Exercise Adherence

Introduction to Exercise Adherence
Your viewpoint

Define exercise adherence?
Exercise adherence

Adherence refers to maintaining an exercise regimen for a prolonged period of time following the initial adoption phase.

Rehab adherence

Adherence refers to maintaining an rehab regimen for a prolong period of time following injury and/or surgery.
Adherence

Adherence is:

Voluntary
Self-regulated
Largely a psychological issue
Adherence is the bottom line

- All content and skills associated with being a fitness specialist, physical therapist, or athletic trainer must translate to your ability to facilitate adherence
- Reduce acute (short term) noncompliance & promote acute compliance
- Reduce chronic (long term) noncompliance & promote chronic compliance
Magnitude of the Adherence Problem

- 75% of population dropout of exercise in 3 years
- 20-80% dropout in dieting
- 80% do not achieve desired weight goals
- 20-50% fail to keep rehab appointments
- Only 30% of US population meets the recommended physical activity guidelines set by CDC or ACSM
What is the difference between physical activity and exercise?
Definitions of Important Terms

Physical Activity

Any body movement produced by skeletal muscle that results in a substantial increase over the resting energy expenditure

Exercise

Planned, structured and repetitive PA designed to improve or maintain fitness
Your Viewpoint

How can the study of exercise adherence help the fitness specialist?

How can the study of rehab adherence help the physical therapist or athletic trainer?
Major Challenges

Adherence will come through:

- Understanding and modifying one’s behavior
- Influencing public and personal opinions
- Promote Exercise Self-efficacy
- Motivating people
- Changing the client’s intention to exercise or to rehab
Lack of fitness cost money!

- 100,000 deaths from CV disease per year (Estimated costs = $35.1 billion)
- 75 million people have lower back problems (Estimated cost = $10 million)
- Total health care costs = $225 billion
- Total workers comp = $225 million
Cost Containment

- **Prudential Study**
  - 1389 Employees over 5 years
  - Basic 8 step process in the fitness center
- Participant’s fitness changes - 22% increase.
- Participant Disability Days - decrease 20.1%
- Disability Dollar Costs - decrease 31.7%
- Medical Costs – decrease $45.7%
- Absenteeism
  - 59% drop in days of absenteeism = $284,000
Estimated Savings

- Dallas school district
  - 35% drop in days of absenteeism = $500,000

- Canadian Life Insurance Company
  - 13% drop in turnover

- Kennecott Copper
  - 55% decrease in medical costs
Your Viewpoint

- What are the reasons why people exercise?
Reasons to Exercise

- Improved physiological health/physical fitness
- Enhanced physical appearance
- Improved psychological/emotional health
- Improved social relations
Your View Point

- What prevents people or you from exercising?
Barriers to Physical Activity

- Convenience/availability
- Environmental/ecological factors
- Physical limitations
- Lack of time*
- Boredom/lack of enjoyment
Your Viewpoints

- Is exercise a therapy?
1. Is Physical Activity a Therapy?

Chronic physical activity positively influences health ….

- The skeletal system
  - Bone density in youth
  - Likelihood that bone mineral density will be retained in older adults.

- The muscle system
  - Hypertrophy
  - Strength and endurance
  - Capillarization & maximal blood flow.
Other Common Benefits of Physical Activity

Expending approximately 1,000 kilocalories per week in physical activity decreases the risk of all-cause mortality by 20 to 30% (Lee & Skerrett, 2001).

30 to 45 minutes per day of moderate-intensity physical activity is sufficient to reduce risk of colon cancer (Lee, 2007).

4 to 7 hr/week of moderate to vigorous-intensity physical activity in women reduces the risk of breast cancer by 20% (Lee, 2007).

30 minutes of moderate intensity physical activity at least 5 days per week provides a 25 to 36% reduction in the risk of type 2 diabetes (Institute of Medicine, 2007).

Anxiety and depression disorders can be reduced by 20 to 50% by being physically active.
Your Viewpoint

- How much physical activity or exercise is enough to reap benefits?
ACSM 2007 Recommendations for Physical Activity Aged 18-65

- **Cardiovascular training:**
  - Moderate intensity aerobic physical activity for minimum of 30 minutes five days a week or vigorous intensity for 20 minutes on three days each week.
  - Aerobic activity can be broken down into 3 ten minutes bouts.

- **Resistance training:**
  - One set of 8-12 reps for each exercise
  - Intensity should be adjusted so that amount of resistance causes volitional fatigue after each set
  - Twice a week (but not on successive days) for 8-10 different exercises
ACSM Recommendations for Physical Activity (continued)

- Flexibility training:
  - Three to five sets per stretch; perform each stretch to point of mild discomfort
  - Hold each stretch for 10-30 seconds
  - Each major muscle group should be stretched at least 3 days per week
CDC Recommendations

- 30 minutes or more of moderate intensity physical activity on most, preferably all, days of week

- Physical activity of 3 METs or higher is necessary
Your Viewpoint

- Is the United State population more or less active than other affluent and industrialized countries such as ours?
Physical Activity Participation Patterns—Sampling Across Globe

- Countries studied:
  Australia, Canada, England, Scotland, United States

- Demographics studied:
  Age, gender, ethnicity, socioeconomic status, education level
Sedentary Lifestyles Across the Globe

- Percentage of sedentary adults in each country:
  - Australia: 15 percent
  - England/Scotland: 20–26 percent
  - United States: 38 percent
  - Canada: 56 percent
Your viewpoint

Are most people who live in the United State aware of the health benefits associated with an active lifestyle or from being physically fit?
Are People Aware of the Benefits of Physical Activity?

Godin, Cox, and Shephard (1984) queried physically active and inactive individuals about their knowledge and beliefs about physical activity.

In most instances, inactive individuals held similar beliefs to active individuals about the benefits of physical activity.
Are People Aware of the Benefits of Physical Activity?

Inactive people agree that physical activity can be used to...

- control body weight
- be more healthy
- relieve tension
- improve physical appearance
- feel better
- meet people

Yet they don’t participate.
One can only conclude

That exercise and/or rehabilitation adherence is a major concern for anyone who works in fitness or rehabilitation setting.

The best designed fitness or rehabilitation programs will succeed or result in a higher level of exercise or rehabilitative adherence if the fitness or rehabilitation specialist is aware of or addresses the psychological, environmental, and social factors related to the client’s maintaining of an exercise or physical activity regiment.
Assignment #1

I want you to go the following sites about the following organization. Once you are at the organization site explore each site. In a short type written report provide the name of the organization, purpose, cost of membership, and where there next annual conference will be held.

- www.appliedsportpsych.org
- www.acsm.org
- www.naspspa.org

I want you to go to one of the UMD library databases used in exercise psychology (page 12 of your text) and find an article online from one of the journals cited in exhibit 1.4. Write a single spaced proper margin APA abstract (max of 250 words) about a study published in one of the journals related to exercise psychology.

Assignment 1 is due Monday.
The END