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Supplemental information

Gut markers of bodily self-consciousness in men

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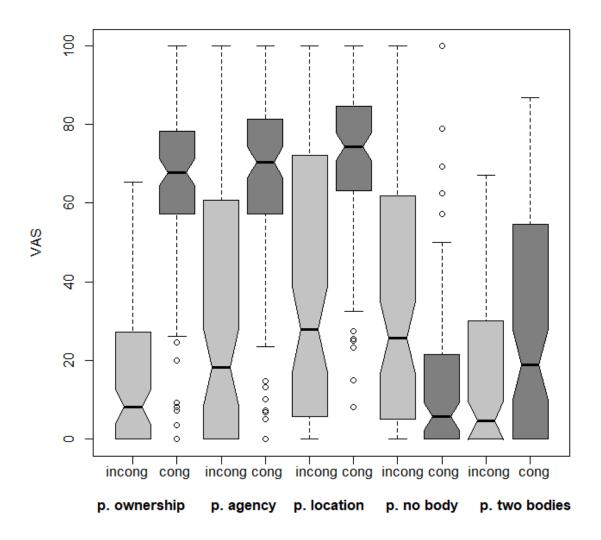


Figure S1. Boxplots of the bodily self-consciousness visual analogue scales. 'Incong': incongruent. 'Cong': congruent. Related to STAR Methods.

	Sum Sq	Mean Sq	NumDF	DenDF	F	p
condition	30123	30123	1	26.58	69.4735	< 0.001 ***
item	138897	34724	4	682.05	80.0860	< 0.001 ***
region	2500	1250	2	689.12	2.8825	0.0566674
ph	12	12	1	720.92	0.0271	0.8693748
pressure	176	176	1	732.28	0.4055	0.5244588
temperature	233	233	1	178.07	0.5365	0.4648315
condition:item	104086	26022	4	682.05	60.0145	< 0.001 ***
condition:region	440	220	2	689.35	0.5079	0.6019753
item:region	1609	201	8	682.05	0.4639	0.8816696
condition:ph	323	323	1	344.98	0.7456	0.3884859
condition:pressure	232	232	1	466.03	0.5358	0.4645279
condition:temperature	42	42	1	43.75	0.0976	0.7562384
item:ph	4925	1231	4	682.05	2.8396	0.0235759 *
item:pressure	5289	1322	4	682.05	3.0497	0.0165619 *
item:temperature	5241	1310	4	682.05	3.0218	0.0173608 *
region:ph	1123	562	2	729.83	1.2954	0.2744179
region:pressure	514	257	2	717.05	0.5926	0.5531316
region:temperature	1651	826	2	701.67	1.9041	0.1497268
condition:item:region	780	98	8	682.05	0.2250	0.9864123
condition:item:ph	336	84	4	682.05	0.1936	0.9417517
condition:item:pressure	1726	431	4	682.05	0.9951	0.4094523
condition:item:temperature	755	189	4	682.05	0.4353	0.7831263
condition:region:ph	150	75	2	483.89	0.1732	0.8410048
condition:region:pressure	1396	698	2	473.00	1.6100	0.2009734
condition:region:temperature	344	172	2	701.36	0.3964	0.6728689
item:region:ph	11957	1495	8	682.05	3.4472	< 0.001 ***
item:region:pressure	2255	282	8	682.05	0.6502	0.7354894
item:region:temperature	2145	268	8	682.05	0.6185	0.7627258
condition:item:region:ph	8404	1050	8	682.05	2.4228	0.0138468 *
condition:item:region:pressure	1673	209	8	682.05	0.4822	0.8692024
condition: item: region: temperature	3431	429	8	682.05	0.9892	0.4430677

Table S1. Model 1 type II analysis of variance table with Satterthwaite's method. Blue rows show interactions that were further analysed through post-hoc tests. Significance codes: `***' < 0.001 `**' < 0.05. Related to Figures 4 and 5.

item	T.trend	SE	df	t	p
ownership agency location no body two bodies	-2.26 3.89 -7.72 -13.49 2.72	5.94 5.94 5.94 5.94 5.94	366 366 366 366 366	-0.381 0.654 -1.300 -2.272 0.459	0.7036 0.5132 0.1944 0.0237* 0.6468

Table S2. Model 1 post-hoc analysis of the interaction between item and temperature (T.trend). Degrees-of-freedom (df) method: Kenward-Roger. Related to Figure 4.

item	P.trend	SE	df	t	p
ownership agency location	0.0829 2.5662 5.6242	2.25 2.25 2.25	710 710 710	0.037 1.139 2.496	0.9707 0.2552 0.0128*
$no\ body \ two\ bodies$	-0.4251 0.3640	$2.25 \\ 2.25$	$710 \\ 710$	-0.189 0.161	0.8504 0.8718

Table S3. Model 1 post-hoc analysis of the interaction between item and pressure (P.trend). Degrees-of-freedom (df) method: Kenward-Roger. Symbols and abbreviations as in Table S2. Related to Figure 4.

condition	item	region	ph.trend	SE	df	t	p
	7 .	, 7	0.000	0.00	-05	0.140	0.0000
incongruent	ownership	stomach	-0.899	6.32	705	-0.142	0.8869
congruent	ownership	stomach	2.098	5.36	707	0.391	0.6959
incongruent	agency	stomach	-10.605	6.32	705	-1.678	0.0937
congruent	agency	stomach	-1.189	5.36	707	-0.222	0.8246
in congruent	location	stomach	21.017	6.32	705		< 0.001***
congruent	location	stomach	4.700	5.36	707	0.876	0.3813
in congruent	nobody	stomach	-13.201	6.32	705	-2.089	0.0370*
congruent	nobody	stomach	-11.393	5.36	707	-2.124	0.0340*
in congruent	$two\ bodies$	stomach	-6.113	6.32	705	-0.967	0.3337
congruent	$two\ bodies$	stomach	-0.259	5.36	707	-0.048	0.9615
incongruent	ownership	small bowel	16.027	9.52	705	1.684	0.0926
congruent	ownership	small bowel	8.706	9.41	707	0.925	0.0320 0.3554
incongruent	agency	small bowel	24.215	9.52	705	2.545	0.0111*
congruent	agency	small bowel	12.209	9.41	707	1.297	0.0111* 0.1950
	location	small bowel	-8.017	9.41 9.52	705	-0.842	0.1930 0.3998
incongruent	location	small bowel	-0.017	9.52 9.41	703	-0.642 -0.012	0.9998
congruent	nobody	small bowel	-0.110 -24.996	9.41 9.52	707	-0.012 -2.627	0.9907
incongruent		small bowel	-24.996 3.646	9.52 9.41	705	-2.627 0.387	0.6987
congruent	nobody						
incongruent	two bodies	small bowel	10.315	9.52	705	1.084	0.2787
congruent	$two\ bodies$	$small\ bowel$	6.815	9.41	707	0.724	0.4693
incongruent	ownership	large bowel	1.102	6.56	707	0.168	0.8666
congruent	ownership	large bowel	9.325	6.44	708	1.448	0.1480
incongruent	agency	large bowel	1.368	6.56	707	0.209	0.8348
congruent	agency	large bowel	7.540	6.44	708	1.171	0.2420
incongruent	location	large bowel	-15.444	6.56	707	-2.355	0.0188*
congruent	location	large bowel	5.818	6.44	708	0.904	0.3665
incongruent	nobody	large bowel	4.836	6.56	707	0.737	0.4611
congruent	nobody	large bowel	-0.322	6.44	708	-0.050	0.9602
incongruent	$two\ bodies$	large bowel	-1.075	6.56	707	-0.164	0.8698
congruent	$two\ bodies$	large bowel	-10.558	6.44	708	-1.640	0.1015

Table S4. Model 1 post-hoc analysis of the interaction between condition, item, region, and pH (ph.trend). Symbols and abbreviations as in Table S2. Degrees-of-freedom (df) method: Kenward-Roger. Related to Figures 4 and 5.

	Sum Sq	$Mean\ Sq$	NumDF	DenDF	F	p
condition	33017	33017	1	228.72	67.7224	< 0.001 ***
item	33277	8319	4	213.57	17.0637	< 0.001 ***
EGG peak	1303	1303	1	172.15	2.6719	0.10396
condition:item	30907	7727	4	213.57	15.8484	< 0.001 ***
condition:EGG peak	2246	2246	1	182.29	4.6064	0.03317 *
item:EGG peak	1270	318	4	213.57	0.6515	0.62645
condition:item:EGG peak	880	220	4	213.57	0.4512	0.77142

Table S5. Model 2 type II analysis of variance table with Satterthwaite's method. The blue row shows the interaction that was further analyzed through post-hoc tests. Significance codes as in table S1. Related to Figure 5.

condition	EGG.trend	SE	df	t	p
$incongruent\\ congruent$	$-293 \\ 972$	463 384	190 161	-0.634 2.534	$0.5268 \\ 0.0122*$

Table S6. Model 2 post-hoc analysis of the interaction between condition and EGG peak frequency (EGG.trend). Symbols and abbreviations as in Table S2. Degrees-of-freedom (df) method: Kenward-Roger. Related to Figure 5.

	$interoception\ scores$					
	$\operatorname{sensibility}$	accuracy	awareness			
N	27	31	31			
mean	2.534	0.669	50.124			
SD	0.945	0.202	23.869			
min	0.800	0.140	0			
max	4.390	0.963	90.909			

Table S7. Descriptive statistics of interoceptive sensibility (scale: 0-5), accuracy (scale: 0-1), and awareness (scale: 0-100). Related to STAR Methods.