

## Athletes' Relationships with Training Scale (ART)\*

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### **Description**

The Athletes' Relationships with Training Scale (ART)\* is a self-report measure of unhealthy training behaviors and beliefs in athletes. The ART was designed for use by clinicians and athletic trainers to help identify athletes who are engaging in unhealthy training practices which could be associated with an eating disorder. The ART may also be helpful for tracking clinical outcomes in athletes with eating disorders who are receiving treatment. The 15-item ART can be found below along with scoring instructions and guidelines for interpreting total scores.

**ART©\***

\*This questionnaire contains items that ask about your attitudes, feelings, and behaviors regarding exercise and training. Read each item and determine **how frequently** each item applies to you. Remember, there are no right or wrong answers. Please answer all the items. Use this scale when providing your responses:

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>NEVER</b>	<b>RARELY</b>	<b>SOMETIMES</b>	<b>OFTEN</b>	<b>ALWAYS</b>

1. I train more than is required by my coach 1. \_\_\_\_\_
2. I train/exercise against the advice of the medical/training staff 2. \_\_\_\_\_
3. I train despite being injured 3. \_\_\_\_\_
4. I feel guilty when I don't train/exercise 4. \_\_\_\_\_
5. I feel anxious when I don't train/exercise 5. \_\_\_\_\_
6. It is hard for me to change/alter my training routine/schedule 6. \_\_\_\_\_
7. It is difficult for me to take a day off from training 7. \_\_\_\_\_
8. I get "overuse" injuries 8. \_\_\_\_\_
9. I exercise outside of team practices 9. \_\_\_\_\_



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**ART©**

These items ask about your attitudes, feelings, and behaviors regarding exercise and training. Read each item and determine **the extent that you agree or disagree** with the item. Remember, there are no right or wrong answers. Please answer all items. Use this scale when providing your responses:

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>STRONGLY AGREE</b>	<b>AGREE</b>	<b>NEITHER AGREE NOR DISAGREE</b>	<b>DISAGREE</b>	<b>STRONGLY DISAGREE</b>

10. No matter how hard I train, I am still not lean enough 10.\_\_\_\_\_

11. No matter how hard I train, I am still not thin enough 11.\_\_\_\_\_

12. I prefer to train alone 12.\_\_\_\_\_

13. No matter how hard I train, I am not pleased with my body 13.\_\_\_\_\_

14. I do not feel good if I miss a day of training/exercise 14.\_\_\_\_\_

15. I exercise outside of practice to build bigger muscles 15.\_\_\_\_\_

## **ART© Scoring**

Scoring Directions: This page should not be administered to participants/patients. Sum the scores for individual items in each subscale (see below).

### Affect-Driven Training:

4, 5, 6, 7, 14\*

### Training Amount:

1, 9, 12\*, 15\*

### Training Against Medical Advice:

2, 3, 8

### Body Dissatisfaction:

10\*, 11\*, 13\*

### Total Score:

A total score can be calculated by adding scores from the Affect-Driven Training, Training Amount, Training Against Medical Advice, and Body Dissatisfaction subscales.

\*reverse-coded items

**Step One:** Reverse code items 10, 11, 12, 13, 14, and 15 (notated by \* below). Score the ART using the instructions below. ART subscales include the following: Affect Driven Training (AD), Training Amount (TA), Training Against Medical Advice (AMA), and Body Dissatisfaction (BD). All items can be summed to get the ART total score; total scores range from 15 to 75.

<b>AD Score:</b> Add items 4, 5, 6, 7 and 14*	<b>TA Score:</b> Add items 1, 9, 12*, 15*	<b>AMA Score:</b> Add items 2, 3, 8	<b>BD Score:</b> Add items 10*, 11*, 13*	<b>ART Total Score:</b> Add all items
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**Step Two:** After scoring the ART, review the boxes below for score interpretation and proposed action steps.



	<b>Action Steps for Athletes in Sport</b>	<b>Action Steps for Athletes in Treatment</b>
<b>Total Scores <math>\leq 41</math>:</b> Scores in this range are most similar to athletes without eating disorders. This athlete appears to have a healthy relationship with training.	No need to refer athlete. Continue to assess athlete annually.	Consider treatment discharge after further assessment and medical evaluation.
<b>Total Scores 41-48:</b> Scores in this range are slightly elevated compared to athletes without eating disorders.	Continue monitoring this athlete's relationships with training.	Continue treatment protocol prior to discharge.
<b>Total Scores <math>\geq 48</math>:</b> Scores in this range are most similar to athletes with eating disorders. This athlete appears to have training beliefs and behaviors that may be associated with an eating disorder.	Refer athlete to an eating disorder specialist. Further diagnostic testing is recommended.	Implement treatment protocol.

*Note.* Interpretation guidelines were based on normed data from a sample of female, collegiate athletes without eating disorders. The Mean (*SD*) of the ART total score for athletes without eating disorders was 41.08 (7.30). Normed data from a sample of treatment-seeking athletes with eating disorders was also considered. The Mean (*SD*) of the ART total score for athletes who were seeking treatment for an eating disorder was 52 (10.80) at admission and 43.19 (10.25) at discharge. The interpretation guidelines provided above may need to be adjusted as more normed data become available. These are guidelines and do not represent medical or psychological advice. In situations that are concerning, professional consultation is warranted.

## Appendix A

### List of Deleted ART items

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I weigh myself after training/exercise.  
I feel that I need to train more than my teammates.  
I worry about my weight when I can't/don't train/exercise.  
I think that I am not training hard enough.  
I exercise longer than I had planned.  
I exercise when I feel depressed  
I exercise no matter what.  
I feel stressed or tense before I exercise.  
No matter how hard I train, I am not satisfied with my conditioning.  
The right amount of exercise has to involve pain.  
Unless I am exhausted after a workout, I don't feel that I have trained enough  
My primary reason for training hard is to please my coach  
I train hard so my teammates will not be disappointed in me.  
The worst part of being injured is that I can't train.  
The worst part of being injured is that I will gain weight.  
The worst part about being injured is that I will decondition.  
An athlete can train too much.  
I prefer to train the same way (same exercises, same schedule, etc.) every day.  
The more I exercise, the better I feel.  
I exercise outside of practice to lose weight.

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*Note.* These items were deleted from the initial ART item pool based on EFA factor loadings and were not included in the final scale.