

## Chapter 9

# Body Image and Exercise

# Body Image Defined

- A multidimensional construct that reflects the following:
  - How we see our own body
  - How we think, feel, and act toward it

# Four Dimensions of Body Image

- **Perceptual:**
  - How we imagine ourselves to look
- **Cognitive:**
  - How we think about or evaluate our body in terms of its appearance and function
- **Affective (Emotional):**
  - Feelings (i.e., comfortable, proud, anxious, disgusted) experienced in relation to our body's appearance and function
- **Behavioral:**
  - What we do to reflect our positive or negative perceptions, thoughts, and feelings

# Healthy Body Image

- Accurate perceptions about body shape and size
- Thoughts and feelings about one's body that are predominantly positive
- Behavior that reflects positive evaluations

# Body Image Disturbance

- Inaccurate perceptions of one's body shape and size; image differs from one's actual shape/size
- Negative thoughts and feelings about one's body
- Actions performed to hide or change the body without regard to health implications

# Body Image Disturbance Women vs. Men

- No longer just a “women’s issue”
- According to *Psychology Today*:
  - Body image dissatisfaction has increased dramatically for both genders
  - Body image disturbance has become almost as common among men as among women

# Body Reality and Body Ideal

- Body reality:
  - Our actual physical characteristics—height, weight, body fat, lean body mass, bone structure, fitness, strength, disease, etc.
- Body ideal:
  - How we think our body should look and function
- Body image reflects an interplay between body reality and body ideal

# Healthy Body Ideal

- Recognition that human bodies naturally come in a wide range of shapes/sizes and that genetic factors are instrumental in determining one's weight and shape
- A realistic level of health and fitness for one's own unique, personal body shape

# Factors in Body Image Formation and Disturbance

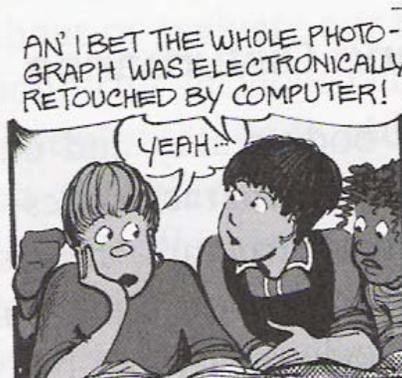
- Media influence
- Cultural influences
- Activity participation
- Changes to body reality

# Media Influence

- Displaces personal body ideals with media-driven body ideals
- Promotes strict and narrowly defined image of an ideal body
- Promotes unrealistic ideals that are unattainable for the vast majority of the population
- Perpetuates the misconception that bodies of fashion models and movie stars are the norm

# For Better or For Worse

By LYNN JOHNSTON



# Your Viewpoint

- How do popular magazines portray exercise and body image for men and women?
- In the magazines that you read, do the articles and ads generally refer to exercise as a way to improve appearance or improve health?
- Do the models in these magazines (articles and ads) have bodies that are representative of the general population?

# Cultural Influences

- People who are part of ethnic groups that reject media ideals have healthier body images
- Differences result from culture-bound values related to the relative importance of thinness and acceptance of heavier body shapes
- Positive values result in a better body image

# Activity Participation

- Activities that we choose to participate in can influence body image by altering perceptions of the body ideal
- If the new ideal is more realistic than the media ideal, body image can improve
- If the new ideal is less realistic and less attainable, the gap between body ideal and reality will widen and body image disturbance will increase

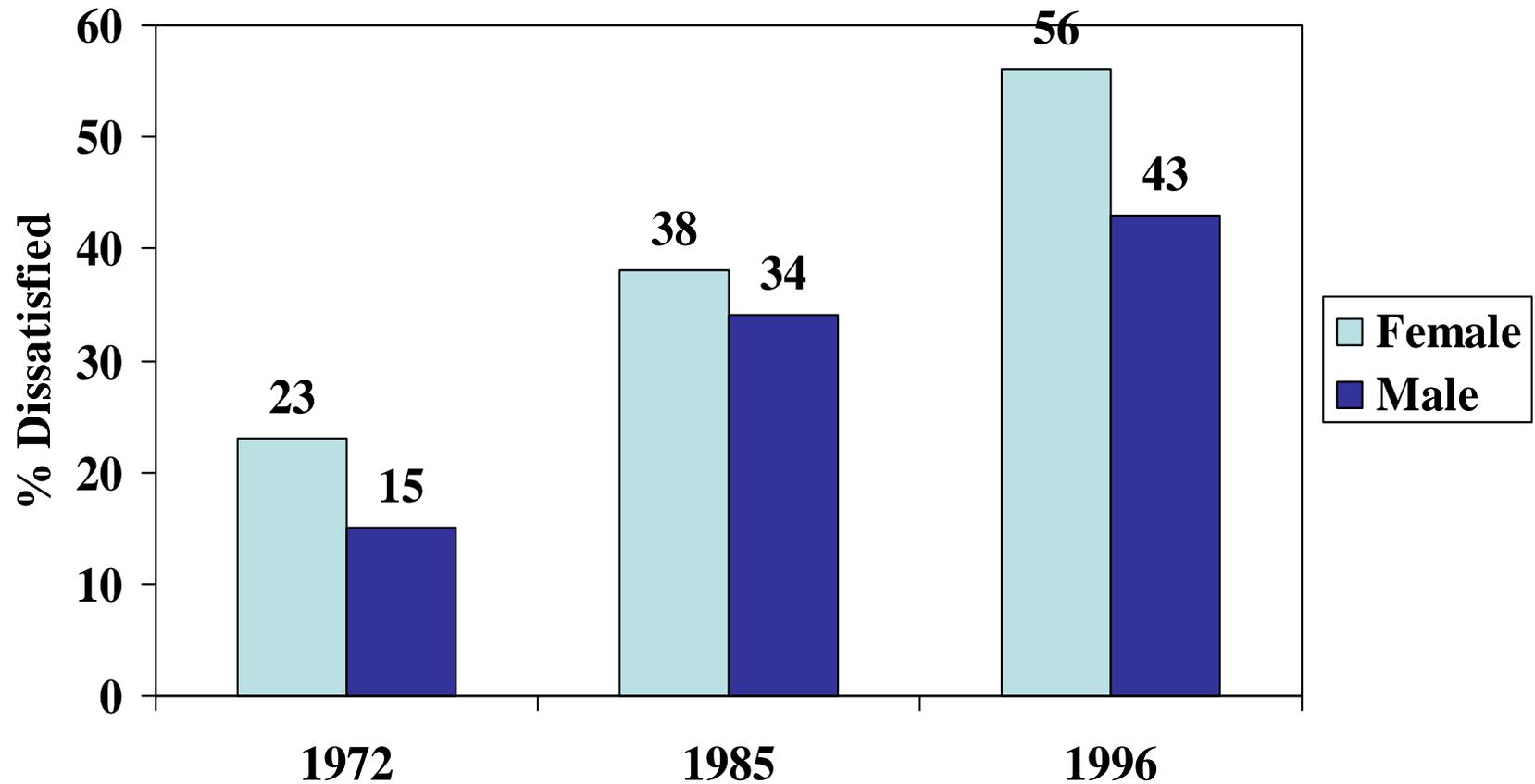
# Changes to Body Reality

- Throughout life, one's body grows and alters in size, shape, proportion, and function
- Changes occur that have a profound effect on feelings about oneself and one's body
  - Examples: puberty, advancing age

# Are you dissatisfied with your body?

- Increasing dissatisfaction felt in one's physical appearance
  - The problematic areas for men are abdomen and overall weight
  - The problematic areas for women are abdomen, hips, thighs, and overall weight
- 43% of men and 56% of women are dissatisfied (Garner, et al., 1997)

# Body Dissatisfaction in Adults



Berscheid et al. (1973); Garner (1997)

# Are women or men more dissatisfied with their body?

- Correlation is much stronger for women than for men
  - A woman's feelings of self-worth are typically more strongly influenced by her perceived physical attractiveness than those of a man
- People who feel better about their bodies tend to feel better about themselves overall

# Sex Differences in Body Image Dissatisfaction

- Reflect differences between the male and female body image ideals that are glamorized by the media
- Persist throughout adolescence and adulthood
- Caused by different reasons
  - Men: Want to have more lean muscle mass
  - Women: Want to be thinner

# Male Body Image Dissatisfaction

- Male standard: V-shaped physique
  - Broad, muscular shoulders, toned “six-pack” abdominals, a narrow waist, and muscular legs
- Men show very little difference between cultural and medical ideals, although the cultural ideal weighs slightly more
- Men tend to desire body weights that are similar to their actual body weights and that fall within the ranges of both medical and cultural ideals

# Female Body Image Dissatisfaction

- Female standard: Ultra-thin, shapely, toned, and firm
- Women show virtually no overlap between the medical and the cultural weight ideals, with the cultural ideal weighing less
- Women's actual body weight may be within the range considered healthy from a medical standpoint, yet some women desire substantially lower weights that reflect the cultural ideal

# Why Is Body Image Important?

- Healthy body image is related to better psychological well-being in two ways:
  - Better self-esteem
  - Lowered risk for depression and anxiety

# Depression and Anxiety

- Poor body image is associated with greater anxiety and depression symptoms
- Depressed and anxious persons view their appearance more negatively than do nondepressed individuals, even if there are no differences in actual body shape and size
- Body image disturbance is an antecedent, not a consequence, of increased depression and anxiety

# Body Dysmorphic Disorder

- An extreme case of body dissatisfaction
- Excessive preoccupation with some aspect of one's physical appearance
- Obsessive-compulsive activities such as constantly weighing oneself
- Muscle dysmorphia:
  - Preoccupation with muscularity
  - Anxiety and dissatisfaction with muscles
  - Steroid use and excessive work out routines
- Body dysmorphic disorder (BDD)- preoccupied with physical appearance that become obsessive and cause them to avoid social situations
  - BDD is estimated between 1-2.3% of the population (Phillips & Dufresne, 2000)
- Muscle dysmorphic (MD)-fear of being muscularly small
  - MD is estimated at 9% of the male population (Olivardia, 2001)

# Relationship of Body Image to Physical Well-Being

Body image can lead to both health-damaging and health-promoting behaviors:

- Health-damaging
  - Eating disorders
  - Unhealthy weight control strategies
  - Smoking
- Health-promoting
  - Diet and exercise programs
  - Healthy eating
  - Physical activity

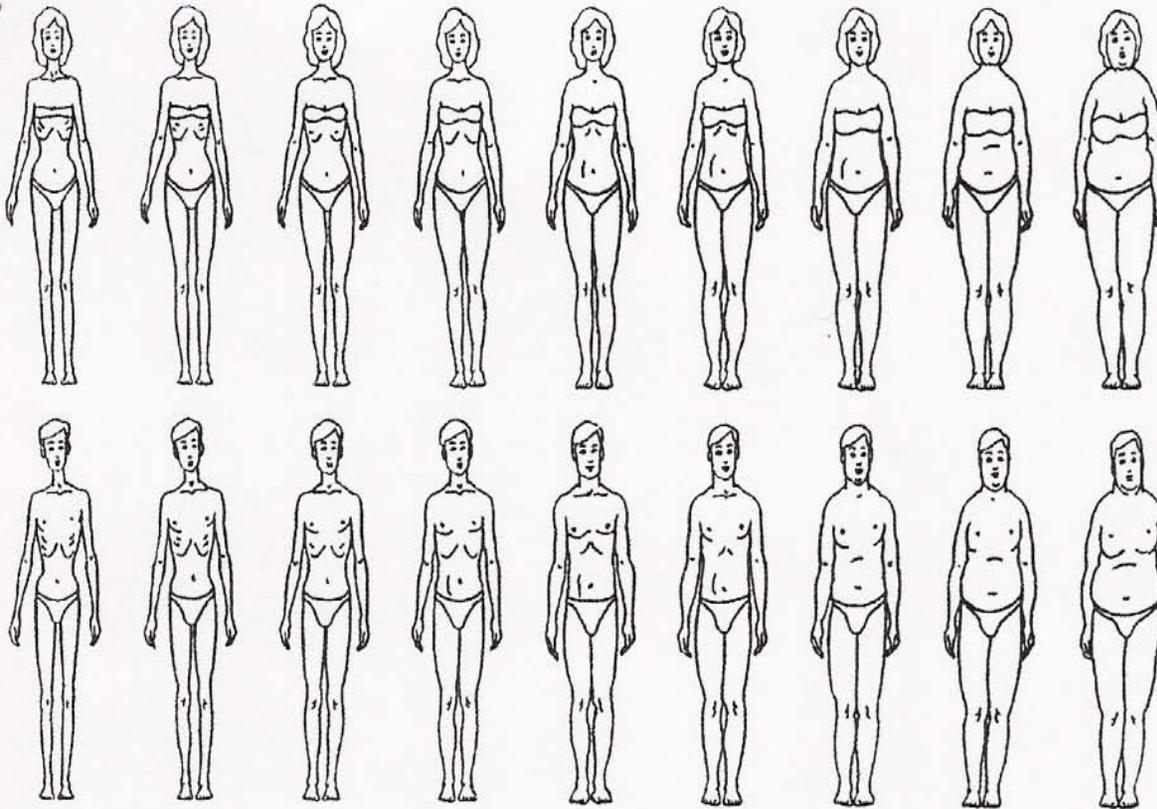
# Body Image Measures

- Exercise psychologists need valid and reliable measures of all body image dimensions:
  - Perceptual measures
  - Cognitive measures
  - Affective measures
  - Behavioral measures

# Perceptual Measures

- Assess the level of accuracy of judgments about the size of an individual's body
- One method uses specially designed morphing software to alter an individual's photograph
  - Individuals estimate what they perceive their actual body size is
  - Difference between what individuals think they look like and what they actually look like represents the accuracy of their body-size perception

# Perceptual Measurement



Respondents are asked to choose the drawing they think best represents their current size and the drawing that best represents their ideal size. The discrepancy between the two chosen figures is taken as an indication of body size dissatisfaction.

# Cognitive Measures

- Consist of questionnaires that assess the degree of satisfaction with one's body shape
  - An individual rates his/her level of satisfaction with items on a list
  - An individual chooses images from a series of drawings, selecting ones that represent his/her current size and ideal size
- Criticism: Some scales do not adequately measure concerns about muscularity

# Cognitive Measures

## Exhibit 9.4

### Appearance evaluation from the MBSRQ.\*

Please indicate the extent to which you agree with each statement.

	DEFINITELY DISAGREE	MOSTLY DISAGREE	NEITHER AGREE NOR DISAGREE	MOSTLY AGREE	DEFINITELY AGREE
1. I like my looks just the way they are.	1	2	3	4	5
2. My body is sexually appealing.	1	2	3	4	5
3. Most people would consider me good looking.	1	2	3	4	5
4. I like the way I look without my clothes on.	1	2	3	4	5
5. I like the way my clothes fit me.	1	2	3	4	5
6. I dislike my physique.	1	2	3	4	5
7. I am physically unattractive.	1	2	3	4	5

*Note:* This scale is scored by reverse-scoring items 6 and 7 and then summing the scores for all items. Higher scores indicate more positive evaluations of one's appearance.

## Exhibit 9.5

### Body-areas satisfaction scale from the MBSRQ.\*

Please use this 1 to 5 scale to indicate how satisfied you are with each of the following areas or aspects of your body:

	VERY DISSATISFIED	MOSTLY DISSATISFIED	NEITHER SATISFIED NOR DISSATISFIED	MOSTLY SATISFIED	VERY SATISFIED
1. Face (facial features, complexion)	1	2	3	4	5
2. Hair (color, thickness, texture)	1	2	3	4	5
3. Lower torso (buttocks, hips, thighs, legs)	1	2	3	4	5
4. Mid torso (waist, stomach)	1	2	3	4	5
5. Upper torso (chest or breasts, shoulders, arms)	1	2	3	4	5
6. Muscle tone	1	2	3	4	5
7. Weight	1	2	3	4	5
8. Height	1	2	3	4	5
9. Overall appearance	1	2	3	4	5

*Note:* This scale is scored by summing the scores for all items. Higher scores indicate greater body satisfaction.

# Affective Measures

- Assess feelings such as worry, shame, anxiety, comfort, embarrassment, and pride in relation to the body
- Greater negative feelings are associated with greater body image disturbance
- Also measure:
  - Social physique anxiety
  - Body comfort

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# **Physical Activity and Anxiety About the Body**

**Anxiety arises over concerns with self-  
presentation of the body**

**Self Presentation: The attempt by an individual to present one-self and to omit self-relevant information to maximize the likelihood that positive social impression will be generated and undesired impression will be avoided.**

# **Physical Activity and Anxiety About the Body**

## **Social Physique Anxiety (SPA)**

- Women who possess high SPA view their physical appearance more negatively**
- Women with high SPA individuals often exercise for self-presentation reasons (e.g. Weight loss, to improve appearance, and body tone)**
- Women low in SPA were more likely to exercise for the purpose of fitness, mood enhancement, & health.**

# Chain Reaction

- Individual attempts to present themselves
- The individual doubts that he or she will be able to generate a positive impression because of their physical appearance
  - Social Physique Anxiety results

# Behavioral Measures

- Assess the frequency with which an individual engages in activities that might indicate body image disturbance
- Questionnaires ask people to self-report frequency with which they engage in one of two behaviors:
  - *Avoidance behaviors*: Actions performed to divert attention away from the body or to prevent other people from seeing one's body (e.g., wearing baggy clothes)
  - *Lifestyle behaviors*: Actions performed to alter the body or that reflect extensive body image concern

Drive for Muscularity Scale.

Exhibit 9.6

Please read each item carefully. Then, for each statement, circle the number that best applies to you.

1                      2                      3                      4                      5                      6  
*Always*            *Very often*            *Often*            *Sometimes*            *Rarely*            *Never*

**I. ITEMS TO ASSESS MUSCULARITY-ORIENTED BODY IMAGE COGNITIONS**

I wish that I were more muscular.	1	2	3	4	5	6
I think I would feel more confident if I had more muscle mass.	1	2	3	4	5	6
I think that I would look better if I gained 10 pounds in bulk.	1	2	3	4	5	6
I think that I would feel stronger if I gained a little more muscle mass.	1	2	3	4	5	6
I think that my arms are not muscular enough.	1	2	3	4	5	6
I think that my chest is not muscular enough.	1	2	3	4	5	6
I think that my legs are not muscular enough.	1	2	3	4	5	6

**II. ITEMS TO ASSESS MUSCULARITY-ORIENTED BEHAVIORS**

I lift weights to build up muscle.	1	2	3	4	5	6
I use protein or energy supplements.	1	2	3	4	5	6
I drink weight-gain or protein shakes.	1	2	3	4	5	6
I try to consume as many calories as I can in a day.	1	2	3	4	5	6
I feel guilty if I miss a weight-training session.	1	2	3	4	5	6
Other people think I work out with weights too often.	1	2	3	4	5	6
I think that my weight-training schedule interferes with other aspects of my life.	1	2	3	4	5	6

*Note:* This scale is scored by calculating separate sums for the cognition items and the behavior items. Higher scores indicate greater muscularity satisfaction and less use of behaviors to increase muscularity.

# Research on Body Image and Exercise

- Exercise training can lead to significant improvements in body image
- Both aerobic exercise and weight training can improve body image, but researchers have found *weight training* to be more effective

# Exercise vs. Psychological Interventions

- Cognitive behavior therapy (CBT) can improve body image
  - Individuals use certain strategies (i.e., relaxation, stress management, desensitization) to improve thoughts, feelings, and behaviors toward their bodies
- Exercise is just as effective as CBT for improving body image, and has the added bonus of also improving people's health and physical fitness

# Mechanisms of Change

- Improved physical fitness
- Increased awareness of physical capabilities
- Increased self-efficacy

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by Mark Parisi

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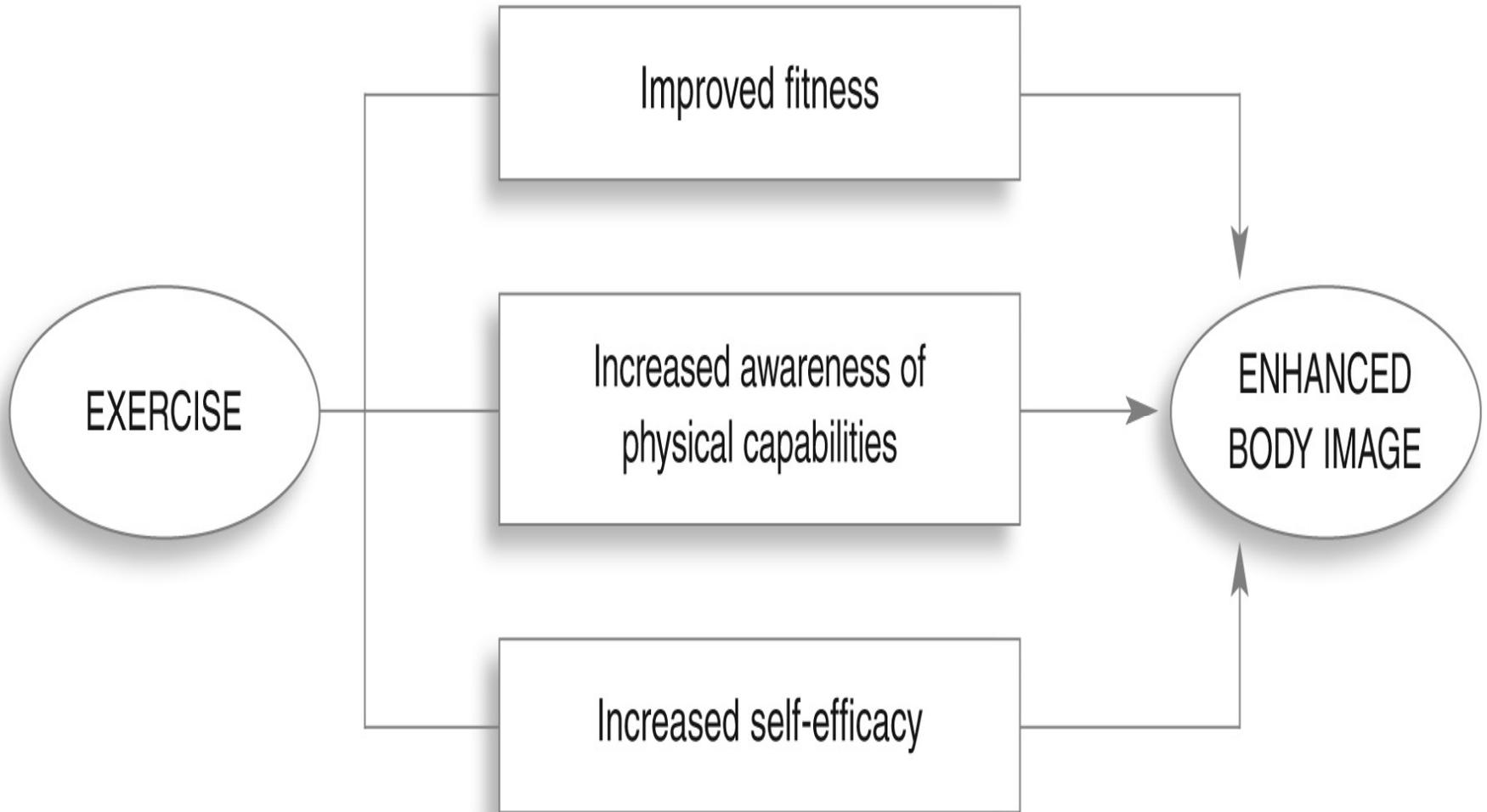


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# Mechanisms by Which Exercise Might Improve Body Image



# What are the causes?

Exercise improves body image by making people aware of their physical capabilities (McDonald & Thompson, 1992)

Exercise related improvements in physical self-efficacy leads to more positive feelings about one's body (McAuley et al, 2002)

# Improved Physical Fitness

- Improvements in body image have been shown with little or no significant physical alterations
- Majority of body image studies interested in relationship between body comp and body image.
  - The result are mixed...
  - Improved body composition generally accounts for less than 10 % of the total change in body image.

# Body Image and Strength/Endurance Training

- Few studies have examined this relationship.
- Improvements in strength and endurance seems to account for only modest changes in body image.

# Increased Awareness of Physical Capabilities

- Exercise may make people more aware of physical capabilities and may reduce their focus on physical appearance
- Particularly important for women, who tend to place greater value on their appearance
  - When they exercise to improve such things as satisfaction with physical function, they are more likely to experience greater success and body satisfaction

# Increased Self-Efficacy

- When physical capabilities improve, physical self-efficacy improves
- Changes in self-efficacy then lead to improvements in body image
- Increases in physical self-efficacy are associated with decreases in social physique anxiety

# Who Benefits Most from Exercise Interventions?

- Greatest impact is on people who have the poorest body image
- Women with the poorest self-image (Tucker & Mortell, 1993) diagnosed with breast cancer (Martin & Lichtenberger, 2002) and Obese women (Foster, et al, 1997).
- Particular benefit to those whose body image is threatened by disease or illness
- Little is known about effects of exercise training on the following:
  - Children
  - Younger men
  - People drawn from ethnic groups or socioeconomic strata other than well-educated Caucasians

# Influence of Body Image on Exercise Behavior

- Exercise motivation
  - Body image concerns are a powerful motivator
  - Desire to lose weight or increase muscle tone often shifts to desire for continued physical and psychological well-being
  - Body image can also be a demotivator—some people avoid exercise completely
- Exercise setting and attire preference
  - People with high social physique anxiety exercise in private or far away from instructor, in baggy nonrevealing clothes

# Physical Activity and SPA

- Regular physical activity has been shown to reduce SPA
- Women with high SPA stand in back and wear baggy clothing in aerobic classes ( Brewer, et al, 2004)
- Being in groups with people one perceives as similar physically also reduces SPA.
- Females experience less SPA in group aerobic and weight training classes)
- Instructors who lead classes primarily for self-presentation (e.g. an instructor who wants to show you that they are a better than you) reasons possess a high SPA
- Instructor who lead classes primarily for leadership (e.g. sensitive to client's level) opportunities possess lower SPA

# Body Image & Exercise

## Findings

- Exercise training can lead to significant improvements in body image of women (Martin & Lichtenberger, 2002)**
  - Both aerobic and weight training improved body image with weight training having the greatest impact.**
- Exercisers are less dissatisfied with their weight**
- High active women evaluated their physical appearance better than inactive women**
- Women (active and inactive) are overly preoccupied with weight loss**

# Physical Activity & Behavior

- Overweight people often do not exercise because they feel self-conscious if *others* see them huffing and puffing.
  - Being observed
  - Being evaluated by others
- Classes where physique is emphasized produces more SPA

# Influence of Body Image on Exercise Behavior

- Exercise participation motives for men and women are to lose weight and increase muscle tone are keys to start an exercise program (Rodger & Gauvin, 1994)
- Exercise behavior is effected by one's low body image or High SPA.
- People who are overweight or obese avoid signing up for exercise programs because of embarrassment and shame of their appearance (Bain, et al., 1989).

# Recommendation

- People who enjoy their workouts show the biggest exercise related improvements in body image.
- Exercise needs to be moderate to high to produce the greatest changes in body image.
- Fitness instructor need to teach people about body image and exercise behavior.
- Monitor progress of bodily changes in strength and body composition throughout your program.
- Fitness instructors should encourage clients to wear loose-fitted, comfortable exercise attire.
- Media promotion materials of classes or exercise campaigns should show a wide range of body shapes, sizes, and physical abilities.
- Promotional materials for exercise campaigns should show a wide range of body shapes, sizes, and physical abilities.
- Exercise programs should focus on improving physical function, strength, and endurance rather than on changing physical appearance.