

Supplementary Material

Principal Components Analysis (70-item questionnaire).

Table S1: Principal Components Analysis (70 items)								
Component								
	1	2	3	4	5	6	Hyper/Hypo*	Mod.**
Q19	.656				.279		<i>Hyper</i>	<i>Vis</i>
Q63	.644				-.295		<i>Hyper</i>	<i>Pro</i>
Q23	.642						<i>Hyper</i>	<i>Tac</i>
Q68	.630						<i>Hyper</i>	<i>Pro</i>
Q8	.623						<i>Hypo</i>	<i>Vis</i>
Q62	.611						<i>Hyper</i>	<i>Pro</i>
Q26	.605						<i>Hyper</i>	<i>Vis</i>
Q24	.599						<i>Hypo</i>	<i>Tac</i>
Q14	.595	-.273					<i>Hyper</i>	<i>Vis</i>
Q38	.592					.264	<i>Hyper</i>	<i>Olf</i>
Q10	.588	.342					<i>Hypo</i>	<i>Vis</i>
Q55	.587					-.390	<i>Hypo</i>	<i>Pro</i>
Q32	.587						<i>Hypo</i>	<i>Ves</i>
Q69	.585						<i>Hypo</i>	<i>Vis</i>
Q31	.584						<i>Hypo</i>	<i>Vis</i>
Q52	.583						<i>Hyper</i>	<i>Aud</i>
Q49	.571						<i>Hypo</i>	<i>Pro</i>
Q54	.570	.309					<i>Hypo</i>	<i>Aud</i>
Q37	.563						<i>Hyper</i>	<i>Gus</i>
Q34	.558			-.264			<i>Hyper</i>	<i>Tac</i>
Q20	.555		-.317				<i>Hypo</i>	<i>Ves</i>
Q9	.549						<i>Hypo</i>	<i>Pro</i>
Q64	.544						<i>Hypo</i>	<i>Gus</i>
Q6	.542				-.332		<i>Hyper</i>	<i>Gus</i>
Q11	.541						<i>Hyper</i>	<i>Aud</i>
Q16	.540			-.319			<i>Hyper</i>	<i>Tac</i>
Q47	.529						<i>Hyper</i>	<i>Vis</i>
Q46	.528						<i>Hypo</i>	<i>Tac</i>
Q33	.527	-.322					<i>Hyper</i>	<i>Olf</i>

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Q22	.521					-.330	<i>Hypo</i>	<i>Aud</i>
Q13	.500					-.483	<i>Hypo</i>	<i>Pro</i>
Q7	.498				-.254		<i>Hypo</i>	<i>Pro</i>
Q21	.498						<i>Hyper</i>	<i>Olf</i>
Q57	.497	.353	-.287				<i>Hypo</i>	<i>Ves</i>
Q51	.491	-.284	.319				<i>Hyper</i>	<i>Ves</i>
Q44	.491						<i>Hyper</i>	<i>Gus</i>
Q66	.489				.312		<i>Hypo</i>	<i>Aud</i>
Q28	.482	-.310	-.317				<i>Hyper</i>	<i>Olf</i>
Q53	.479	-.287					<i>Hyper</i>	<i>Ves</i>
Q4	.476						<i>Hyper</i>	<i>Tac</i>
Q29	.448	.341					<i>Hypo</i>	<i>Aud</i>
Q43	.448	-.318					<i>Hyper</i>	<i>Aud</i>
Q35	.447						<i>Hyper</i>	<i>Aud</i>
Q17	.444						<i>Hypo</i>	<i>Aud</i>
Q3	.431	-.419		-.269			<i>Hyper</i>	<i>Vis</i>
Q58	.430	.283			-.325		<i>Hypo</i>	<i>Gus</i>
Q61	.425				.312		<i>Hyper</i>	<i>Pro</i>
Q12	.421			-.339			<i>Hypo</i>	<i>Olf</i>
Q67	.412						<i>Hyper</i>	<i>Gus</i>
Q48	.401			.323		.287	<i>Hypo</i>	<i>Gus</i>
Q45		.551	.311				<i>Hypo</i>	<i>Olf</i>
Q27	.269	.483	-.341			-.258	<i>Hypo</i>	<i>Ves</i>
Q39		.379					<i>Hypo</i>	<i>Tac</i>
Q5	.301	.339					<i>Hypo</i>	<i>Vis</i>
Q36		-.393	.533				<i>Hyper</i>	<i>Ves</i>
Q18	.418		.433				<i>Hyper</i>	<i>Ves</i>
Q15	.365	.307	-.428				<i>Hypo</i>	<i>Ves</i>
Q60		.363	.425		-.293		<i>Hypo</i>	<i>Olf</i>
Q42			.380				<i>Hyper</i>	<i>Ves</i>
Q2				-.701			<i>Hyper</i>	<i>Olf</i>
Q41		-.265		.682			<i>Hypo</i>	<i>Olf</i>
Q50		.252			.396		<i>Hypo</i>	<i>Gus</i>
Q25	.352				-.367		<i>Hypo</i>	<i>Olf</i>
Q70	.340					.367	<i>Hyper</i>	<i>Gus</i>
Q1						-.342	<i>Hypo</i>	<i>Gus</i>
Q65	.436						<i>Hypo</i>	<i>Tac</i>

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Q59							<i>Hyper</i>	<i>Pro</i>
Q40	.350						<i>Hyper</i>	<i>Aud</i>
Q56		.280					<i>Hypo</i>	<i>Tac</i>
Principal Components Analysis								
6 factors extracted								

* Items were either investigating hyper-sensitivity or hypo-sensitivity

** Modalities: Aud – auditory, Gus – gustatory, Olf – olfactory, Pro – proprioception, Tac – tactile, Ves – vestibular, Vis – visual

We used Factor Analysis to reduce the number of items in the questionnaire. Items were separated into 14 groups (organised by modality and hyper/hypo-sensitivities). The two questions in each sub-group which were worst-performing, i.e. a) did not load onto Factor 1 and/or b) loaded heavily onto multiple factors. Originally, there were 5 questions in each sub-group – after the FA this number was reduced to 3 (resulting in 42 items). A single-factor extraction for these data explains 22% of the variance. All descriptive and inferential statistics have been run with both the original (70-item) and reduced data (42-items). The results from both sets of analysis were very similar.

Principal Components Analysis (42-item questionnaire).

The Keiser-Meyer-Olkin test measures the partial correlations between the variables (if the sample is adequate, the partial correlations are small). Large values indicate that the sample is suitable for Factor Analysis. Our KMO statistic is 0.898, indicating that the execution of FA is fitting. Bartlett’s test checks whether the data form an identity matrix (data which does not form an identity matrix is suitable for FA). This test tests the null hypothesis (i.e. that the variables in the population correlation matrix are uncorrelated).

The observed significance level for our data is $p < .0001$, therefore it can be concluded that

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the strength of the relationship among the variables is strong. As such, it is advisable to continue with a FA.

Table S2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.898
Bartlett's Test of Sphericity	Approx. Chi-Square	3145.568
	df	861
	Sig.	.000

Table S3: Principal Components Analysis (42 items)

	Component						Hyper/Hypo*	Mod.**
	1	2	3	4	5	6		
Q19	.665			-.410			<i>Hyper</i>	<i>Vis</i>
Q63	.664						<i>Hyper</i>	<i>Pro</i>
Q68	.649					.260	<i>Hyper</i>	<i>Pro</i>
Q23	.645						<i>Hyper</i>	<i>Tac</i>
Q8	.615					-.282	<i>Hypo</i>	<i>Vis</i>
Q26	.615						<i>Hyper</i>	<i>Vis</i>
Q38	.615				-.330		<i>Hyper</i>	<i>Olf</i>
Q62	.610		-.319				<i>Hyper</i>	<i>Pro</i>
Q14	.609		.256				<i>Hyper</i>	<i>Vis</i>
Q69	.602		-.260				<i>Hypo</i>	<i>Vis</i>
Q31	.595			-.275			<i>Hypo</i>	<i>Vis</i>
Q32	.587		-.261				<i>Hypo</i>	<i>Ves</i>
Q24	.586						<i>Hypo</i>	<i>Tac</i>
Q52	.585						<i>Hyper</i>	<i>Aud</i>
Q37	.570						<i>Hyper</i>	<i>Gus</i>
Q20	.567		-.278				<i>Hypo</i>	<i>Ves</i>
Q49	.566						<i>Hypo</i>	<i>Pro</i>
Q34	.564				-.288		<i>Hyper</i>	<i>Tac</i>
Q54	.557	.318					<i>Hypo</i>	<i>Aud</i>
Q6	.555			.353			<i>Hyper</i>	<i>Gus</i>
Q46	.542					-.479	<i>Hypo</i>	<i>Tac</i>
Q11	.541					.295	<i>Hyper</i>	<i>Aud</i>

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Q9	.541						-.301	<i>Hypo</i>	<i>Pro</i>
Q33	.529	-.309						<i>Hyper</i>	<i>Olf</i>
Q21	.519	.280	.355					<i>Hyper</i>	<i>Olf</i>
Q51	.511		.460					<i>Hyper</i>	<i>Ves</i>
Q7	.505							<i>Hypo</i>	<i>Pro</i>
Q53	.503							<i>Hyper</i>	<i>Ves</i>
Q22	.502	-.316						<i>Hypo</i>	<i>Aud</i>
Q44	.494							<i>Hyper</i>	<i>Gus</i>
Q57	.492	.317	-.443					<i>Hypo</i>	<i>Ves</i>
Q4	.479	-.383						<i>Hyper</i>	<i>Tac</i>
Q43	.453	-.357					.427	<i>Hyper</i>	<i>Aud</i>
Q67	.420							<i>Hyper</i>	<i>Gus</i>
Q48	.418						-.315	<i>Hypo</i>	<i>Gus</i>
Q12	.403						-.360	<i>Hypo</i>	<i>Olf</i>
Q58	.424	.573						<i>Hypo</i>	<i>Gus</i>
Q60		.563				.394		<i>Hypo</i>	<i>Olf</i>
Q18	.423		.434	-.361				<i>Hyper</i>	<i>Ves</i>
Q17	.453	.265		-.475			.307	<i>Hypo</i>	<i>Aud</i>
Q25	.349	.291		.363	.506			<i>Hypo</i>	<i>Olf</i>
Q65	.420		-.393		.433			<i>Hypo</i>	<i>Tac</i>
Principal Components Analysis									
6 factors extracted									

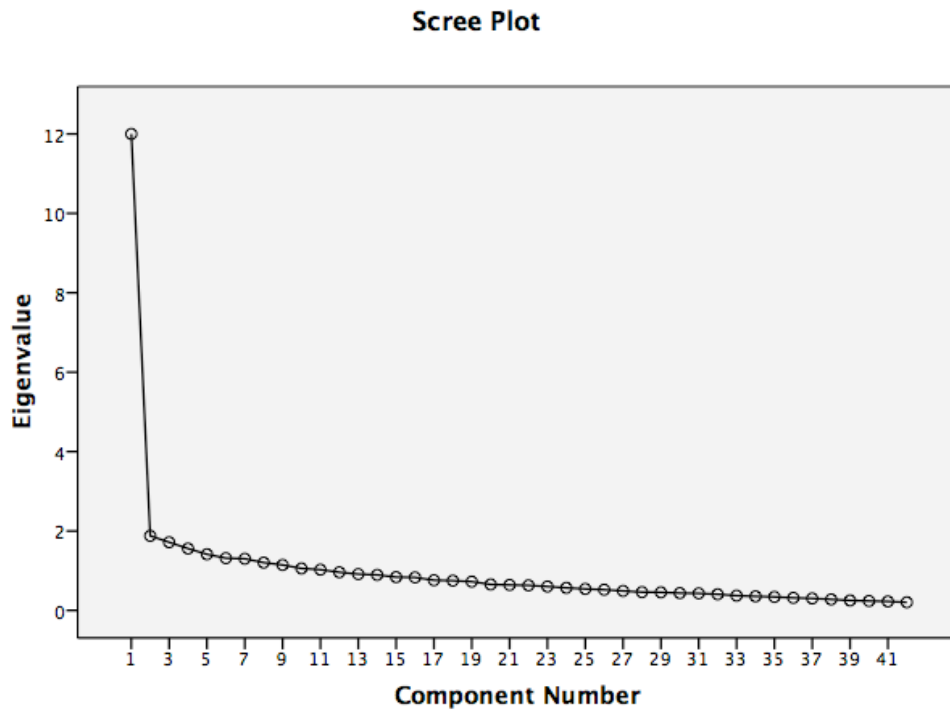
* Items were either investigating hyper-sensitivity or hypo-sensitivity

** Modalities: Aud – auditory, Gus – gustatory, Olf – olfactory, Pro – proprioception, Tac – tactile, Ves – vestibular, Vis – visual

The output from the 42-item FA clearly shows that almost all variables load most strongly onto the first factor and there is a lot of variation between the loadings for other factors.

As such, a single-factor extraction for these data explains 28% of the variance.

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Figure S1: Scree Plot



The scree plot for the second FA (i.e. the 42-item data) supports the conclusion that a single-factor model fits these data best (as the point of inflexion is at factor 2).