the server).

In evaluating the homogeneity of the experimental and control groups:

 Descriptive analysis (average,

standard deviation, percentage)

 Chi-square test

 T test in independent groups

 Mann Whitney U test

To compare the findings of cognitive risk behaviors, physical activity and nutritional behaviors between experimental and control groups in pre-program, post-program 1st month, 3rd month and 6th month.

 Analysis of variance in repeated measurements

 Friedman test

 In dependent groups t test will be used.

For the analysis of food consumption, analysis will be performed by using Nutrition Information Systems Package Program (BEBİS).