

## 1 **Supporting File S1**

### 2 **Participants Recruiting Procedure**

3 All recruited participants worked out with free weights or machines at least  
4 three times per week. They answered a Chinese version of the Muscle Appearance  
5 Satisfaction Scale (CMASS; Jin et al., 2015) questionnaire. Their total scores on the  
6 CMASS were used to assign them into two groups at higher and lower risk of MD.

7 CMASS is a 17-item self-reported questionnaire, with total scores ranging from  
8 17 to 85. Higher scores on the MASS reflect a tendency towards MD (Babusa et al.,  
9 2012; González-Martí et al., 2012; Mayville et al., 2002; Ryan & Morrison, 2010).  
10 Their total scores on the C MASS were ranked in descending order. Participants  
11 scoring in the top 27% ( $n = 54$ , total scores 51–72) comprised the HRMD group, as  
12 they were considered to be at the highest risk of developing MD, whereas participants  
13 scoring in the bottom 27% ( $n = 54$ , total scores 24–42) comprised the low risk of MD  
14 (LRMD) group (Kelley, 1939).

15 33 participants were recruited from each of the HRMD and LRMD groups for  
16 inclusion in the eye-tracking experiment. One participant did not finish the study,  
17 resulting in a total of 65 participants, who ranged in age from 20 to 33 years (mean,  
18 23.66 years; SD, 2.08 years).

### 19 **Sampling validity**

20 The frequency of exercise as well as the total and subscale CMASS scores  
21 were calculated for both the HRMD and LRMD groups to assess whether the risk of  
22 MD was distinguished in the groups. Results of independent *t*-test showed significant

- 1 difference between both groups ( $p < .0001$ ), indicating the HRMD group (top 27%)
- 2 had more typical characteristics and risk of MD than did the LRMD group (see Table
- 3 S1).
- 4

1 **Table S1**

2 *Comparison with CMASS scores and frequency of exercise between the HRMD and*  
 3 *LRMD groups.*

	Group	N	Score( $M\pm SD$ )	Difference in HRMD &LRMD
				<i>t</i> -statistics
Muscle Checking	HRMD	54	13.33 $\pm$ 2.97	10.29 <sup>***</sup>
	LRMD	54	7.91 $\pm$ 2.49	
Muscle Satisfaction	HRMD	54	11.02 $\pm$ 2.70	3.83 <sup>***</sup>
	LRMD	54	9.07 $\pm$ 2.57	
Substance Use	HRMD	54	9.13 $\pm$ 2.42	10.43 <sup>***</sup>
	LRMD	54	4.91 $\pm$ 1.73	
Injury	HRMD	54	10.65 $\pm$ 2.42	8.80 <sup>***</sup>
	LRMD	54	6.70 $\pm$ 2.24	
Bodybuilding Dependence	HRMD	54	13.87 $\pm$ 2.43	12.37 <sup>***</sup>
	LRMD	54	8 $\pm$ 2.50	
Total Score	HRMD	54	58 $\pm$ 5.47	23.00 <sup>***</sup>
	LRMD	54	36.59 $\pm$ 4.11	
Frequency of Exercise	HRMD	54	4.87 $\pm$ 1.79	4.45 <sup>***</sup>
	LRMD	54	3.43 $\pm$ 1.57	

4 **Note:**

5 HRMD: Higher Risk of Muscle Dysmorphia; LRMD: Lower Risk of Muscle

6 Dysmorphia

1 \*\*\*  $p < .0001$ .

## 2 **References**

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