

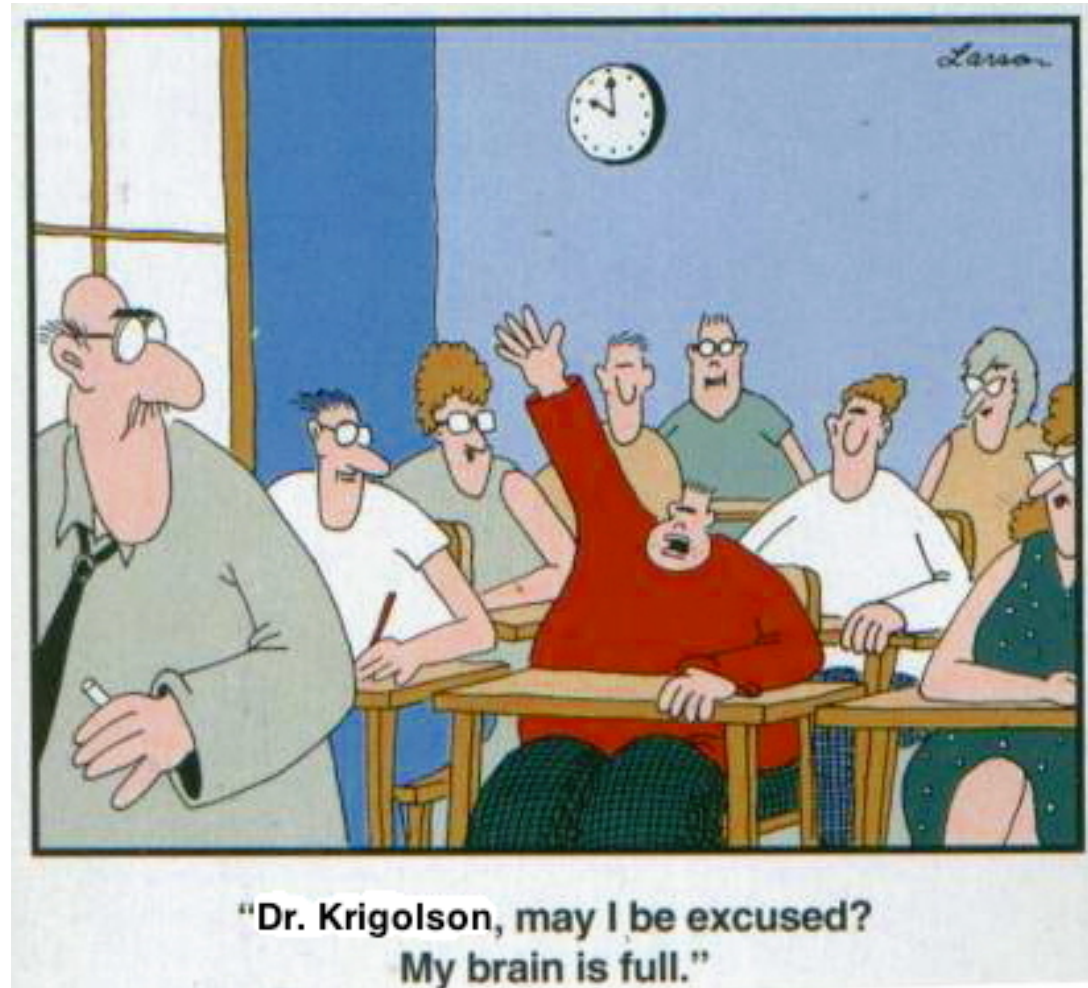
EPHE 575

Exercise Adherence

To Do

8am Tuesday

Presentations



Quiz

Find an article on exercise adherence and do an article summary on it.

(If you have already checked it off, I will have one for you to fill out in class)

Today

To Do List

9:00 am

1. Make sure quiz for today is completed.
2. Read the slides on exercise adherence.
3. Complete the exercise adherence questionnaire (online)
4. Read the exercise adherence chapter (optional)
5. Ask any last minute questions about Major Project

9:50 am

BREAK

10:00 am

Q and A on Exercise Adherence slides

10:20 am

Q and A on any course content

CHAPTER 18



Exercise Behavior and Adherence

Why Study Exercise Behavior?

Despite the current societal emphasis on fitness, a small percentage of children and adults participate in regular physical activity.

Why Exercise Behavior and Adherence Are Important

- ▶ 50% of adults are completely sedentary.
- ▶ 50% of youth (ages 12-21) *do not* participate in regular physical activity.
- ▶ 25% of children and adults report doing *no* physical activity.
- ▶ Only 15% of adults participate in vigorous and frequent activity.
- ▶ Only 10% of sedentary adults are likely to begin a program of regular exercise within a year.

(continued)

Why Exercise Behavior and Adherence Are Important

- ▶ Among boys and girls, physical activity declines steadily through adolescence.
- ▶ Physical inactivity is more prevalent among women, African-Americans, and Hispanics, as well as among older and less affluent adults.
- ▶ 50% of people starting an exercise program will drop out within six months.
- ▶ Daily attendance in physical education classes dropped from 42% to 25% between 1990 and 1995.

Reasons to Exercise

- ▶ **Weight control**
- ▶ **Reduced risk of cardiovascular disease**
- ▶ **Reduction in stress and depression**
- ▶ **Enjoyment**
- ▶ **Building self-esteem**
- ▶ **Socializing**

Reasons to Exercise

KEY—

Exercise combined with proper eating habits can help people lose weight; but weight loss should be slow and steady, occurring as changes in exercise and eating patterns take place.

Reasons to Exercise

KEY—

Both the physiological and psychological benefits of exercise can be cited to help persuade sedentary people to initiate exercise.

“Maintenance” as well as initiation of physical activity is critical.

Reasons for Not Exercising

- ▶ Lack of time
- ▶ Lack of energy
- ▶ Lack of motivation

Reasons for Not Exercising

KEY—

Exercise professionals should highlight the benefits of exercise and provide a supportive environment to involve sedentary people in physical activity.

Reasons for Not Exercising

KEY—

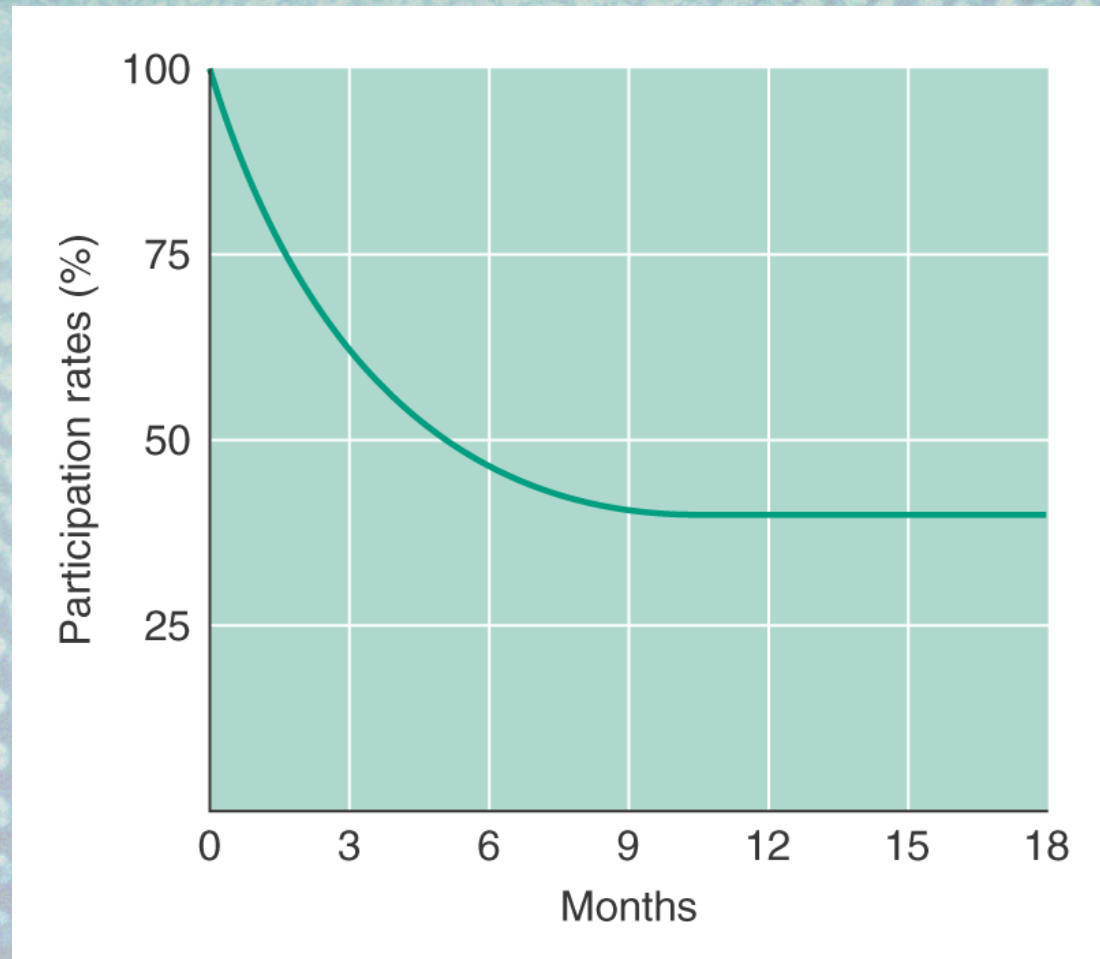
People often cite time constraints for not exercising, but such constraints are more perceived than real and often reveal a person's priorities.

Individual Barriers to Physical Activity

- ▶ Lack of time, energy, or motivation
- ▶ Excessive cost
- ▶ Illness or injury
- ▶ Feeling uncomfortable
- ▶ Lack of skill
- ▶ Fear of injury

(See table 18.1 on p. 403 of text.)

The Problem of Exercise Adherence



The Problem of Exercise Adherence

- ▶ **Help those who start exercising to overcome barriers to continuing the exercise program.**
- ▶ **Help exercisers develop contingency plans to overcome factors leading to relapses (not exercising).**

Theories/Models of Exercise Behavior

Health Belief Model

(Becker and Maiman, 1975)

The likelihood of exercising depends on the person's perception of the severity of health risks and appraisal of the costs and benefits of taking action.

Theories/Models of Exercise Behavior

Health Belief Model

KEY—

Overall “inconsistent” support for Health Belief Model predictions of exercise behavior

(Becker and Maiman, 1975)

Theories/Models of Exercise Behavior

Theory of Planned Behavior

Exercise behavior is made up of

- ▶ intentions,
- ▶ subjective norms and attitudes, and
- ▶ perceptions of ability to perform behavior.

(Ajzen and Madden, 1986)

Theories/Models of Exercise Behavior

Theory of Planned Behavior

KEY—

The theory of planned behavior is a useful theory for predicting exercise behavior.

(Ajzen and Madden, 1986)

Theories/Models of Exercise Behavior

Social Cognitive Theory

(Bandura, 1986, 1997)

Exercise behavior is influenced by both personal and environmental factors, particularly self-efficacy.

Theories/Models of Exercise Behavior

Social Cognitive Theory

KEY—

Social cognitive theory has produced some of the most consistent results in predicting exercise behavior.

(Bandura, 1986, 1997)

Theories/Models of Exercise Behavior

Transtheoretical Model

An individual progresses through five stages of change:

1. Precontemplation stage (does not exercise)
2. Contemplation stage (has fleeting thoughts of exercising)
3. Preparation stage (exercises, but not regularly enough)

(Prochaska, DiClemente, and Norcross, 1992)

(continued)

Theories/Models of Exercise Behavior

Transtheoretical Model

An individual progresses through five stages of change:

4. Action stage (has been exercising regularly, but for less than six months)
5. Maintenance stage (has been exercising regularly for more than six months)

(Prochaska, DiClemente, and Norcross, 1992)

Theories/Models of Exercise Behavior

Transtheoretical Model

➤➤➤ **KEY—**

Different exercise behavior induction strategies are used during the different transtheoretical stages.

(Prochaska, DiClemente, and Norcross, 1992)

➤➤➤ **KEY—**

Matching the intervention to the stage of change is effective in producing high levels of regular exercise.

Factors Associated With Participation in Supervised Exercise Programs

Many factors, from demographics to physical and social environment, affect exercise participation.

(See table 18.03 on p. 409 of text.)

Determinants of Exercise Adherence: Highlights

- ▶ **Demographic variables (e.g., education, income, gender, socioeconomic status) have a strong association with physical activity.**
- ▶ **Early involvement in sport and physical activity should be encouraged, because there is a positive relation between childhood exercise and adult physical activity patterns.**
- ▶ **Barriers to exercise are similar for white and nonwhite populations.**

(continued)

Determinants of Exercise Adherence: Highlights

- ▶ **Self-efficacy and self-motivation consistently predict physical activity.**
- ▶ **Spousal support is critical to enhance adherence rates for people in exercise programs. Spouses should be involved in orientation sessions or in parallel exercise programs.**
- ▶ **Exercise intensities should be kept at moderate levels to enhance the probability of long-term adherence to exercise programs.**

(continued)

Determinants of Exercise Adherence: Highlights

- ▶ **Group exercising generally produces higher levels of adherence than exercising alone, but tailoring programs to fit individuals and the constraints they feel can help them adhere to the program.**
- ▶ **Post-exercise participation predicts exercise behavior.**

(continued)

Determinants of Exercise Adherence: Highlights

- ▶ **Exercise leaders influence the success of an exercise program. They should be knowledgeable, give lots of feedback and praise, help participants set flexible goals, and show concern for safety and psychological comfort.**
- ▶ **A convenient location is an important predictor of exercise behavior.**

Strategies for Enhancing Adherence to Exercise

Six categories of techniques

Behavior modification approaches

Reinforcement approaches

Cognitive/behavioral approaches

Decision-making approaches

Social-support approaches

Intrinsic approaches

Category 1

Behavior Modification Approaches

Prompts

Verbal, physical, or symbolic cues that initiate behaviors (e.g., posters, running shoes by bed).

Contracting

Participants enter into a contract with their exercise leader.

Category 2

Reinforcement Approaches

Charting attendance and participation

Rewards for Attendance and Participation

Rewards improve attendance but must be provided throughout the length of the program.

(continued)

Category 2

Reinforcement Approaches

Feedback

Providing feedback to participants on their progress has positive motivational effects.

Self-Monitoring

Participants keep written records of their physical activity.

Category 3

Cognitive/Behavioral Approaches

Goal setting should be used to motivate individuals.

Exercise-related goals should be

- ▶ self-set rather than instructor-set,
- ▶ flexible rather than fixed, and
- ▶ time based rather than distance based.

Category 3

Cognitive/Behavioral Approaches

Cognitive Techniques

Dissociative strategies emphasize external distractions and produce significantly higher levels of exercise adherence than associative strategies focusing on internal body feedback.

Category 4

Decision-Making Approaches

Involve exercisers in decisions regarding program structure.

Develop Balance Sheets

Completing a decision balance sheet to increase awareness of the costs and benefits of participating in an exercise program can enhance exercise adherence.

Category 4

A Decision Balance Sheet

GAINS TO SELF	LOSSES TO SELF
Better physical condition	Less time with hobbies
More energy	
Weight loss	

(continued)

Category 4

A Decision Balance Sheet

GAINS TO IMPORTANT OTHERS	LOSSES TO IMPORTANT OTHERS
Get healthier so I can play baseball	Less time with my family
Become more attrac- tive to my spouse	Less time to devote to work

(continued)

Category 4

A Decision Balance Sheet

APPROVAL OF OTHERS	DISAPPROVAL OF OTHERS
<p>My children would like to see me be more active</p> <p>My spouse would like me to lead healthier lifestyle</p>	<p>My boss thinks it takes time away from work</p>

(continued)

Category 4

A Decision Balance Sheet

SELF-APPROVAL	SELF-DISAPPROVAL
Feel more confident Improved self-concept	I look foolish exer- cising because I'm out of shape

(continued)

Category 5

Social-Support Approaches

Social Support

- **An individual's (e.g., spouse's, family member's, friend's) favorable attitude toward another individual's involvement in an exercise program.**
- **Social support can be enhanced by participation in a small group, the use of personalized feedback and the use of a buddy system.**

Intrinsic Approaches

- ▶ **Focus on the experience itself.**
- ▶ **Take a process orientation.**
- ▶ **Engage in purposeful and meaningful physical activity.**

Settings for Exercise Interventions

- ▶ **Schools**
- ▶ **Work sites**
- ▶ **Home**
- ▶ **Community**
- ▶ **Health care facilities**

Settings for Exercise Interventions

KEY—

Community-based approaches appear to offer the best way of reaching large numbers of people.

Guidelines for Improving Exercise Adherence

- ▶ Match the intervention to the participant's stage of change.
- ▶ Provide cues for exercises (signs, posters, cartoons).
- ▶ Make the exercises enjoyable.
- ▶ Tailor the intensity, duration, and frequency of the exercises.

(continued)

Guidelines for Improving Exercise Adherence

- ▶ Promote exercising with a group or friend.
- ▶ Have participants sign a contract or statement of intent to comply with the exercise program.
- ▶ Offer a choice of activities.
- ▶ Provide rewards for attendance and participation.
- ▶ Give individualized feedback.

(continued)

Guidelines for Improving Exercise Adherence

- ▶ Find a convenient place for exercising.
- ▶ Have participants reward themselves for achieving certain goals.
- ▶ Encourage goals to be a self-set, flexible, and time based (rather than distance based).
- ▶ Remind participants to focus on environmental cues (not bodily cues) when exercising.

(continued)

Guidelines for Improving Exercise Adherence

- ▶ Use small-group discussions.
- ▶ Have participants complete a decision balance sheet before starting the exercise program.
- ▶ Obtain social support from the participant's spouse, family members, and peers.
- ▶ Suggest keeping daily exercise logs.
- ▶ Help participants choose purposeful physical activity.