Supplementary Materials:

Sex-dependent Clinical Presentation, Body Image, and Endocrine Status in Long-term Remitted Anorexia Nervosa

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Supplementary Tables

Comorbidity in MINI	Female [% (N)]	Male [% (N)]
Major depressive disorder	16.7 (4)	0
Suicidality	8.3 (2)	11.1 (1)
Panic disorder	12.5 (3)	0
Agoraphobia	4.2 (1)	0
Social phobia	4.2 (1)	0
Generalized anxiety disorder	16.7 (4)	0
Alcohol abuse	0	11.1 (1)
At least one comorbidity	33.3 (8)	11.1 (1)
No comorbidity	66.7 (16)	88.9 (8)

Table S1: Current comorbid psychiatric disorders in patients assessed using the Mini International Neuropsychiatric Interview (MINI)

Percentages of full samples.

	Recovered anorexia nervosa (AN)								Healthy Controls (HC)							
	Female				Male				Female				Male			
	mean	*SD*	*min*	*max*	*mean*	*SD*	*min*	*max*	*mean*	*SD*	*min*	*max*	*mean*	*SD*	*min*	*max*
Residual eating disorder psychopathology (Eating Disorder Inventory 2)																
Drive for thinness [a]	22.6	10.4	7.0	40.0	13.0	3.8	9.0	21.0	13.7	7.0	7.0	37.0	11.2	2.9	7.0	16.0
Bulimia [a]	14.7	8.1	7.0	35.0	10.7	3.0	7.0	15.0	12.5	5.5	7.0	30.0	11.2	4.0	8.0	20.0
Body dissatisfaction [a]	34.3	11.4	15.0	54.0	24.2	7.2	16.0	37.0	22.2	7.7	12.0	40.0	18.0	3.0	13.0	22.0
Ineffectiveness	30.0	11.2	16.0	53.0	23.7	10.7	13.0	46.0	19.1	5.6	9.0	28.0	16.5	3.6	12.0	25.0
Perfectionism [b]	21.1	5.3	13.0	34.0	18.7	3.7	15.0	26.0	17.1	5.3	10.0	30.0	17.2	5.0	10.0	26.0
Interpersonal distrust [a]	19.4	6.0	9.0	31.0	19.0	5.0	12.0	29.0	15.4	5.2	8.0	32.0	16.0	4.2	11.0	25.0
Interoceptive awareness [b]	27.1	9.0	18.0	49.0	23.7	10.2	10.0	43.0	19.8	6.1	11.0	31.0	16.3	3.8	11.0	21.0
Maturity fears [a]	24.5	7.2	16.0	48.0	19.1	5.3	12.0	30.0	21.8	6.1	10.0	37.0	20.1	5.2	10.0	29.0
Asceticism [c]	19.8	7.6	10.0	34.0	17.6	5.3	10.0	24.0	15.2	3.4	9.0	22.0	14.8	3.7	9.0	21.0
Impulse regulation [c]	23.1	7.5	13.0	40.0	23.3	8.5	14.0	39.0	17.4	4.3	12.0	29.0	15.2	3.0	11.0	21.0
Social Insecurity [d]	23.4	6.5	14.0	35.0	20.7	6.0	14.0	32.0	18.2	3.5	10.0	27.0	17.1	3.9	12.0	21.5
Body image (Drive for Muscularity Scale & Body Morphing Tool)																
Drive for muscularity [e]	32.8	10.4	19.0	55.0	43.1	14.2	16.0	59.0	26.8	6.7	19.0	43.0	27.6	5.6	21.0	37.0
Perceived body fat [a]	-6.7	26.5	-74.8	31.7	-11.7	35.5	-54.7	71.9	-6.6	19.9	-64.8	18.0	-4.5	22.1	-32.7	34.5
Desired body fat [a]	-31.2	26.6	-79.9	2.2	-18.2	52.5	-81.3	100.0	-22.5	24.8	-92.1	3.6	-23.8	24.1	-71.4	7.9
Perceived muscularity [a]	34.5	19.4	.0	66.5	48.2	26.0	8.3	80.9	37.2	15.8	6.5	76.6	20.2	11.5	.0	35.9
Desired muscularity [a]	42.7	19.7	.0	88.5	73.4	24.0	33.2	100.0	46.9	13.8	16.1	75.1	46.2	16.6	12.4	68.2
Perceived definition [a]	38.3	14.2	6.1	60.1	70.3	20.0	28.1	100.0	39.8	14.8	7.9	71.4	39.2	19.9	7.6	65.5
Desired definition [a]	49.3	20.2	11.9	97.5	88.4	19.7	48.9	100.0	54.8	16.5	7.4	78.4	72.9	15.3	47.9	100.0
Hormonal Status																
Cortisol [ng/ml]	132.9	79.7	32.7	347.9	105.6	52.3	34.2	190.1	205.5	98.0	59.9	460.8	110.0	45.6	42.6	156.4
Leptin [ng/ml]	11.8	7.4	1.1	26.0	1.5	.8	.5	2.8	10.6	6.4	2.5	25.6	3.2	2.5	.4	9.4
Free T3 [pg/ml]	3.5	1.5	2.1	9.6	3.2	.8	2.0	4.7	3.1	.5	2.1	4.3	3.0	.6	2.0	3.7
LH [mlU/ml] [h]	9.4	8.6	.6	27.3	8.8	5.8	.1	18.3	13.2	11.1	1.8	34.8	9.5	5.8	3.1	19.3
FSH [mlU/ml] [h]	4.8	2.9	.0	11.2	3.4	3.5	.0	12.1	5.6	3.0	1.3	10.4	3.2	2.5	.7	8.0
Progesterone [ng/ml] [h]	2.8	4.6	.3	15.8	.7	.3	.4	1.2	1.9	2.8	.5	7.9	.7	.3	.4	1.5
Estradiol [pg/ml] [h]	109.0	60.5	38.4	265.5	73.6	15.0	47.4	91.3	74.1	14.3	53.8	95.6	57.9	21.5	12.3	78.3
Testosterone [ng/ml] [h]	1.0	.3	.7	1.7	5.5	1.2	3.8	7.8	.9	.2	.6	1.4	6.4	1.6	3.8	9.7

Table S2: Groupwise scores/levels of eating disorder psychopathology, hormonal status, and body image assessments

SD = standard deviation, min = minimum, max = maximum, Missing values: a: n = 1 fHC. b: n = 2 fHC. c: n = 3 fHC. d: n = 4 fHC. e: n = 2 fAN, 3 fHC, 2 mAN. f: n = 2 fAN, 3 fHC. g: n = 1 mHC.

	Analyses of covariance													Simple main effects			
	Full model				Diagnosis			Sex			Interaction			Female		Male	
	df	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*Comp.*	*p*	*Comp.*	*p*
Residual eating disorder psychopathology (Eating Disorder Inventory 2)																	
Drive for thinness [a]	5, 62	**6.73**	**<.001***	**.35**	**6.77**	**.012***	**.10**	**6.07**	**.016***	**.09**	3.42	.069	.05	AN>HC	<.001*	ns.	.488
Bulimia [a]	5, 62	1.31	.271	.10	.19	.664	.00	1.46	.232	.02	.78	.380	.01	ns.	.262	ns.	.688
Body dissatisfaction [a]	5, 62	**7.98**	**<.001***	**.39**	**14.77**	**<.001***	**.19**	**6.78**	**.012***	**.10**	1.75	.190	.03	AN>HC	.001*	ns.	.083
Ineffectiveness	5, 63	**5.85**	**<.001***	**.32**	**13.95**	**<.001***	**.18**	2.07	.155	.03	.83	.367	.01	AN>HC	.001*	ns.	.091
Perfectionism [b]	5, 61	2.54	.038	.17	3.34	.073	.05	.06	.814	.00	1.17	.285	.02	AN>HC	.022*	ns.	.592
Interpersonal distrust [a]	5, 62	2.48	.041	.17	5.30	.025*	.08	.25	.616	.01	.18	.671	.00	AN>HC	.012*	ns.	.275
Interoceptive awareness [b]	5, 61	**4.46**	**.002***	**.27**	**10.96**	**.002***	**.15**	.98	.327	.02	.02	.899	.00	AN>HC	.004*	ns.	.084
Maturity fears [a]	5, 62	1.93	.102	.14	.08	.785	.00	2.24	.140	.04	1.38	.245	.02	ns.	.213	ns.	.474
Asceticism [c]	5, 60	2.18	.069	.15	5.45	.023*	.08	.31	.581	.01	.47	.496	.01	AN>HC	.012*	ns.	.259
Impulse regulation [c]	5, 60	**4.72**	**.001***	**.28**	**15.31**	**<.001***	**.20**	.01	.930	.00	.33	.571	.01	AN>HC	.003*	AN>HC	.023*
Social Insecurity [d]	5, 59	3.81	.005	.24	8.19	.006*	.12	.74	.392	.01	.41	.525	.01	AN>HC	.002*	ns.	.166
Body image (Drive for Muscularity Scale & Body Morphing Tool)																	
Drive for muscularity [e]	5, 56	**4.18**	**.003***	**.27**	**15.50**	**<.001***	**.22**	**4.10**	**.048***	**.07**	2.97	.090	.05	AN>HC	.029*	AN>HC	.004*
Perceived body fat [a]	5, 62	2.96	.019	.19	.10	.748	.00	.04	.850	.00	.41	.527	.01	ns.	.741	ns.	.703
Desired body fat [a]	5, 62	.67	.651	.05	.03	.869	.00	.71	.402	.01	.66	.418	.01	ns.	.277	ns.	.780
Perceived muscularity [a]	5, 62	3.42	.009	.22	8.33	.005*	.12	.49	.489	.01	10.38	.002*	.14	ns.	.771	AN>HC	.001*
Desired muscularity [a]	5, 62	**3.96**	**.004***	**.24**	**5.08**	**.028***	**.08**	**9.11**	**.004***	**.13**	**9.97**	**.002***	**.14**	ns.	.408	**AN>HC**	**.002***
Perceived definition [a]	5, 62	**6.27**	**<.001***	**.34**	**9.95**	**.002***	**.14**	**14.84**	**<.001***	**.19**	**13.20**	**.001***	**.18**	ns.	.663	**AN>HC**	**<.001***
Desired definition [a]	5, 62	**7.66**	**<.001***	**.38**	.79	.377	.01	**31.09**	**<.001***	**.33**	**4.47**	**.038***	**.07**	ns.	.237	ns.	.071
Hormonal status																	
Cortisol	5, 63	**3.89**	**.004***	**.24**	2.73	.103	.04	**7.14**	**.010***	**.10**	2.38	.128	.04	HC>AN	.004*	ns.	.918
Leptin	5, 63	**15.31**	**<.001***	**.55**	<.01	.948	.00	**35.17**	**<.001***	**.36**	1.42	.237	.02	ns.	.239	ns.	.423
Free T3	5, 63	1.00	.423	.07	.71	.404	.01	.06	.805	.00	.30	.584	.01	ns.	.301	ns.	.786
LH [f,h]	5, 33	3.02	.024	.31	.02	.897	.00	.20	.662	.01	.23	.638	.01	ns.	.869	ns.	.428
FSH [a,h]	5, 34	2.21	.076	.25	.12	.736	.00	.69	.413	.02	.17	.685	.01	ns.	.654	ns.	.948
Progesterone [h]	5, 34	.99	.440	.13	.04	.844	.00	3.60	.006	.01	.01	.944	.00	ns.	.858	ns.	.760
Estradiol [g,h]	5, 33	2.28	.069	.26	4.04	.053	.11	1.22	.277	.04	1.12	.301	.03	ns.	.099	ns.	.266
Testosterone [h]	5, 34	**64.4**	**<.001***	**.90**	1.42	.242	.04	**253.67**	**<.001***	**.88**	**5.63**	**.023***	**.14**	ns.	.195	ns.	.063

Table S3: Group comparison of eating disorder psychopathology, body image assessments and hormonal status

Statistic: two-way analyses of covariance with bootstrapping with inclusion of *diagnosis* and *sex* main effects, the interaction of *diagnosis* × *sex*, and age as well as BMI-SDS as covariates. Significant interaction effects were followed up on by evaluation of simple main effects of diagnosis within each sex category (Šidák correction). Partial eta-squared is used to demonstrate effect sizes. * significant at alpha-level of $p < 0.05$, with Bonferroni correction per set of analyses at the level of full model ($p < .0045$, $p < .0063$, $p < .0071$). Bold numbers indicate effects significant on factor- *and* model-level, and simple-main effects *if* corresponding interaction *and* model effects were significant. Missing values: a: n = 1 fHC. b: n = 2 fHC. c: n = 3 fHC. d: n = 4 fHC. e: n = 2 fAN, 3 fHC, 2 mAN. f: n = 1 fAN, g: n = 1 mHC, h: excluding probands with hormonal contraception. fT3 = free triiodothyronine, LH = luteinizing hormone, FSH = follicle-stimulating hormone, df = degrees of freedom, η_p^2 = partial eta-squared, comp. = comparison, ns. = not significant.

	Analyses of covariance													Simple main effects			
	Full model				Diagnosis			Sex			Interaction			Females		Males	
	df	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*Comp.*	*p*	*Comp.*	*p*
Residual eating disorder psychopathology (Eating Disorder Inventory 2)																	
Drive for thinness [a]	5, 53	**6.37**	**<.001***	**.38**	3.84	.055	.07	**8.07**	**.006***	**.13**	3.57	.064	.06	AN>HC	<.006*	ns.	.963
Body dissatisfaction [a]	5, 53	**6.73**	**<.001***	**.39**	**8.57**	**.005***	**.14**	**7.87**	**.007***	**.13**	1.93	.170	.04	AN>HC	.001*	ns.	.369
Ineffectiveness	5, 54	**4.57**	**.002***	**.30**	**8.55**	**.005***	**.14**	2.65	.110	.05	1.43	.237	.03	AN>HC	.001*	ns.	.406
Interoceptive awareness [a]	5, 53	**3.15**	**.015***	**.23**	**6.07**	**.017***	**.10**	.93	.340	.02	.16	.687	.00	AN>HC	.012*	ns.	.317
Impulse regulation [b]	5, 52	**3.17**	**.014***	**.23**	**9.58**	**.003***	**.16**	.02	.656	.00	.08	.776	.00	AN>HC	.015*	ns.	.143
Body image (Drive for Muscularity Scale & Body Morphing Tool)																	
Drive for muscularity [c]	5, 48	**2.63**	**.035***	**.22**	**6.66**	**.013***	**.12**	.83	.372	.02	1.04	.312	.02	ns.	.131	AN>HC	.048*
Desired muscularity [a]	5, 53	1.96	.100	.16	2.49	.120	.05	4.75	.034*	.08	5.51	.023*	.09	ns.	.431	ns.	.093
Perceived definition [a]	5, 53	**3.81**	**.005***	**.27**	**7.04**	**.011***	**.12**	**10.28**	**.002***	**.16**	**7.28**	**.009***	**.12**	ns.	.955	**AN>HC**	**.013***
Desired definition [a]	5, 53	**6.04**	**<.001***	**.36**	.96	.331	.02	**25.85**	**<.001***	**.33**	2.07	.156	.04	ns.	.642	ns.	.203
Hormonal status																	
Cortisol	5, 54	**2.82**	**.025***	**.21**	1.35	.251	.02	**5.21**	**.026***	**.09**	2.43	.125	.04	HC>AN	.018*	ns.	.701
Leptin	5, 54	**14.53**	**<.001***	**.58**	.27	.605	.01	**38.47**	**<.001***	**.41**	2.51	.119	.04	ns.	.328	ns.	.116
Testosterone [d]	5, 29	**59.92**	**<.001***	**.91**	.84	.367	.03	**236.50**	**<.001***	**.89**	3.26	.082	.10	ns.	.347	ns.	.130

Table S4: Group comparison results of eating disorder psychopathology, hormonal status, and body image assessments while excluding patients with a BMI below the 10th percentile

Only main analyses significant at Bonferroni corrected model level (see Table S3) were repeated. No further multiple comparison correction was applied. Group sizes: N = 20 fAN, 7 mAN, 24 fHC, 9 mHC. Statistics: two-way analyses of covariance with bootstrapping with inclusion of diagnosis and sex main effects, the interaction of diagnosis × sex, and age as well as BMI-SDS as covariates. Significant interaction effects were followed up on by evaluation of simple main effects of diagnosis within each sex category (Šidák correction). Partial eta-squared is used to demonstrate effect sizes. * significant at alpha-level of $p < 0.05$, uncorrected. Bold numbers indicate effects significant on factor- and model-level, and simple-main effects if corresponding interaction and model effects were significant. fT3 = free triiodothyronine, LH = luteinizing hormone, FSH = follicle-stimulating hormone, df = degrees of freedom, ηp2 = partial eta-squared, comp. = comparison, ns. = not significant, missing values: a: n = 1 fHC, b: n =2 fHC, c: n =1 fAN, n = 3 fHC, n = 2 mHC.

	Analyses of covariance												Simple main effects			
	Full model				Diagnosis			Sex			Interaction			Females		Males	
	df	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*F*	*p*	η_p^2	*Comp.*	*p*	*Comp.*	*p*
Residual eating disorder psychopathology (Eating Disorder Inventory 2)																	
Drive for thinness [a]	5, 65	**6.14**	**<.001***	**.32**	**10.34**	**.002***	**.14**	3.53	.065	.05	1.63	.206	.03	AN>HC	<.001*	ns.	.254
Body dissatisfaction [a]	5, 65	**8.35**	**<.001***	**.39**	**19.13**	**<.001***	**.23**	**4.88**	**.031***	**.07**	1.01	.319	.02	AN>HC	<.001*	ns.	.050
Ineffectiveness	5, 66	**6.50**	**<.001***	**.33**	**17.98**	**<.001***	**.21**	1.65	.203	.02	.47	.496	.01	AN>HC	<.001*	AN>HC	.040*
Interoceptive awareness [b]	5, 64	**5.19**	**<.001***	**.29**	**14.72**	**<.001***	**.19**	.60	.440	.01	.00	.996	.00	AN>HC	.001*	AN>HC	.025*
Impulse regulation [c]	5, 63	**5.59**	**<.001***	**.31**	**18.16**	**<.001***	**.22**	.00	.955	.00	.17	.684	.00	AN>HC	.001*	AN>HC	.007*
Body image (Drive for Muscularity Scale & Body Morphing Tool)																	
Drive for muscularity [d]	5, 59	**4.60**	**.001***	**.28**	**17.56**	**<.001***	**.23**	3.54	.065	.06	2.90	.094	.05	AN>HC	.020*	AN>HC	.001*
Desired muscularity [a]	5, 65	**5.17**	**<.001***	**.29**	**5.62**	**.021***	**.08**	**10.46**	**.002***	**.14**	**12.54**	**.001***	**.16**	ns.	.285	**AN>HC**	**.001***
Perceived definition [a]	5, 65	**4.72**	**.001***	**.27**	**5.72**	**.020***	**.08**	**11.35**	**.001***	**.15**	**10.03**	**.002***	**.13**	ns.	.483	**AN>HC**	**.002***
Desired definition [a]	5, 65	**9.07**	**.001***	**.41**	0.76	.388	.01	**33.86**	**<.001***	**.34**	**4.99**	**.029***	**.07**	ns.	.207	ns.	.073
Hormonal status																	
Cortisol	5, 66	**3.49**	**.007***	**.21**	2.09	.153	.03	**6.41**	**.014***	**.09**	1.86	.177	.03	HC>AN	.009*	ns.	.957
Leptin	5, 66	**13.80**	**<.001***	**.51**	.04	.834	.00	**29.96**	**<.001***	**.31**	.48	.490	.01	ns.	.393	ns.	.779
Testosterone [e]	5, 36	**69.55**	**<.001***	**.91**	1.40	.244	.04	**267.27**	**<.001***	**.88**	**7.13**	**.011***	**.17**	ns.	.120	**HC>AN**	**.047***

Table S5: Group comparison results of eating disorder psychopathology, hormonal status, and body image assessments while additionally including subjects with current Bulimia nervosa

Only main analyses significant at Bonferroni corrected model level (see Table S3) were repeated. No further multiple comparison correction was applied. Group sizes: N = 26 fAN, 10 mAN, 26 fHC, 10 mHC. Statistics: two-way analyses of covariance with bootstrapping with inclusion of diagnosis and sex main effects, the interaction of diagnosis × sex, and age as well as BMI-SDS as covariates. Significant interaction effects were followed up on by evaluation of simple main effects of diagnosis within each sex category (Šidák correction). Partial eta-squared is used to demonstrate effect sizes. * significant at alpha-level of $p < 0.05$, uncorrected. Bold numbers indicate effects significant on factor- and model-level, and simple-main effects if corresponding interaction and model effects were significant. fT3 = free triiodothyronine, LH = luteinizing hormone, FSH = follicle-stimulating hormone, df = degrees of freedom, ηp2 = partial eta-squared, comp. = comparison, ns. = not significant, missing values: a: n = 1 fHC, b: n = 2 fHC, c: n = 3 fHC, d: n = 2 fAN, n = 3 fHC, n = 2 mHC.

	Mann-Whitney-U tests											
	HC vs. AN			Male vs. Female			fAN vs. fHC			mAN vs. mHC		
	N	*U*	*p*	*N*	*U*	*p*	*N*	*U*	*p*	*N*	*U*	*p*
Residual eating disorder psychopathology (Eating Disorder Inventory 2)												
Drive for thinness	68	**840.5**	**.001***	68	**305.5**	**.028***	49	**461.5**	**.001***	19	55.0	.410
Body dissatisfaction	68	**921.5**	**<.001***	68	**290.0**	**.016***	49	**495.0**	**<.001***	19	68.5	.054
Ineffectiveness	69	**929.5**	**<.001***	69	**321.5**	**.039***	50	**498.5**	**<.001***	19	67.0	.072
Interoceptive awareness	67	**852.0**	**<.001***	67	319.0	.056	48	**441.5**	**.002***	19	66.0	.085
Impulse regulation	66	**860.5**	**<.001***	66	365.0	.250	47	**423.0**	**.002***	19	**75.5**	**.013***
Body image (Drive for Muscularity Scale & interactive Body Morphing Tool)												
Drive for muscularity	62	**682.0**	**.005***	62	487.0	.099	45	336.5	.058	17	**61.0**	**.016***
Desired muscularity	68	623.0	.577	68	**625.5**	**.029***	49	265.5	.490	19	**71.0**	**.034***
Perceived definition	68	547.5	.713	68	**650.0**	**.012***	49	285.0	.764	19	**79.0**	**0.06***
Desired definition	68	678.5	.215	68	**785.5**	**<.001***	49	239.5	.226	19	68.5	.051
Hormonal status												
Cortisol	69	**367.5**	**.007***	**69**	**285.5**	**.011***	50	**159.5**	**.003***	19	43.0	.870
Leptin	69	579.0	.857	**69**	**60.0**	**<.001***	50	338.5	.607	19	23.5	.079
Testosterone	40	156.5	.287	**40**	**399.0**	**<.001***	21	33.0	.255	19	28.5	.178

Table S6: Replication of significant group comparisons using Mann-Whitney U tests

Only main analyses significant at Bonferroni corrected model level (see Table S3) were repeated. * significant at an alpha-level of $p < .05$, uncorrected. U = Mann-Whitney U statistic.

Variable 1	Variable 2	Recovered AN		Healthy controls	
		Female	Male	Female	Male
		rs, p (N)	*rs, p (N)*	*rs, p (N)*	*rs, p (N)*
Perceived body fat	*BMI-SDS*	**.71, <.001* (24)**	.83, .831 (9)	**.61, .001* (25)**	.20, .580 (10)
	Leptin	**.43, .039* (24)**	.65, .058 (9)	**.58, .002* (25)**	.28, .434 (10)
	DMS	-.39, .075 (22)	-.37, .330 (9)	.27, .221 (22)	-.17, .686 (8)
	Drive for thinness	**.47, .021* (24)**	.16, .680 (9)	**.74, <.001* (24)**	.46, .186 (10)
Desired body fat	*BMI-SDS*	**.47, .020* (24)**	-.22, .576 (9)	-.16, .454 (25)	.29, .425 (10)
	Leptin	**.47, .021* (24)**	-.43, .244 (9)	-.15, .483 (25)	-.28, .434 (10)
	DMS	**-.45, .036* (22)**	-.43, .252 (9)	**-.71, <.001 (22)**	-.68, .062 (8)
	Drive for thinness	-.28, .192 (24)	.34, .374 (9)	-.28, .184 (24)	.62, .058 (10)
Perceived muscularity	*BMI-SDS*	-.22, .313 (24)	**.90, .001* (9)**	.35, .082 (25)	-.04, .907 (10)
	Leptin	-.26, .229 (24)	-.02, .996 (9)	.05, .815 (25)	-.15, .688 (10)
	DMS	-.12, .592 (22)	-.08, .831 (9)	.30, .169 (22)	-.17, .686 (8)
	Drive for thinness	-.20, .342 (24)	**-.77, .016* (9)**	.31, .146 (24)	-.27, .449 (10)
Desired muscularity	*BMI-SDS*	-.30, .154 (24)	.23, .559 (9)	.21, .325 (25)	.03, .934 (10)
	Leptin	-.18, .396 (24)	-.39, .306 (9)	.21, .327 (25)	.26, .466 (10)
	DMS	.16, .482 (22)	**.68*, .045* (9)**	.02, .932 (22)	.20, .643 (8)
	Drive for thinness	.03, .878 (24)	.17, .655 (9)	.10, .646 (24)	-.10, .774 (10)
Perceived definition	*BMI-SDS*	-.19, .371 (24)	.05, .898 (9)	.22, .293 (25)	.53, .117 (10)
	Leptin	**-.50, .013* (24)**	-.33, .381 (9)	-.27, .196 (25)	-.54, .111 (10)
	DMS	.08, .729 (22)	.02, .966 (9)	-.31, .159 (22)	.24, .560 (8)
	Drive for thinness	-.13, .551 (24)	.00, 1.00 (9)	.10, .627 (24)	.50, .137 (10)
Desired definition	*BMI-SDS*	-.23, .388 (24)	-.21, .604 (9)	-.11, .589 (25)	.48, .166 (10)
	Leptin	-.06, .791 (24)	-.46, .217 (9)	-.09, .655 (25)	-.38, .275 (10)
	DMS	.21, .350 (22)	.24, .537 (9)	-.54, .811 (22)	.00, 1.000 (8)
	Drive for thinness	-.06, .791 (24)	**.83, .005* (9)**	-.15, .493 (24)	.38, .285 (10)

Table S7: Correlational analyses to validate the Body Morphing Tool results

Variables were correlated using spearman correlations. * significant at uncorrected alpha-level of $p < .05$. AN = Anorexia nervosa, rs = Spearman correlation coefficient, BMI-SDS = body mass index – standard deviation score, DMS = Drive for Muscularity Scale.

Supplementary Figures

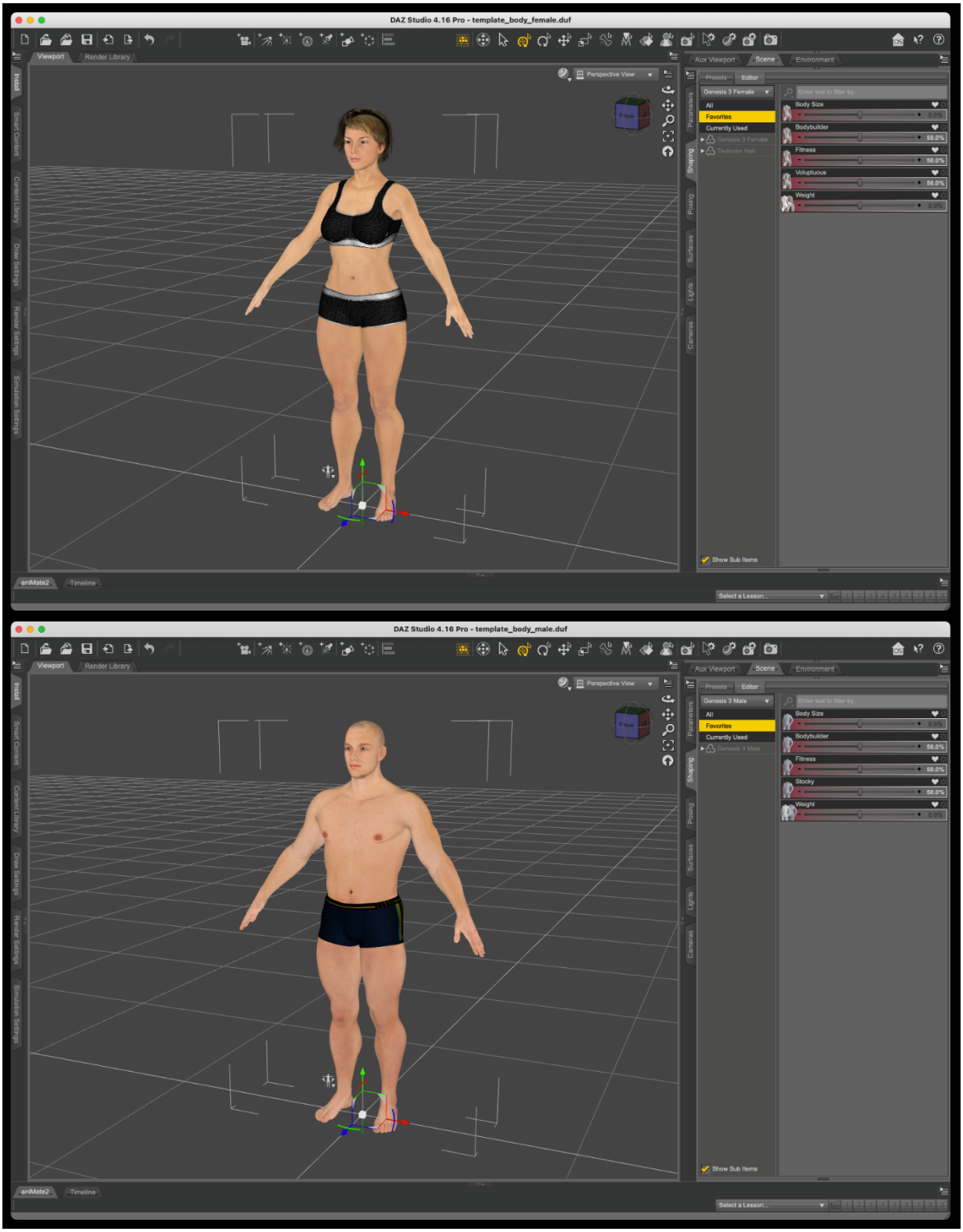

Figure S1: User interface of the Body Morphing Tool (BMT)

Software: *DAZ Studio 4 Pro* (https://www.daz3d.com/). The templates were built from packages *Genesis 3 Starter Essentials*, *Female* and *Male Body Morphs*. Participants could move the camera freely around the bodies. For simplicity, five parameters were selected before the experiment to transform the bodies into the desired shape (right side).

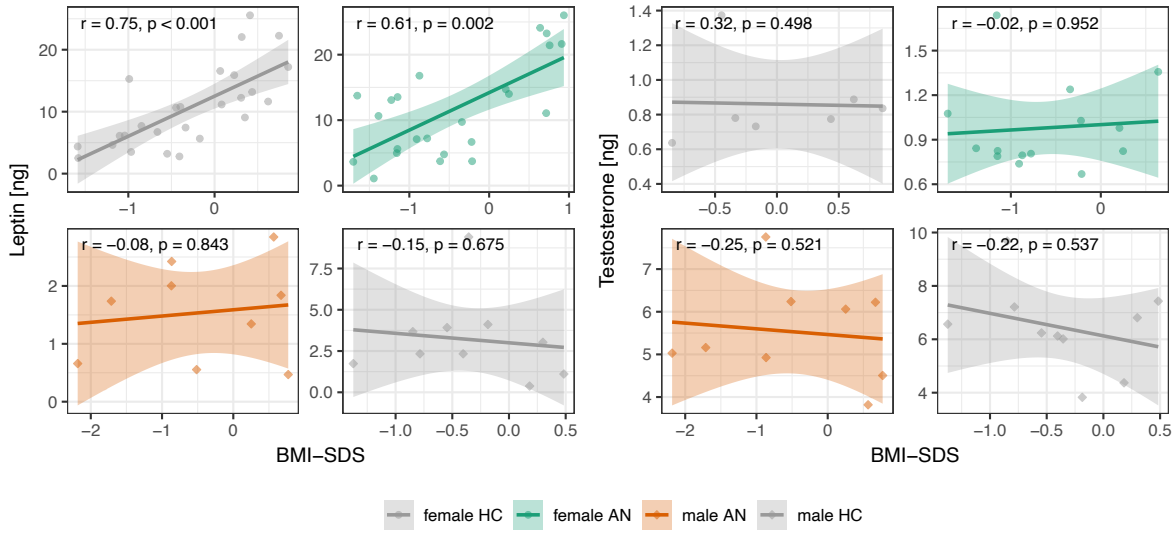

Figure S2: Correlation of leptin and testosterone with BMI-SDS

Spearman correlations were conducted separately by group. Scatter circles and squares depict individual values, regression lines and 95% confidence intervals are shown. Leptin is measured in ng/ml. AN = Anorexia nervosa, HC = healthy controls, BMI-SDS = body mass index – standard deviation score.

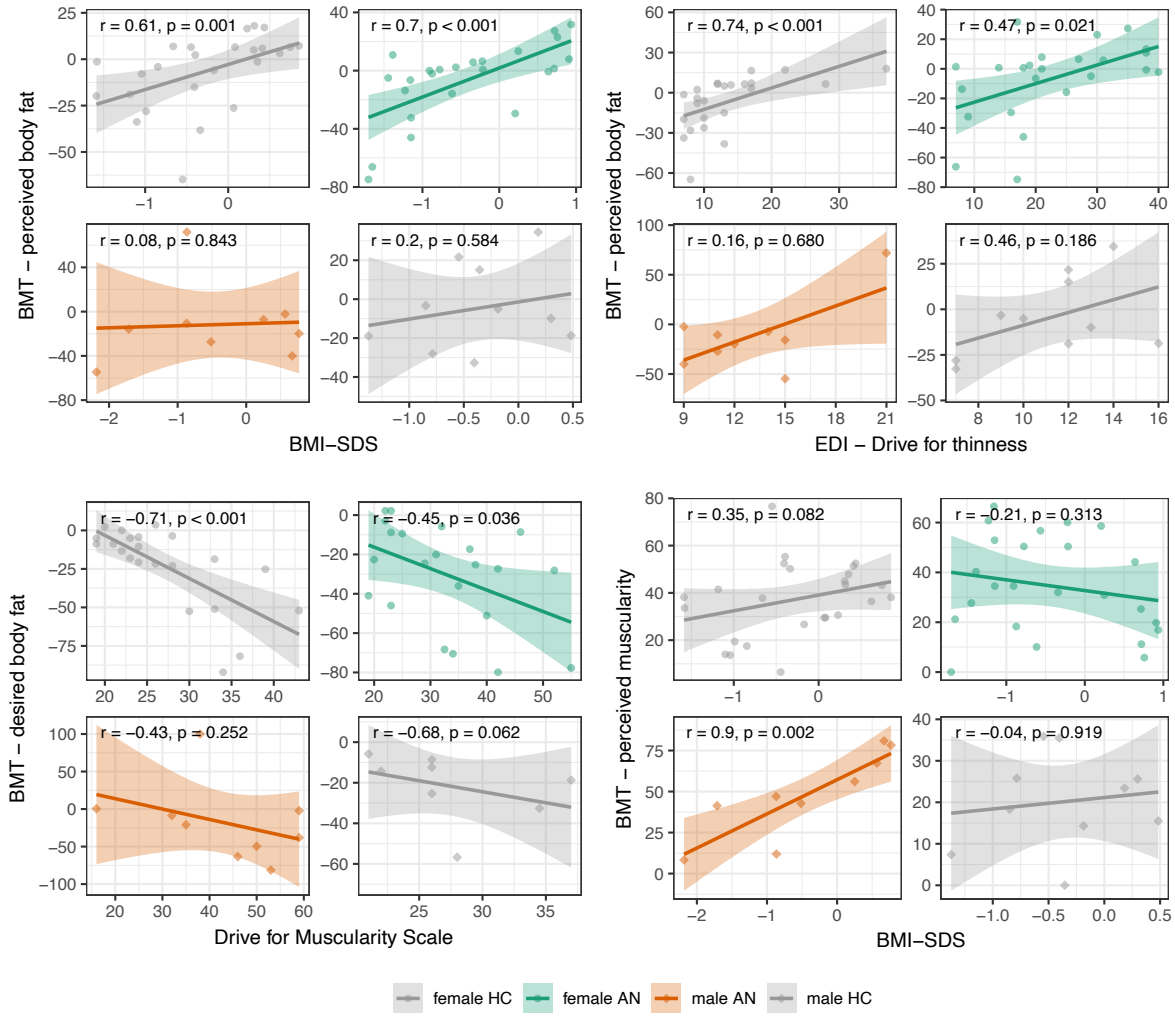

Figure S3: Exemplary associations between body weight, drive for muscularity, drive for thinness, and Body Morphing Tool results

Spearman correlations were conducted separately by group. Scatter circles and squares depict individual values, regression lines and 95% confidence intervals are shown. See Table S5 for full results. AN = Anorexia nervosa, HC = Healthy controls, BMT = Body Morphing Tool, BMI-SDS = body mass index – standard deviation score, EDI = Eating Disorder Inventory 2.