1. What is the title of this study?

The Influence of Mirrored Environments on Levels of Social Physique Anxiety and Physical Self-Worth in Undergraduate Students Participating in a Jazzercise Class.

2. Who are the research personnel and what is their contact information?

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<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Role</td>
<td>Undergraduate Student Investigator</td>
<td>Faculty Advisor</td>
</tr>
<tr>
<td>Institution</td>
<td>Pacific University</td>
<td>Pacific University</td>
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<td>Program</td>
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</table>

3. What is the purpose of this study?

In 1997, the American College of Sports Medicine suggested that all exercise classrooms should include mirrors on at least two of their four walls (ACSM, 1997). Although they may aid exercisers in improving their form and coordination, research indicates that mirrors can also produce negative psychological consequences (Weinberg & Gould, 2007) such as social physique anxiety, a state in which individuals experience stress and negative thoughts about themselves during fitness evaluations and other such situations (Hagger & Stevenson, 2010). Lamarch, Gammage, and Strong (2009) suggest that increased self-awareness, such as provided by mirrors, leads to social comparison which then leads to either positive or negative self-evaluations depending on how active and/or attractive an individual considers herself.

A study by Katula, McAuley, Mihalko, and Bane (1998) found that when women exercised in a mirrored environment they had lower exercise self-efficacy than males. In a subsequent study, Katula and McAuley (2001) found exercise self-efficacy was increased when exercising in a mirrored environment in a sample of highly active women. Even more recently, research has found that mirrors lead women, usually sedentary, to feel worse when exercising.

According to Leary and Kowalski (1995), people who are considering exercising in contexts where physical self is important (i.e., a gym or group exercise class) are more likely to expect that their body will be evaluated by others. Additionally, individuals with high levels of social physique anxiety will likely be concerned that the presentation of their physique in such contexts will be perceived as unfavorable or negative in the eyes of others. Due to the constant struggle to appear attractive, individuals may avoid physical activity, resulting in those who have the greatest need for aerobic exercise may be the most reluctant to engage in it (Marquez & McAuley, 2001). It is for this reason that exercise companies, such as Jazzercise and Curves, have abandoned the use of mirrors in their facilities. In 2003, Martin Ginis and Jung highlighted this trend by stating that the recommended practice of placing mirrors in exercise centers may need to be reconsidered, especially in facilities that are trying to attract exercise initiates.
In light of these findings, the purpose of this study is to examine the influence of mirrored exercise environments on an individual’s levels of social physique anxiety and physical self-worth. The problem with the research up to this point has been that most of it has focused solely on female exercisers. Therefore, this study hopes to examine both female and male responses to mirrors as part of the exercise environment. The results from this study may better inform exercise leaders and physical educators as to the influence of mirrors on their students’ psychological well-being.

Citations


Martin Ginis, KA & Jung, ME (2003). To see or not to see: effects of exercising in mirrored environments on sedentary women’s feeling states and self-efficacy. *Health Psychology*, 22(4), 354-361.


4. What are the relevant characteristics of the intended sample and the recruitment plan?

a. **Intended Sample Size & Relevant Demographics**

In this study, each participant will attend two 30-minute Jazzercise classes. Sample size will include a total of at least 40 healthy, male and female adults.

b. **Eligibility Criteria**

- 18 years of age or older.
- Not pregnant.
- No pre-existing injuries in the upper- or lower-limbs or other health concerns as determined by the PAR-Q (Appendix B).
- Has proper footwear for exercising (any sort of athletic shoe for indoor use).

c. **Exclusionary Criteria**

- Younger than 18 years of age.
- Pregnant.
• Any health concerns as determined by the PAR-Q.
• Does not have or wear proper footwear for exercising (any sort of athletic shoe for indoor use).

d. Recruiting Plan
We will be sending out recruitment emails to Pacific University undergraduate students. When individuals sign up to participate, we will send out a follow-up email with more information.
(See Appendix A for both)

5. What is the study methodology?

a. Location of the study.
The study will take place in Warner Hall (Room 4) and the Pacific Athletic Center (Room 123A). Data will be analyzed and stored in the psychomotor lab (Room 136) of the Pacific Athletic Center in a locked cabinet. Information analyzed on the psychomotor computers will be kept in a password protected file.

b. Materials, measures, and/or apparatus to be applied.
• PAR-Q form (Thomas, Reading, & Shephard, 1992) to screen participants for physical ability to exercise.
• Demographics.
• Godin Leisure-Time Exercise Questionnaire (Godin & Shephard, 1997) to quantify participants’ amount and type of exercise over a period of one week.
• Physical Self-Perception Profile (PSPP; Fox & Corbin, 1989) to measure participants’ levels of physical self-worth.
• Social Physique Anxiety Scale (SPAS; Hart, Leary, & Rejeski, 1989) to measure participants’ perceptions and feelings about their physique/figure.
(See Appendices B, C, D, E, and F)

c. Procedures.
1) Upon going through the informed consent procedure, each participant will complete the PAR-Q to determine physical ability for exercise. Those who have no physical limitations for exercise will then complete the demographic questionnaire, Godin Leisure-Time Exercise Questionnaire, the PSPP, and the SPAS and schedule a time for their first exercise session. Those who have physical limitations, based on the PAR-Q, will be thanked for their interest and will have no more contact with the researchers on this project. Those who continue as participants will attend two 30-minute Jazzercise classes in two different classroom-types, one mirrored and one non-mirrored. The classes will be held on non-consecutive days to allow participants proper for recovery. Each class will be comprised of at least 20 individual participants. All classes will be taught by the same certified Jazzercise instructor. She has taught activity classes for the Exercise Science Department at Pacific University for several years.

First Exercise Class:
2) Participants will follow the aerobics instructor through a 30-minute Jazzercise class that will include warm-up, cardio, strength training, and a cool-down.
3) Each participant will fill out the PSPP and the SPAS.
4) They will be thanked for participating and will be allowed to leave.

Second Exercise Class:
1) The same Jazzercise instructor will lead all the participants through the same 30-minute Jazzercise class.
2) Each participant will fill out the PSPP and the SPAS.
3) They will be thanked for participating and will be allowed to leave. This ends participants’ involvement in the study.

Timeframe: Total time commitment is 1 hour and 45 minutes.

d. Timeframe for recruitment, data collection, analysis and dissemination.
Recruitment and data collection will begin once IRB approval has been obtained. The study will end May 1, 2011. Results will be presented on April 27, 2011 as a part of Senior Projects Day at Pacific University.
6. What risk(s) accompany participation in this study?

a. Specifically identify and briefly describe the various risks to which participants may be exposed.
   - Muscle soreness – caused by overusing the same muscles or muscle groups and by not stretching properly.
   - Sprains and/or Strains – result from not wearing proper footwear and/or not taking the time to properly stretch.

b. Describe the likelihood of these risks occurring, how they can/will be minimized, and how they will be handled should they occur.
   - Muscle soreness – Low-risk: The Jazzercise routine used for this study varies in the muscle groups used. Also, the participants will be led in a proper warm-up and cool-down which both involve gentle stretching.
   - Sprains and/or Strains – Low-risk: Participants will be led in stretches during the classes. Also, they are required to wear proper footwear and clothing.

c. Describe any element(s) of deception or meaningful withholding of information associated with the study methodology.
   This study does not include any withholding of information. Participants are urged to ask any questions that they may have about the study, its procedures, and its methodology.

d. Describe any treatment alternatives that may be advantageous to subjects, if clinical trials are involved.
   This study does not involve clinical trials.

7. Does participation in this study provide direct benefit or compensation?

a. Describe the specific unique benefits subjects will realize via their participation in this study, if any.
   There are no unique benefits to participating in this study.

b. Describe the payment or other reward participants will receive, if any.
   There are no payments or rewards for participating in this study.

8. How will adverse events be handled and reported?
   If any adverse research events occur during any part of the study, the IRB will be notified within 24 hours (or by the next business day) by the faculty advisor who is overseeing this study. In case of serious injuries, the study will cease and medical help will be sought.

9. How will you protect the privacy of your participants?
   Each participant will be assigned an identification number for his or her data. The only documents that will include the participant’s actual name will be their informed consent and PAR-Q. The link file that connects participants’ names and identification numbers will be kept in a locked file within the faculty advisors office. Informed consent and PAR-Q documents will be stored separately in a locked file within the faculty advisors office away from the demographics and survey results. All information will be kept confidential.

10. Is there a grant or contract supporting this study and/or any potential conflicts of interest?
    a. Describe any grant or contract funding support for this study, if any.
       The study will be receiving an Arts and Sciences Research Grant.

    b. Describe any potential or apparent conflict(s) of interest that may exist.
       There are no conflicts of interest.
11. How will informed consent be obtained and documented?

Participants will read the informed consent, ask any questions if the information is unclear or if they have any concerns, and then sign the statement of consent. They will be reminded that they can refuse to participate at any time during the course of the study and that the statement of consent is not a binding contract. If they decide to withdraw during the course of the study, their data will be removed from analysis and properly disposed of.
1. Study Title

The Influence of Environments on Undergraduate Students Participating in a Jazzercise Class

2. Study Personnel

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<th>Name</th>
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3. Study Invitation, Purpose, Location, and Dates

You are invited to participate in a research study that seeks to answer the question: What effects do fitness rooms have on an individual while they are participating in an exercise class? This project has been approved by the Pacific University IRB and will be completed May 2011. This study will take place in Warner Hall (Room 4) and the Pacific Athletic Center (Room 123A) at Pacific University. The results of this study will be used to inform exercise leaders and physical educators as to the influence of environments on the health of participants.

4. Participant Characteristics and Exclusionary Criteria

Eligibility Criteria
- 18 years of age or older.
- Not pregnant.
- No pre-existing injuries in the upper- or lower-limbs.
- Physically able to participate based on the PAR-Q instrument.
- Has proper footwear for exercising (any sort of athletic shoe for indoor use).

Exclusionary Criteria
- Younger than 18 years of age.
- Pregnant.
- Any pre-existing injuries in the upper- or lower-limbs.
- Not physically able based on the PAR-Q instrument.
- Does not have proper footwear for exercising (any sort of athletic shoe for indoor use).

Participants who do not fulfill all the eligibility requirements or who exhibit any of the exclusionary criteria may be removed, by the principle investigator, from further participation in this study. Additionally, the principle investigator has the right to exclude a participant if they are dressed improperly for exercise. Decisions like this are left up to the principle investigator’s own discretion.

5. Study Materials and Procedures

You will attend two Jazzercise classes. Classes will be comprised of at least 20 individual participants. All classes will be taught by the same certified Jazzercise instructor. She has taught activity classes for the Exercise Science Department at Pacific University for several years.
First Meeting (15 minutes):
1) You will read, ask any questions, and sign the informed consent.
2) You will fill out the PAR-Q form.
3) You will fill out the demographics form and a set of questionnaires.
4) You will be scheduled into two Jazzercise classes.

First Exercise Class (45 minutes):
5) You will be led, by a certified Jazzercise instructor, through a 30-minute Jazzercise class that will include warm-up, cardio, strength training, and a cool-down.
6) You will again fill out the set of questionnaires.
7) You will be thanked for participating and will be allowed to leave.

Second Class (45 minutes):
1) You will be led, by the same Jazzercise instructor, through the same 30-minute Jazzercise class.
2) You will again fill out the set of questionnaires.
3) You will be thanked for participating and will be allowed to leave. This completes your participation in this project.

Timeframe: Overall, your participation in this study will be about 1 hour and 45 minutes. This study does not have any additional costs other than just your time and willingness to participate.

6. Risks, Risk Reduction Steps and Clinical Alternatives
   a. Unknown Risks:
      It is possible that participation in this study may expose you to currently unforeseeable risks.
   
   b. Anticipated Risks and Strategies to Minimize/Avoid:
      • Muscle soreness – Low-risk: The Jazzercise routine used for this study varies in the muscle groups used. Also, you will be led in a proper warm-up and cool-down which both involve stretching.
      • Sprains and/or Strains – Low-risk: You will be led in stretches during the classes. Also, you are required to wear proper footwear and clothing.
   
   c. Advantageous Clinical Alternatives:
      This study does not involve experimental clinical trial(s).

7. Adverse Event Handling and Reporting Plan
   The IRB office will be notified by the next normal business day if minor unanticipated adverse events occur. The IRB office will be notified within 24 hours if major unanticipated adverse events occur.

8. Direct Benefits and/or Payment to Participants
   a. Benefit(s):
      This study is non-beneficial.
   
   b. Payment(s) or Reward(s):
      You will not be paid or rewarded for your participation.

9. Promise of Privacy
   As a participant you will be given your own identification number. Your identification number will not be linked in any way to your Pacific Identification Number, Social Security Number, or to any other personal information. Your identification number will be the same for your informed consent, demographics document, and your survey results. The only documents that will include your actual name will be your informed consent and PAR-Q; these along with a file that links your name to your identification number will be stored separately from the demographics and survey results and kept in a locked file within the faculty advisor’s office. All information will be kept confidential.
10. Medical Care and Compensation In the Event of Accidental Injury
During your participation in this project it is important to understand that you are not a Pacific University clinic patient or client, nor will you be receiving complete medical care as a result of your participation in this study. If you are injured during your participation in this study and it is not due to negligence by Pacific University, the researchers, or any organization associated with the research, you should not expect to receive compensation or medical care from Pacific University, the researchers, or any organization associated with the study.

11. Voluntary Nature of the Study
Your decision whether or not to participate will not affect your current or future relations with Pacific University. If you decide to participate, you are free to not answer any question or to withdraw at any time without prejudice or negative consequences. If you choose to withdraw after beginning the study, any data collected to that point will be omitted from the study and will be properly disposed of.

12. Contacts and Questions
The researcher(s) will be happy to answer any questions you may have at any time during the course of the study. If you are not satisfied with the answers you receive, please call Pacific University’s Institutional Review Board, at (503) 352-1478 to discuss your questions or concerns further. If you become injured in some way and feel it is related to your participation in this study, please contact the investigators and/or the IRB office. All concerns and questions will be kept in confidence.

13. Statement of Consent

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

Participant’s Signature                                                                                           Date

Investigator’s Signature                                                                                           Date

14. Participant Contact Information
This contact information is required in case any issues arise with the study and participants need to be notified and/or to provide participants with the results of the study if they wish.

Would you like to have a summary of the results after the study is completed?  ____Yes  ____No

Participant’s Name (Please Print)                      Email
Participant ID#_____________________  

Appendix A

Invitation Email

Hello all!

My name is Removed. I am a senior Exercise Science student at Pacific. I am conducting a research study that examines the effects of exercise rooms have on individuals participating in a Jazzercise class. Your involvement would be in two group aerobic classes. Classes will take place in Warner Hall (Room 4) and the Pacific Athletic Center (PAC; Room 123A) and will take about an hour and 45 minutes for both classes and the initial meeting.

You are eligible if you…
• Are at least 18 years old.
• Are not pregnant.
• Are in good health.
• Have no lower- or upper-limb injuries.

If you are willing to participate, send me an email at schn4643@pacificu.edu and tell me which two sessions (one in Warner and one in the PAC) you wish to attend (see Session Times). I will put your name down on the schedule, get in touch with you, and give you some more details. If you have any questions, feel free to ask.

Session Times
1: Warner (Room 4) = (date and time will be determined after IRB approval)
2: Warner (Room 4) = (date and time will be determined after IRB approval)

3: PAC (Room 123A) = (date and time will be determined after IRB approval)
4: PAC (Room 123A) = (date and time will be determined after IRB approval)

Thank you!

Follow-Up Email

Thank you for participating in our study!

We appreciate you taking the time and energy to help us. Before you come in for your first class, here are a few things you should remember:
You will be exercising, so please wear appropriate clothing (i.e., shirt, pants/shorts, and athletic shoes).
You may get thirsty, so please bring a water bottle.
It is very important that everyone fully participates, so please show up on time.

If you have any other questions or concerns, please send an email to schn4643@pacificu.edu.

Again, thank you!

Removed
Appendix B

PAR-Q Form


Please complete this form as accurately and completely as possible.

<table>
<thead>
<tr>
<th>Please mark YES or NO to the following:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your doctor ever said that you have a heart condition and recommended only medically supervised activity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you frequently have pains in your chest when you perform physical activity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you had chest pain when you were not doing physical activity?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you had a stroke?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you lose your balance due to dizziness or do you ever lose consciousness?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have a bone, joint, or any other health problem that causes you pain or limitations that must be addressed when developing an exercise program (i.e., diabetes, osteoporosis, high blood pressure, high cholesterol, arthritis, anorexia, bulimia, anemia, epilepsy, respiratory ailments, back problems, etc.)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are you pregnant now or have given birth within the last 6 months?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have asthma or exercise induced asthma?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have low blood sugar levels (hypoglycemia)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have diabetes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you had a recent surgery?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you have marked YES to any of the above, please elaborate below:

____________________________________________________________________________________________________
____________________________________________________________________________________________________

Do you take any medications, either prescription or non-prescription, on a regular basis? Yes / No

What is the medication for? ______________________________________________________

How does this medication affect your ability to exercise or achieve your fitness goals?

____________________________________________________________________________________________________
____________________________________________________________________________________________________

Please note: If your health changes such that you could then answer YES to any of the above questions, tell your trainer/coach. Ask whether you should change your physical activity plan.

I have read, understood, and completed the questionnaire. Any questions I had were answered to my full satisfaction.

Print Name: _________________________ Signature: _________________________ Date: _________________________
Appendix C

Demographics

Please answer the questions below by checking the response that best describes you. Remember, this information will be kept anonymous. Please print clearly.

1) Gender?
   - male
   - Female

2) Age? _______

3) Height? _______

4) Weight? _______

5) Major? ____________________________

6) Are you involved in…
   - A team sport (state which one) ____________________________
   - An individual sport (state which one) ____________________________
   - I am not involved in either a team or individual sport.

7) If you exercise regularly, do you exercise in a room with mirrors?
   - Yes
   - No
   - Sometimes
   - I do not exercise on a regular basis

8) Have you ever taken a Jazzercise class before? If so, how long have you done Jazzercise?
   - Yes, (# of months) _______
   - No
Appendix D

Godin Leisure-Time Exercise Questionnaire


INSTRUCTIONS

In this excerpt from the Godin Leisure-Time Exercise Questionnaire, the individual is asked to complete a self-explanatory, brief four-item query of usual leisure-time exercise habits.

CALCULATIONS

For the first question, weekly frequencies of strenuous, moderate, and light activities are multiplied by nine, five, and three, respectively. Total weekly leisure activity is calculated in arbitrary units by summing the products of the separate components, as shown in the following formula:

Weekly leisure activity score = (9 \times \text{Strenuous}) + (5 \times \text{Moderate}) + (3 \times \text{Light})

The second question is used to calculate the frequency of weekly leisure-time activities pursued “long enough to work up a sweat” (see questionnaire).

EXAMPLE

Strenuous = 3 times/wk
Moderate = 6 times/wk
Light = 14 times/wk

Total leisure activity score = (9 \times 3) + (5 \times 6) + (3 \times 14) = 27 + 30 + 42 = 99
Godin Leisure-Time Exercise Questionnaire

1. During a typical 7-Day period (a week), how many times on the average do you do the following kinds of exercise for more than 15 minutes during your free time (write on each line the appropriate number).

<table>
<thead>
<tr>
<th>Times Per</th>
<th>Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) STRENUOUS EXERCISE</td>
<td>(HEART BEATS RAPIDLY)</td>
</tr>
<tr>
<td>(e.g., running, jogging, hockey, football, soccer, squash, basketball, cross country skiing, judo, roller skating, vigorous swimming, vigorous long distance bicycling)</td>
<td></td>
</tr>
<tr>
<td>b) MODERATE EXERCISE</td>
<td>(NOT EXHAUSTING)</td>
</tr>
<tr>
<td>(e.g., fast walking, baseball, tennis, easy bicycling, volleyball, badminton, easy swimming, alpine skiing, popular and folk dancing)</td>
<td></td>
</tr>
<tr>
<td>c) MILD EXERCISE</td>
<td>(MINIMAL EFFORT)</td>
</tr>
<tr>
<td>(e.g., yoga, archery, fishing from river bank, bowling, horseshoes, golf, snow-mobiling, easy walking)</td>
<td></td>
</tr>
</tbody>
</table>

2. During a typical 7-Day period (a week), in your leisure time, how often do you engage in any regular activity long enough to work up a sweat (heart beats rapidly)?

<table>
<thead>
<tr>
<th></th>
<th>OFTEN</th>
<th>SOMETIMES</th>
<th>NEVER/RARELY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>[ ]</td>
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<td>[ ]</td>
</tr>
<tr>
<td>2.</td>
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<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3.</td>
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</tr>
</tbody>
</table>
Physical Self-Perception Profile (PSPP)


*Physical Self-Perception Profile* (Fox & Corbin, 1989) measures perceptions of physical self-worth, body attractiveness, sports competence, physical condition, and physical strength. Each subscale contains six items that reference the participant’s perceptions of their own confidence, pride, and positive feelings about that physical domain. These questionnaires are in a structured-alternative format and offer two contrasting viewpoints of the physical self. The participants are asked to determine which position is most like theirs and then indicate the degree to which the perspective is like theirs. Each following sub-domain, body attractiveness, sports competence, physical condition, physical strength, also includes two items that ask the participant to rate the importance of the sub-domain for themselves.
Physical Self-Perception Profile

Physical Self-Worth Subscale

WHAT AM I LIKE?

These are statements that allow people to describe themselves. There are no right or wrong answers since people differ a lot.

For each number, decide which one of the two statements best describes you. Then, indicate if it is just “Sort of True” or “Really True” FOR YOU by filling in one of the boxes below.

**EXAMPLE**

<table>
<thead>
<tr>
<th>Really True for Me</th>
<th>Sort of True for Me</th>
<th>Sort of True for Me</th>
<th>Really True for Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some people are very competitive</td>
<td>BUT Others are not quite so competitive</td>
<td>![Radio Button]</td>
<td>![Radio Button]</td>
</tr>
</tbody>
</table>

Physical Self-Worth Subscale

WHAT AM I LIKE?

<table>
<thead>
<tr>
<th>Really True for Me</th>
<th>Sort of True for Me</th>
<th>Really True for Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some people feel extremely proud of who they are and what they can do physically</td>
<td>BUT Others are sometimes not quite so proud of who they are physically</td>
<td>![Radio Button]</td>
</tr>
</tbody>
</table>

2. Some people are sometimes not so happy with the way they are or what they can do physically | BUT Others always feel happy about the kind of person they are physically | ![Radio Button] | ![Radio Button] |

3. When it comes to the physical side of themselves, some people do not feel very confident | BUT Others seem to have a real sense of confidence in the physical side of themselves | ![Radio Button] | ![Radio Button] |

4. (R) Some people always have a really positive feeling about the physical | BUT Others sometimes do not feel positive about the physical side of themselves | ![Radio Button] | ![Radio Button] |
<table>
<thead>
<tr>
<th>Really</th>
<th>Sort of</th>
<th>True</th>
<th>True</th>
<th>for Me</th>
<th>for Me</th>
</tr>
</thead>
</table>

5. Some people wish that they could have more respect for their physical selves. **BUT** Others always have great respect their physical selves.

6. (R) Some people feel extremely satisfied with the kind of person they are physically. **BUT** Others sometimes feel a little dissatisfied with their physical selves.
Body Attractiveness Subscale
WHAT AM I LIKE?

These are statements that allow people to describe themselves. There are no right or wrong answers since people differ a lot.

For each number, decide which one of the two statements best describes you. Then, indicate if it is just “Sort of True” or “Really True” FOR YOU by filling in one of the boxes below.

EXAMPLE

<table>
<thead>
<tr>
<th>Really True</th>
<th>Sort of True</th>
<th>Really True</th>
<th>Sort of True</th>
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</thead>
<tbody>
<tr>
<td>for Me</td>
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</tbody>
</table>

Some people are very competitive BUT Others are not quite so competitive

1. (R) Some people feel that they have an attractive body BUT Others feel that compared to most, their body is not quite so attractive.

2. Some people feel that they have difficulty maintaining an attractive body. BUT Others feel that they are easily able to keep their bodies looking attractive.

3. Some people feel embarrassed by their bodies when it comes to wearing few clothes. BUT Others do not feel embarrassed by their bodies when it comes to wearing few clothes.
<table>
<thead>
<tr>
<th></th>
<th>Really True for Me</th>
<th>Sort of True for Me</th>
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<th>Really True for Me</th>
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</thead>
<tbody>
<tr>
<td>4.</td>
<td>Some people feel that they are often admired because of their physique or figure is considered attractive.</td>
<td>BUT</td>
<td>Others rarely feel that they receive admiration for the way their body looks.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Some people feel that compared to most, their bodies do not look in the best shape.</td>
<td>BUT</td>
<td>Others feel that compared to most their bodies always look in excellent shape.</td>
<td></td>
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<tr>
<td>6.</td>
<td>Some people are extremely confident about the appearance of their body.</td>
<td>BUT</td>
<td>Others are a little self-conscious about the appearance of their bodies.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Some people believe that having an attractive physique or figure is vitally important to them.</td>
<td>BUT</td>
<td>Others believe that having an attractive physique or figure is not all that important in their lives.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Some people do not feel it is so important for them to spend a lot of time and effort maintaining an attractive body.</td>
<td>BUT</td>
<td>Others think it is vitally important for them to spend time and effort maintaining an attractive body.</td>
<td></td>
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</tbody>
</table>
Sports Competence Subscale
WHAT AM I LIKE?

These are statements that allow people to describe themselves. There are no right or wrong answers since people differ a lot.

For each number, decide which one of the two statements best describes you. Then, indicate if it is just “Sort of True” or “Really True” FOR YOU by filling in one of the boxes below.

<table>
<thead>
<tr>
<th>Really True for Me</th>
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</table>

1. Some people feel that they are not very good when it comes to playing sports. Others feel that they are really good at just about every sport.

2. (R) Some people feel that they are among the best when it comes to athletic ability. Others feel that they are not among the most able when it comes to athletics.

3. Some people are not quite so confident when it comes to taking part in sports activities. Others are among the most confident when it comes to taking part in sports activities.

4. (R) Some people feel that they are always one of the best when it comes to joining in sports activities. Others feel that they are not one of the best when it comes to joining in sports activities.

5. Some people are sometimes a little slower than most when it comes to learning new skills in a sports situation. Others have always seemed to be the quickest when it comes to learning new sports skills.
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<th>Really</th>
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<th>Really</th>
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</tbody>
</table>

6. (R) Given the chance, some people are always one of the first to join in sports activities. **BUT** Others people sometimes hold back and are not usually among the first to join in sports.

7. Some people feel that being good at sports is vitally important to them. **BUT** Others feel that being good at sports is not so important to them.

8. Some people feel that having very good sports ability and skill is not so important to them. **BUT** Others feel that having a high level of sports ability is really important to them.
Physical Condition Subscale
WHAT AM I LIKE?

These are statements that allow people to describe themselves. There are no right or wrong answers since people differ a lot.

For each number, decide which one of the two statements best describes you. Then, indicate if it is just “Sort of True” or “Really True” FOR YOU by filling in one of the boxes below.

<table>
<thead>
<tr>
<th>Really True for Me</th>
<th>Sort of True for Me</th>
<th>Sort of True for Me</th>
<th>Really True for Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Some people are not very confident about their level of physical conditioning and fitness.</td>
<td>Others always feel confident that they maintain excellent conditioning and fitness.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. (R) Some people make certain they take part in some form of regular vigorous physical exercise.</td>
<td>Others don’t often manage to keep up regular vigorous physical exercise.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Some people are not usually have a high level of stamina and fitness.</td>
<td>Others always maintain a high level of stamina and fitness.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Some people tend to feel a little uneasy in fitness and exercise settings.</td>
<td>Others feel confident and at ease at all times in fitness and exercise settings.</td>
<td></td>
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</tr>
<tr>
<td>5. (R) Some people feel extremely confident about their ability to maintain regular exercise and physical condition.</td>
<td>Others don’t feel quite so confident about their ability to maintain regular exercise and physical condition.</td>
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</table>

Note: The abbreviation (R) indicates reverse scoring.
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<td>True</td>
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</tbody>
</table>

6. (R) Some people feel that compared to most they always maintain a high level of physical conditioning. **BUT** Others feel that compared to most their level of physical conditioning is not usually so high.

7. Some people do not feel that maintaining a high level of physical conditioning is very important to them. **BUT** Others feel that maintaining a high level of physical conditioning is extremely important to them.

8. (R) Some people feel that maintaining regular vigorous exercise is vitally important to them. **BUT** Others feel that keeping up regular vigorous exercise is not of prime importance to them.
**Strength Subscale**

**WHAT AM I LIKE?**

These are statements that allow people to describe themselves. There are no right or wrong answers since people differ a lot.

For each number, decide which **one** of the two statements best describes you. Then, indicate if it is just “**Sort of True**” or “**Really True**” FOR YOU.

<table>
<thead>
<tr>
<th></th>
<th>Really True for Me</th>
<th>Sort of True for Me</th>
<th>Really True for Me</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. (R)</td>
<td>Some people feel that they are physically stronger than most people of their sex.</td>
<td>Others feel that they lack physical strength compared to most others of their sex.</td>
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<td>[ ] [ ]</td>
<td>BUT [ ] [ ]</td>
<td></td>
<td>[ ] [ ]</td>
</tr>
<tr>
<td>2. (R)</td>
<td>Some people feel that their muscles are much stronger than most others of their sex.</td>
<td>Others feel that on the whole their muscles are not quite so strong as most others of their sex.</td>
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<tr>
<td></td>
<td>[ ] [ ]</td>
<td>BUT [ ] [ ]</td>
<td></td>
<td>[ ] [ ]</td>
</tr>
<tr>
<td>3. (R)</td>
<td>When it comes to situations requiring strength some people are one of the first to step forward.</td>
<td>When it comes to situations requiring strength some people are one of the last to step forward.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[ ] [ ]</td>
<td>BUT [ ] [ ]</td>
<td></td>
<td>[ ] [ ]</td>
</tr>
<tr>
<td>4.</td>
<td>Some people tend to lack confidence when it comes to their physical strength.</td>
<td>Others are extremely confident when it comes to their physical strength.</td>
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<tr>
<td></td>
<td>[ ] [ ]</td>
<td>BUT [ ] [ ]</td>
<td></td>
<td>[ ] [ ]</td>
</tr>
<tr>
<td>5. (R)</td>
<td>Some people feel that they are very strong and have well developed muscles compared to most people.</td>
<td>Others feel that they are not so strong and their muscles are not very well developed.</td>
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<td></td>
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<tr>
<td></td>
<td>[ ] [ ]</td>
<td>BUT [ ] [ ]</td>
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<tr>
<td></td>
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<tr>
<td>6.</td>
<td>True</td>
<td>True</td>
<td>for Me</td>
<td>True</td>
</tr>
<tr>
<td></td>
<td>Some people feel that they are not as good as most at dealing with situations requiring physical strength.</td>
<td>BUT</td>
<td>Others feel that they are among the best at dealing with situations which require physical strength.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>True</td>
<td>True</td>
<td>for Me</td>
<td>True</td>
</tr>
<tr>
<td></td>
<td>Some people believe that being physically strong is not so important to them.</td>
<td>BUT</td>
<td>Others feel that it is extremely important to them to be physically strong.</td>
<td></td>
</tr>
<tr>
<td>8. (R)</td>
<td>True</td>
<td>True</td>
<td>for Me</td>
<td>True</td>
</tr>
<tr>
<td></td>
<td>Some people feel that being strong and having well developed/toned muscles is vitally important to them.</td>
<td>BUT</td>
<td>Others feel that being strong and having well developed/toned muscles is not so important to them.</td>
<td></td>
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</tbody>
</table>
Appendix F

Social Physique Anxiety Scale (SPAS)

ID#_________________

Social Physique Anxiety Scale

Directions: Using the five-point scale, indicate the degree to which the statement is characteristic or true of you.

1. I am comfortable with the appearance of my physique/figure. (R)
   

2. I would worry about wearing clothes that might make me look too thin or overweight.
   

3. I wish I wasn’t so uptight about my physique/figure.
   

4. There are times when I am bothered by thoughts that other people are evaluating my weight or muscular development negatively.
   

5. When I look in the mirror I feel good about my physique/figure. (R)
   
6. Unattractive features of my physique/figure make me nervous in certain social settings.

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<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Slightly</td>
<td>Moderately</td>
<td>Very</td>
<td>Extremely</td>
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</tbody>
</table>

7. In the presence of others, I feel apprehensive about my physique/figure.

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</table>

8. I am comfortable with how fit my body appears to others. (R)

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</table>

9. It would make me uncomfortable to know others were evaluating my physique/figure.

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<th>5</th>
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</tbody>
</table>

10. When it comes to displaying my physique/figure to others, I am a shy person.

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</table>

11. I usually feel relaxed when it is obvious that others are looking at my physique/figure. (R)

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<th>3</th>
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<th>5</th>
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<td>Extremely</td>
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12. When in a bathing suit, I often feel nervous about the shape of my body.

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