SUPPLEMENTARY MATERIALS

Inclusion criteria were age between 18 and 65 years and suitability for MRI scanning.

Exclusion criteria included (1) suspicion of cognitive impairment or dementia based on Mini Mental State Examination (MMSE)[1] scores ≤24[2], and confirmed by clinical neuropsychological evaluation using the Mental Deterioration Battery[3] and the NINCDS-ADRDA criteria for dementia[4]; (2) subjective complaint of memory difficulties or of any other cognitive deficit, regardless of interference with daily activities; (3) major medical illnesses, e.g. diabetes (not stabilized), obstructive pulmonary disease, or asthma; hematologic and oncologic disorders; pernicious anemia; clinically significant gastrointestinal, renal, hepatic, endocrine, or cardiovascular system diseases; newly treated hypothyroidism; (4) current or reported psychiatric (assessed by SCID-I and the SCID-II)[5,6] or neurological (assessed by clinical neurological evaluation) disorders (e.g. schizophrenia, mood disorders, anxiety disorders, stroke, Parkinson's disease, seizure disorder, head injury with loss of consciousness, and any other significant mental or neurological disorder); (5) known or suspected history of alcoholism or drug dependence and abuse, evaluated by structured interviews (SCID I or SCID II)[5–7]; (6) MRI evidence of focal parenchymal abnormalities or cerebro-vascular diseases: for each subject, a trained neuroradiologist and a neuropsychologist expert in neuroimaging co-inspected all the available clinical MRI sequences (i.e. T1- and T2-weighted and FLAIR images) to ensure that the subjects were free from structural brain pathologies and vascular lesions (i.e. FLAIR or T2-weighted hyper-intensities and T1-weighted hypo-intensities).

Psychological Instruments

In this study, participants' psychological profile was assessed by means of the Italian versions of the following psychological questionnaires and scales:

- Attachment Style Questionnaire (ASQ);
- Beck's Depression Inventory Scale (BDI);
- Coping Orientation to Problems and Experiences (COPE);
- Emotion Regulation Questionnaire (ERQ);
- General Self-Efficacy Scale (GSES);
- Hamilton Anxiety Rating Scale (HAM-A);
- Hamilton Depression Rating Scale (HAM-D);
- Holmes and Rahe Stressful Event Scale (HR-SS);
- Interpersonal Reactivity Index (IRI);
- Positive and Negative Affect Schedule (PANAS);
- State-Trait Anger Expression Inventory (STAXI);
- State-Trait Anxiety Inventory-Form Y (STAI-Y);
- Toronto Alexithymia Scale (TAS-20).
- Raven's Progressive Matrices (RPM);

Attachment Style Questionnaire (ASQ)

The ASQ[8–11] is a self-administered questionnaire designed to measure five dimensions of adult attachment: Confidence (about themselves and others; 8 items), which is associated to secure attachment; Discomfort with Closeness (referring to difficulty in trusting others; 10 items) and Relationships as Secondary (referring to the belief that achievement is more important than relationships with others; 7 items), which are associated to insecure/avoidant attachment; Need for Approval (referring to the focus on validation from others and fear of rejection and avoiding doing things that other people will not like; 7 items) and Preoccupation with Relationships (referring to the worry of being abandoned and not making it on your own; 8 items), which are associated to insecure/anxious attachment[12,13]. Each item is rated on a 6-point Likert type scale from 1= *totally disagree* to 6= *totally agree*, in which the participants indicate the degree to which the propositions described their feelings.

Beck's Depression Inventory (BDI)

The BDI is a 21-item multiple-choice self-report inventory rated on a 4-point scale ranging from 0 to 3 that assesses the presence of depressive symptoms[14,15]. Scores can range from 0 to 63, with higher scores indicating more severe depression. The total score is defined as the sum of the individual item scores. The questionnaire is composed of items relating to symptoms of depression, such as hopelessness and irritability, beliefs, such as guilt or feelings of being punished, as well as physical symptoms such as fatigue, weight loss, and lack of interest in sex.

Coping Orientation to Problems and Experiences (COPE)

The COPE is a 60-item self-report multidimensional questionnaire designed to measure different strategies generally used to cope with stressful life events[16–20]. "Coping" is defined broadly as an effort used to minimize distress associated with negative life experiences. Items are rated on a 4-point Likert scale ranging from 1 = *usually don't do this at all* to 4 = *usually do this a lot*. The test consists of five subscales: Social support - referring to the search for sharing opportunities, information and emotional outburst; Avoidance - referring to denial, behavioral and mental detachment and substance abuse; Positive attitude - referring to the attitude of acceptance, containment and positive reinterpretation of events; Problem solving - referring to the use of active strategies and planning; Turning to religion - referring to religion and the absence of humor. These subscales measure substantially independent dimensions, proved to be reliable and fairly stable in time[18].

Emotion Regulation Questionnaire (ERQ)

The ERQ[20–22] is a self-report measure made of 10 items, scored on a 7-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree.* It is composed of two subscales assessing individual

differences in the habitual use of two different emotion regulation strategies: Cognitive Reappraisal (6 items) and Expressive Suppression (4 items). Namely, Cognitive Reappraisal is an antecedent-focused strategy, affecting the early cognitive stages of emotional activity, in which individuals attempt to modulate the emotional salience of a stimulus by changing its meaning[23]. It is considered effective and adaptive (especially when individuals face uncontrollable stress) since it is often correlated positively with better mental and physical health, positive affect, and extraversion, and negatively with negative affect, neuroticism and depressive symptoms[24,25]. By contrast, Expressive Suppression is a response-focused strategy implemented after the emotion has been generated and it is conceptualized as preventing outward expression of internal emotional state, without modifying emotional experience and arousal[23]. Although suppression may have short-term benefits[26], it can be considered maladaptive since it is often correlated negatively with physical and psychological health positive affect, extraversion and relationship satisfaction, and positively with psychopathology[25]. Higher scores on a given subscale indicate a greater tendency to use that emotional regulation strategy.

General self-efficacy scale (GSES)

The GSES is a 10-item self-report measuring the general self-efficacy which refers to the belief in one's competence to cope with unexpected new experiences or life's adversities[19,27,28]. Items are rated on a 4-point Likert scale ranging from 1 = *strongly disagree* to 4 = *strongly agree*. The total score, calculated by finding the sum of all items, ranges between 10 and 40, with a higher score indicating more self-efficacy.

Hamilton Anxiety Rating Scale (HAM-A)

Presence and severity of anxiety symptoms were evaluated by using HAM-A[29,30], which consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Each item is scored on a scale of 0 = *not present* to 4 = *severe*, with total scores ranging from 0 to 56. Scores < 5 indicate no anxiety, scores between 6 and 13 indicate mild anxiety, and score > 14 indicate moderate to severe anxiety.

Hamilton Depression Rating Scale (Ham-D)

Presence and severity of depressive symptoms were evaluated by using HAM-D[30,31] which contains 17 items. It is used to rate depression severity by probing mood, feelings of guilt, suicide ideation, insomnia, agitation, retardation, anxiety, weight loss, and somatic symptoms. Each item is scored on a 3- or 5-point scale, depending on the item. The maximum score is 52. Total scores < 7 indicate no depression, scores from 8 to 17 correspond to mild depression, scores from 18 to 24 correspond to moderate depression, and scores > 25 severe depression.

Holmes and Rahe Stress Scale (HR-SS)

The HR-SS[32] provides a list of 43 stressful life events that have dramatically changed the person's life. We asked participants to refer to the events occurred in the last 3 months. Higher scores reflect the respondents' higher levels of stress.

Interpersonal Reactivity Index (IRI)

The IRI is a self-report multidimensional measure of trait empathy[30,33–36]. The questionnaire is based on a self-report comprising 28 items answered on a 5-point Likert scale ranging from 1 = *never true for me* to 5 = *always true for me*. The measure has 4 subscales, each made up of 7 different items, and for each subscale, scores can range from 7 to 35. These subscales are: Perspective Taking, which indicates the tendency to spontaneously adopt the psychological point of view of others; Fantasy, which taps respondents' tendencies to transpose themselves imaginatively into the feelings and actions of fictitious characters in books, movies, and plays; Empathic Concern, which assesses "other-oriented" feelings of sympathy and concern for unfortunate others; Personal Distress, which measures "self-oriented" feelings of personal anxiety and unease in tense interpersonal settings.

Positive and Negative Affect Schedule (PANAS)

The PANAS[19,37,38] measures someone's positive and negative affect. Participants are required to indicate on a 5-point Likert scale to what extent (1 = *very slightly*, 5 = *extremely*) they generally experienced 20 different affective states described by adjectives (10 for positive affect – such as "Interested", "Proud", etc. - and 10 for negative affect - "Hostile", Upset", etc.). Scores can range from 10 to 50 for both Positive and Negative Affect, with the lower/higher scores representing lower/higher levels of Positive/Negative Affect.

State-Trait Anger Expression Inventory (STAXI)

The STAXI[39] measures the experience of anger conceptualized as having two major components: state and trait anger. State anger is defined as a psychobiological emotional state or condition marked by subjective feelings varying in intensity from mild irritation or annoyance to intense fury and rage, and generally accompanied by muscular tension and by arousal of the neuroendocrine and autonomic nervous systems. Trait anger is defined in terms of individual differences in the disposition to perceive a wide range of situations as annoying or frustrating and by the tendency to respond to such situations with elevations in state anger. Individuals with high trait anger experience state anger more often and with greater intensity than individuals who are low in trait anger. The STAXI questionnaire consists of 44 items, grouped on two main scales, State anger and Trait anger, as well as an Anger Expression Index, which tends to be most closely associated with hypertension.

State-Trait Anxiety Inventory – Form Y (STAI-Y)

The STAI-Y is a self-report inventory that measures state and trait anxiety[20,40–42]. Form Y contains 20 items that assess state anxiety (STAI-Y1) and 20 items for trait anxiety (STAI-Y2). For state anxiety items, participants are asked to indicate whether the statement describes their current mood state. Responses are based on a 4-point scale ranging from 1 = *not at all* to 4 = *extremely*. For trait anxiety items, participants indicate whether the statement describes how they feel most of the time. Responses are based on a 4-point scale ranging from 1= *almost never* to 4 = *almost always*. Scores can range from 20 to 80 for each subscale.

Toronto Alexithymia Scale (TAS-20)

The TAS-20 is a 20-item self-report scale that measures alexithymia, that is, the difficulty in identifying and describing the experienced emotions by oneself or others[15,43]. The scale has 3 subscales: Difficulty in Describing Feelings (F1; 5 items), Difficulty in Identifying (F2; 7 items), Externally Oriented Thinking (F3; 8 items). Items are scored using a 5-point Likert scale whereby 1 = *strongly disagree* and 5 = *strongly agree*. While the score for each subscale is the sum of the responses to that subscale, the total score is the sum of responses to all 20 items. TAS-20 total score can range from 20 to 100. The TAS-20 uses cutoff scoring: equal to or less than 50 = non-alexithymia; from 51 to 60 = possible alexithymia; equal to or greater than 61 = alexithymia.

Raven's progressive matrices (RPM)

Raven's 47 progressive matrices is a non-verbal test typically used to measure general human intelligence and abstract reasoning ability and is regarded as a non-verbal estimate of fluid intelligence[44]. It is included in Mental Deterioration Battery[3] and comprises 60 multiple choice questions, listed in order of increasing difficulty. In each test item, the subject is asked to identify the missing element that completes a pattern. RPM 47 provide two scores, a raw score and a converted age-based corrected score.

Participants' **personality traits** were assessed by means of the Italian versions of the following tests:

- Big Five Questionnaire-2 (BFQ-2);
- Temperament and Character Inventory (TCI).

Big Five Questionnaire-2 (BFQ-2)

The BFQ-2[45] is a 134-item self-report instrument, with items rated on a 5-point Likert scale ranging from complete disagreement (1 = *absolutely false for me*) to complete agreement (5 = *absolutely true for me*). The BFQ-2 was developed to operationalize the personality dimensions of the Big Five model[46], namely Energy/Extraversion (*outgoing/energetic vs. solitary/reserved*), Agreeableness (*friendly/compassionate vs. analytical/detached*), Conscientiousness (*efficient/organized vs.*

easy-going/careless), Emotional Stability (*sensitive/nervous vs. secure/confident*), and Openness (*inventive/curious vs. consistent/cautious*). Each personality dimension is divided into two sub-dimensions (Energy/Extraversion: Dynamism and Dominance; Agreeableness: Cooperativeness and Politeness; Conscientiousness: Scrupulousness and Perseverance; Emotional Stability: Emotion control and Impulse control; Openness: Openness to culture and Openness to experience) and assessed by means of 24 items (12 items for each sub-dimension). The BFQ-2 also provides score to a Lie scale aimed at assessing socially desirable responding. It consists of two sub-dimensions (Lie egoistic and Lie moralistic) assessed by means of 14 items (7 items for each sub-dimensions). The present study takes into account the five Big Five dimensions and the Lie scale.

Temperament and Character Inventory (TCI)

TCI by Cloninger[47–49] is a 240-item self-administered dimensional questionnaire designed to evaluate the 7 (4 temperament + 3 character dimensions measured by subscales) basic dimensions.

The 4 temperament dimensions are: *i)* Novelty seeking (NS; *subscales:* Exploratory excitability (NS1), Impulsiveness (NS2), Extravagance (NS3), Disorderliness (NS4)) which refers to a tendency to exploratory activity in response to novelty, impulsive decision making, extravagant approach to cues of reward, and quick loss of temper; *ii)* Harm avoidance (HA; *subscales:* Anticipatory worry (HA1), Fear of uncertainty (HA2), Shyness with strangers (HA3), Fatigability (HA4)) refers to a tendency to inhibit behaviors and act with caution, apprehensiveness, and pessimism, to respond intensively to aversive stimuli; *iii)* Reward dependence (RD; *subscales:* Sentimentality (RD1), Attachment (RD3), Dependence (RD4)) which refers to a tendency to maintain ongoing behaviors previously associated with reinforcement and to express social attachment and dependence on the others' approval; *iv)* Persistence (P) which refers to the ability to maintain arousal and motivation internally in the absence of immediate external reward.

The character dimensions are: *i)* Self-directedness (SD; *subscales:* Responsibility (SD1), Purposefulness (SD2), Resourcefulness (SD3), Self-acceptance (SD4), Enlightened second nature (SD5)) which refers to the executive ability of an individual to control, regulate, and adapt behavior to fit the situation in accordance to personal goals; *ii)* Cooperativeness (C; *subscales:* Social acceptance (C1), Empathy (C2), Helpfulness (C3), Compassion (C4), Pure-hearted conscience (C5)) which accounts for individual differences in the acceptance of other people; *iii)* Self-transcendence (ST; *subscales:* Self-forgetful (ST1), Transpersonal identification (ST2), Spiritual acceptance (ST3)) which is viewed as the identification with everything conceived as essential and consequential parts of a unified whole[47,50].

MRI Data Acquisition and Processing

Participants underwent a neuroimaging protocol including standard clinical sequences (FLAIR, DP-T2-weighted) and a volumetric whole-brain 3D high-resolution T1-weighted sequence, performed with a 3 T Allegra MR imager (Siemens, Erlangen, Germany), with a standard quadrature head coil. Volumetric whole-brain T1-weighted images were obtained in the sagittal plane using a Modified Driven Equilibrium Fourier Transform (MDEFT) sequence (Echo Time/Repetition Time-TE/TR- = 2.4/7.92 ms, flip angle 15, voxel size 1 x 1 x 1 mm^3). All planar sequence acquisitions were obtained in the plane of the anterior-posterior commissure line.

MRI-based quantification of brain regions was performed using Freesurfer (v5.1.3, http://surfer.nmr.mgh.harvard.edu/, accessed on 26 January 2020) software package (http://surfer.nmr.mgh.harvard.edu). The stream consists of five different stages, fully described elsewhere[20,48,51,52]. Initially, the MRI volumes were registered to the Talairach space and the output images were intensity normalized. At the next stage, the skull was automatically stripped off the 3D anatomical data set by using a hybrid method that uses both watershed algorithms and deformable surface models. At this stage, manual intervention is needed to visualize and edit areas of skull and the areas of cortex or cerebellum that should be corrected. After skull stripping, the output brain mask was labeled using a probabilistic atlas[53] where each voxel in the normalized brain mask volume was assigned one of the following labels: cerebral WM, cerebral cortex, lateral ventricle, inferior lateral ventricle, cerebellar WM, cerebellar Cx, thalamus, caudate, putamen, pallidum, hippocampus, amygdala, accumbens area, third ventricle, fourth ventricle, brainstem, and cerebrospinal fluid. Volumetric data of definite structures were then extracted (in mm^3) using specific algorithms, which count the number of voxels inside the structure and multiple it by the resolution of the MRI image. FreeSurfer measures were corrected for intracranial volume (ICV).

The cortical surface of each hemisphere was inflated to an average spherical surface to locate both the pial surface and the WM/GM boundary. Preprocessed images were visually inspected before including into subsequent statistical analyses. Any topological defects were excluded from the subsequent analyses.

Cortical thickness was measured based on the shortest distance between the pial surface and the GM/WM boundary at each point across the cortical mantle. The regional thickness value at each vertex for each participant was mapped to the surface of an average spherical surface using automated parcellation in FreeSurfer[54]. Segmentations of 68 (34 left and 34 right) cortical gray matter regions based on the Desikan–Killiany atlas[55] and two whole-hemisphere measures were visually inspected and statistically evaluated for outliers.

Cerebellum parcellation was performed through a freely available patch-based multi-atlas segmentation tool called CERES (CEREbellum Segmentation) able to automatically parcellate the cerebellum lobules. CERES[56] is part of broader software pipeline for volumetric brain analysis, namely volBrain (https://www.volbrain.net/). The segmentation pipeline consists of a preprocessing

step (denoising, linear registration to the MNI space, inhomogeneity correction, cropping, non-linear registration and local intensity normalization) and a labeling step which results in 24 volumetric and cortical thickness GM measurements, reflecting the twelve bilateral lobule values for I–II, III, IV, V, VI, crus I, crus II, VIIB, VIIIA, VIIIB, IX, and X. volBrain data were corrected for ICV.

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Table S1. Descriptive statistics for socio-demographic and psychological variables.

Socio-demographic variables		Females		Males	
Sex		41		28	
		mean	SD	mean	SD
Age		41.88	12.69	38.21	11.87
Educational Level		15.68	2.73	15.86	3.37
Psychological tests	Subscales	mean	SD	mean	SD
RS-10		55.22	11.36	58.79	7.49
ASQ	Confidence	34.51	5.07	33.86	4.27
	Discomfort with Closeness	34.85	7.15	33.71	6.59
	Relationships as Secondary	14.17	5.27	15.75	4.27
	Need for Approval	19.37	5.76	18.25	5.97
	Preoccupation with Relationships	24.98	5.66	25.50	7.38
BDI	Total Score	4.71	4.03	4.04	4.18
COPE	Social Support	34.20	6.13	31.36	7.74
	Avoidance	26.63	5.45	25.07	4.59
	Positive Attitude	34.54	4.14	32.57	4.20
	Problem Solving	34.78	4.51	35.50	4.26
	Turning to Religion	21.39	4.77	18.11	5.06
ERQ	Cognitive Reappraisal	5.35	0.93	4.88	0.95
	Expressive Suppression	3.16	1.26	3.86	0.94
GSES		29.17	4.89	30.36	4.10
HAM-A		5.54	3.82	4.07	3.91
HAM-D		3.37	2.75	2.36	2.93
HR-SS		99.76	89.90	100.43	100.32

IRI	Perspective Taking	25.85	3.29	24.64	3.70
	Fantasy	22.80	4.41	20.04	5.43
	Empathic Concern	27.83	3.73	25.07	3.27
	Personal Distress	17.88	4.73	15.14	3.74
PANAS	Positive Affect	36.63	5.97	37.25	4.36
	Negative Affect	21.63	6.28	21.75	7.19
STAXI	State Anger	10.49	2.64	10.14	0.45
	Trait Anger	16.12	3.17	17.79	4.20
	Anger Expression Index	23.22	9.50	26.14	10.94
STAI-Y	State Anxiety	31.17	6.17	30.68	8.49
	Trait Anxiety	36.12	8.95	33.46	10.71
TAS-20	F1	11.63	5.42	10.57	3.41
	F2	11.56	5.50	11.71	4.33
	F3	15.49	4.02	18.14	4.66
	Total Score	38.68	11.48	40.43	7.95
RPM	Raw Score	33.63	2.20	34.07	2.37
	Corrected Score	29.81	2.45	30.17	2.19
Personality tests	**Subscales**	**mean**	**SD**	**mean**	**SD**
BFQ-2	Energy	76.15	11.86	80.93	10.33
	Agreeableness	96.68	10.04	93.29	7.94
	Conscientiousness	86.90	10.99	91.89	11.70
	Emotional Stability	76.44	15.55	81.68	15.80
	Openness	88.41	13.95	92.00	12.00
	Lie	40.17	6.62	39.68	5.24
TCI	NS1	6.71	2.46	6.21	1.73
	NS2	4.05	2.38	3.71	2.14
	NS3	5.00	1.76	4.96	1.97
	NS4	3.71	1.78	4.18	1.81
	NS Total Score	19.46	5.85	19.07	4.82

	HA1	3.90	2.21	3.46	2.27
	HA2	3.98	1.64	3.29	1.67
	HA3	3.07	2.13	2.93	2.14
	HA4	2.44	2.27	2.32	2.18
	HA Total Score	13.39	5.50	12.00	5.92
	RD1	6.68	1.81	6.32	2.18
	RD3	5.51	2.11	5.46	2.32
	RD4	3.22	1.19	3.75	1.17
	RD Total Score	15.41	3.68	15.54	4.00
	PS	4.95	1.47	5.57	1.53
	SD1	6.56	1.58	6.29	1.86
	SD2	5.93	1.97	5.68	1.81
	SD3	4.56	0.92	4.36	1.22
	SD4	6.83	2.83	5.68	2.93
	SD5	10.07	1.81	9.64	3.16
	SD Total Score	33.95	6.23	31.64	8.24
	C1	7.05	1.67	6.54	1.40
	C2	5.54	1.12	5.43	1.45
	C3	6.73	1.14	6.29	1.33
	C4	8.05	2.18	7.43	3.00
	C5	7.80	1.19	7.11	1.26
	C Total Score	35.17	4.64	32.79	5.41
	ST1	4.71	2.22	4.54	2.44
	ST2	3.80	2.22	3.14	2.03
	ST3	6.10	3.27	3.86	3.47
	ST Total Score	14.61	6.58	11.54	5.87

Abbreviations: RS-10, Resilience Scale-10; ASQ, Attachment Style Questionnaire; BDI, Beck's Depression Inventory; COPE, Coping Orientation to Problems and Experiences; ERQ, Emotion Regulation Questionnaire; GSES, General self-efficacy scale; HAM-A, Hamilton Anxiety Rating Scale; HAM-D, Hamilton Depression Rating Scale; HR-SS, Holmes and Rahe Stress Scale; IRI, Interpersonal Reactivity Index; PANAS, Positive and Negative Affect Schedule; STAXI, State-Trait Anger Expression Inventory; STAI-Y, State-Trait Anxiety Inventory – Form Y; TAS-20, Toronto Alexithymia Scale; RPM, Raven's progressive matrices. BFQ-2, Big Five Questionnaire-2; TCI, Temperament and Character Inventory; SD: Standard Deviation.

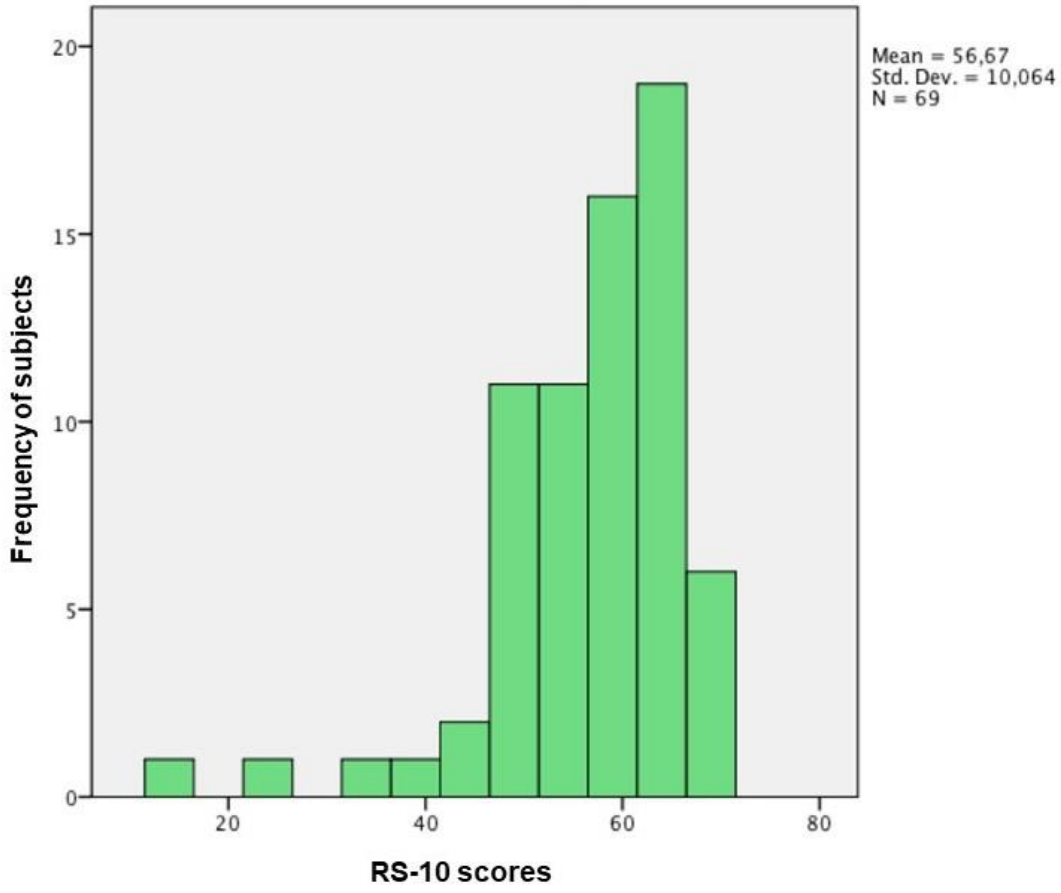

Figure S1. Bar plot illustrating the frequency distribution of RS-10 scores.

Table S2. Correlations between the dependent variable RS-10 and the 279 variables of interest (in **bold** the significant correlations)**.**

Abbreviations as in Fig.1 and Table S1.

Variables	Category	Sub-category	Spearman's rho	p-value	FDR adjusted p-value
GSES	Psychological dimension		0.6507	**<0.00001**	**<0.00001**
PANAS - Positive Affect	Psychological dimension		0.6384	**<0.00001**	**<0.00001**
STAI-Y - Trait anxiety	Psychological dimension		-0.6050	**<0.00001**	**<0.00001**
IRI - Personal Distress	Psychological dimension		-0.5485	**<0.00001**	**0.0001**
STAI-Y - State Anxiety	Psychological dimension		-0.5249	**<0.00001**	**0.0002**
ASQ - Need for Approval	Psychological dimension		-0.5244	**<0.00001**	**0.0002**
ASQ -Confidence	Psychological dimension		0.4969	**0.00001**	**0.0006**
TCI - HA1	Personality trait		-0.4844	**0.00002**	**0.0008**
BFQ-2 Energy	Personality trait		0.4821	**0.00003**	**0.0008**

TCI - HA	Personality trait		-0.4804	**0.00003**	**0.0008**
TCI - SD3	Personality trait		0.4767	**0.00003**	**0.0009**
PANAS - Negative Affect	Psychological dimension		-0.4368	**0.0002**	**0.0041**
ASQ - Preoccupation with Relationships	Psychological dimension		-0.4301	**0.0002**	**0.0048**
BFQ-2 Emotional Stability	Personality trait		0.4123	**0.0004**	**0.0086**
HAM-D	Psychological dimension		-0.3991	**0.0007**	**0.0127**
STAXI - State Anger	Psychological dimension		-0.3952	**0.0008**	**0.0135**
ASQ - Relationships as Secondary	Psychological dimension		-0.3756	**0.0015**	**0.0242**
COPE - Problem solving	Psychological dimension		0.3714	**0.0017**	**0.0260**
TCI - SD2	Personality trait		0.3630	**0.0022**	**0.0320**
BFQ-2 Openness	Personality trait		0.3569	**0.0026**	**0.0364**
TCI - HA2	Personality trait		-0.3546	**0.0028**	**0.0372**
Left cerebellar lobule X	Volume	Cerebellum	-0.3513	**0.0031**	**0.0388**
BFQ-2 Conscientiousness	Personality trait		0.3500	**0.0032**	**0.0388**
TCI - SD	Personality trait		0.3467	**0.0035**	**0.0409**
Left medial orbitofrontal Cx	Volume	Cortical	0.3425	**0.0040**	**0.0443**
COPE Avoidance	Psychological dimension		-0.3358	**0.0048**	0.0515
BFQ-2 Lie	Personality trait		0.3311	**0.0054**	0.0563
Left amygdala	Volume	Subcortical	0.3246	**0.0065**	0.0648
BFQ-2 Agreeableness	Personality trait		0.3212	**0.0071**	0.0686
BDI - Total score	Psychological dimension		-0.3191	**0.0075**	0.0700
Left temporal pole	Cortical thickness		0.3155	**0.0083**	0.0745
Right cerebellar lobules I-II	Cortical thickness	Cerebellum	-0.3037	**0.0112**	0.0976
Right hippocampus	Volume	Subcortical	0.2964	**0.0134**	0.1132
TCI - NS3	Personality trait		0.2831	**0.0184**	0.1510
TCI - HA4	Personality trait		-0.2659	**0.0272**	0.2170
ERQ Expressive Suppression	Psychological dimension		0.2606	**0.0305**	0.2345
Right pars orbitalis	Volume	Cortical	0.2591	**0.0316**	0.2345
Right cerebellar lobule X	Cortical thickness	Cerebellum	-0.2586	**0.0319**	0.2345
Corpus callosum - central	Volume	Subcortical	0.2544	**0.0349**	0.2497
HAM-A	Psychological dimension		-0.2510	**0.0375**	0.2523
TAS-20 Total score	Psychological dimension		-0.2507	**0.0377**	0.2523
TCI - SD5	Personality trait		0.2490	**0.0391**	0.2523
Right cerebellar lobule X	Volume	Cerebellum	-0.2484	**0.0396**	0.2523
Right insula	Volume	Subcortical	0.2482	**0.0398**	0.2523
Left cerebellar lobules I-II	Cortical thickness	Cerebellum	-0.2434	**0.0439**	0.2685
Right cerebellar lobule VIIb	Volume	Cerebellum	-0.2430	**0.0443**	0.2685
TCI - P	Personality trait		0.2357	0.0512	0.3041
Left hippocampus	Volume	Subcortical	0.2341	0.0529	0.3073
Corpus callosum - mid-posterior	Volume	Subcortical	0.2323	0.0548	0.3113

Left pars triangularis	Volume	Cortical	0.2300	0.0572	0.3113
Right rostral anterior cingulate Cx	Volume	Cortical	0.2296	0.0577	0.3113
Right superior temporal Cx	Volume	Cortical	0.2293	0.0580	0.3113
Left transverse temporal gyrus	Volume	Cortical	0.2281	0.0594	0.3129
Left temporal pole	Volume	Cortical	0.2270	0.0607	0.3137
Left Crus II	Volume	Cerebellum	-0.2238	0.0646	0.3189
Right inferior temporal Cx	Volume	Cortical	0.2237	0.0646	0.3189
Left posterior cingulate Cx	Volume	Cortical	0.2233	0.0652	0.3189
Left insula	Volume	Cortical	0.2207	0.0684	0.3239
TAS-20 F2	Psychological dimension		-0.2206	0.0685	0.3239
TCI - SD1	Personality trait		0.2187	0.0710	0.3261
ASQ - Discomfort with Closeness	Psychological dimension		-0.2185	0.0713	0.3261
Corpus callosum - mid-anterior	Volume	Subcortical	0.2168	0.0736	0.3311
COPE - Turning to Religion	Psychological dimension		-0.2128	0.0792	0.3457
Left thalamus	Volume	Subcortical	0.2118	0.0806	0.3457
Left superior temporal Cx	Volume	Cortical	0.2112	0.0816	0.3457
RPM Raw scores	Psychological dimension		0.2110	0.0818	0.3457
Right middle temporal Cx	Volume	Cortical	0.2052	0.0908	0.3748
Left cerebellar lobule V	Cortical thickness	Cerebellum	-0.2047	0.0916	0.3748
Left cuneus	Volume	Cortical	0.2038	0.0931	0.3748
ERQ - Expressive Suppression	Psychological dimension		-0.2032	0.0940	0.3748
Right supramarginal gyrus	Volume	Cortical	0.1995	0.1002	0.3938
Right transverse temporal gyrus	Volume	Cortical	0.1978	0.1033	0.4002
Right cerebellar lobule IV	Cortical thickness	Cerebellum	-0.1942	0.1098	0.4195
Right middle temporal Cx	Cortical thickness		0.1910	0.1160	0.4318
Right cerebellar lobule VIIIa	Volume	Cerebellum	-0.1909	0.1161	0.4318
Left isthmus cingulate Cx	Volume	Cortical	0.1885	0.1209	0.4420
Right superior parietal Cx	Volume	Cortical	0.1877	0.1226	0.4420
Left cerebellar lobule VI	Volume	Cerebellum	-0.1866	0.1246	0.4420
Right Crus I	Volume	Cerebellum	-0.1861	0.1257	0.4420
Right cerebellar lobule VI	Cortical thickness	Cerebellum	-0.1856	0.1267	0.4420
Left cerebellar lobule VI	Cortical thickness	Cerebellum	-0.1839	0.1305	0.4494
TCI - C	Personality trait		0.1802	0.1383	0.4637
TCI - C4	Personality trait		0.1797	0.1395	0.4637
Right amygdala	Volume	Subcortical	0.1785	0.1422	0.4637
Left Crus I	Volume	Cerebellum	-0.1781	0.1431	0.4637
Left cerebellar lobule IX	Cortical thickness	Cerebellum	-0.1780	0.1434	0.4637
Right lateral orbitofrontal Cx	Volume	Cortical	0.1775	0.1446	0.4637
TAS-20 F3	Psychological dimension		-0.1764	0.1471	0.4665
Right cerebellar lobules I-II	Volume	Cerebellum	-0.1737	0.1534	0.4810
COPE - Positive Attitude	Psychological dimension		0.1708	0.1606	0.4932
Left lingual gyrus	Volume	Cortical	0.1700	0.1624	0.4932
Right posterior cingulate Cx	Volume	Cortical	0.1678	0.1682	0.4932

Right Crus II	Volume	Cerebellum	-0.1671	0.1698	0.4932
TCI - C3	Personality trait		0.1668	0.1708	0.4932
Left supramarginal gyrus	Volume	Cortical	0.1664	0.1718	0.4932
Brainstem	Volume	Subcortical	0.1661	0.1726	0.4932
RPM Corrected scores	Psychological dimension		0.1661	0.1726	0.4932
Left middle temporal Cx	Volume	Cortical	0.1658	0.1732	0.4932
Right cerebellar lobule VI	Volume	Cerebellum	-0.1635	0.1795	0.5012
Left cerebellar white matter	Volume	Subcortical	0.1634	0.1796	0.5012
Right pars triangularis	Volume	Cortical	0.1614	0.1852	0.5117
Right caudal anterior cingulate Cx	Volume	Cortical	0.1594	0.1909	0.5222
Left superior parietal Cx	Volume	Cortical	0.1551	0.2031	0.5460
Right lingual gyrus	Volume	Cortical	0.1550	0.2035	0.5460
Left lateral orbitofrontal Cx	Volume	Cortical	0.1504	0.2174	0.5742
Right rostral middle frontal Cx	Volume	Cortical	0.1502	0.2181	0.5742
Left entorhinal Cx	Volume	Cortical	0.1481	0.2246	0.5746
Right superior frontal Cx	Volume	Cortical	0.1478	0.2255	0.5746
Right thalamus	Volume	Subcortical	0.1472	0.2274	0.5746
Right isthmus cingulate Cx	Volume	Cortical	0.1462	0.2305	0.5746
Left nucleus accumbens	Volume	Subortical	-0.1462	0.2308	0.5746
Left isthmus cingulate Cx	Cortical thickness		0.1460	0.2312	0.5746
Left precentral Cx	Volume	Cortical	0.1450	0.2344	0.5746
Left cerebellar lobule I-II	Volume	Cerebellum	-0.1440	0.2378	0.5746
Right precentral Cx	Volume	Cortical	0.1438	0.2385	0.5746
Right superior temporal Cx	Cortical thickness		0.1437	0.2389	0.5746
TAS-20 F1	Psychological dimension		-0.1412	0.2471	0.5770
Left entorhinal Cx	Cortical thickness		0.1408	0.2486	0.5770
Right insula	Cortical thickness		0.1400	0.2512	0.5770
Corpus callosum - posterior	Volume	Subcortical	0.1400	0.2514	0.5770
Right entorhinal Cx	Volume	Cortical	0.1395	0.2530	0.5770
Left superior frontal Cx	Volume	Cortical	0.1393	0.2535	0.5770
Left cerebellar lobule IV	Volume	Cerebellum	0.1386	0.2559	0.5770
Left cerebellar lobule VIIb	Volume	Cerebellum	-0.1385	0.2564	0.5770
Left insula	Volume	Cortical	0.1374	0.2604	0.5789
Left cerebellar lobule VIIIb	Cortical thickness	Cerebellum	-0.1367	0.2628	0.5789
Left rostral middle frontal Cx	Volume	Cortical	0.1363	0.2642	0.5789
Left medial orbitofrontal Cx	Cortical thickness		0.1354	0.2674	0.5789
Left cerebellar lobule IV	Cortical thickness	Cerebellum	-0.1353	0.2676	0.5789
Left pars opercularis	Volume	Cortical	0.1339	0.2727	0.5852
Left inferior temporal Cx	Volume	Cortical	0.1332	0.2754	0.5864
COPE - Social Support	Psychological dimension		-0.1313	0.2822	0.5933
Right cerebellar lobule V	Cortical thickness	Cerebellum	-0.1311	0.2828	0.5933
Left pericalcarine Cx	Volume	Cortical	0.1292	0.2902	0.5992
Left caudal middle frontal Cx	Volume	Cortical	0.1283	0.2935	0.5992
TCI - SD4	Personality trait		0.1273	0.2971	0.5992
TCI - HA3	Personality trait		-0.1273	0.2971	0.5992
Corpus callosum - Anterior	Volume	Subcortical	0.1270	0.2985	0.5992

STAXI - Trait Anger	Psychological dimension		-0.1252	0.3053	0.5992
TCI - NS	Personality trait		0.1245	0.3080	0.5992
Left pars orbitalis	Volume	Cortical	0.1245	0.3082	0.5992
Right pericalcarine Cx	Volume	Cortical	0.1244	0.3086	0.5992
Left lateral occipital Cx	Volume	Cortical	0.1244	0.3087	0.5992
Right cerebellar lobule VIIIb	Cortical thickness	Cerebellum	-0.1240	0.3102	0.5992
Left cerebellar lobule V	Volume	Cerebellum	-0.1236	0.3114	0.5992
Left cerebellar lobule X	Cortical thickness	Cerebellum	-0.1219	0.3186	0.6087
IRI - Fantasy	Psychological dimension		-0.1208	0.3229	0.6117
Left supramarginal gyrus	Cortical thickness		-0.1204	0.3245	0.6117
Right lateral orbitofrontal Cx	Cortical thickness		0.1183	0.3330	0.6218
Left transverse temporal Cx	Cortical thickness		0.1180	0.3343	0.6218
Right medial orbitofrontal Cx	Cortical thickness		0.1159	0.3430	0.6338
Left cuneus	Cortical thickness		0.1140	0.3508	0.6438
Right fusiform gyrus	Volume	Cortical	0.1133	0.3541	0.6458
Left postcentral Cx	Volume	Cortical	0.1120	0.3595	0.6491
TCI - ST2	Personality trait		0.1117	0.3606	0.6491
Right cuneus	Volume	Cortical	0.1109	0.3644	0.6499
Right paracentral Cx	Volume	Cortical	0.1106	0.3657	0.6499
Right medial orbitofrontal Cx	Volume	Cortical	0.1076	0.3787	0.6688
Left precuneus	Cortical thickness		-0.1042	0.3942	0.6917
TCI - RD3	Personality trait		0.1011	0.4083	0.7076
Left fusiform gyrus	Volume	Cortical	0.1005	0.4112	0.7076
TCI - RD1	Personality trait		-0.1005	0.4115	0.7076
Right cerebellar white matter	Volume	Subcortical	0.1000	0.4134	0.7076
Left parahippocampal gyrus	Cortical thickness		-0.0985	0.4208	0.7159
Left rostral anterior cingulate Cx	Volume	Cortical	0.0976	0.4252	0.7189
HR-SS	Psychological dimension		-0.0960	0.4324	0.7268
Right lateral occipital Cx	Volume	Cortical	0.0930	0.4473	0.7473
Right cerebellar lobule V	Volume	Cerebellum	-0.0911	0.4564	0.7579
Right cerebellar lobule VIIIb	Volume	Cerebellum	-0.0890	0.4671	0.7679
Right precuneus	Volume	Cortical	0.0888	0.4679	0.7679
IRI - Perspective Taking	Psychological dimension		0.0853	0.4858	0.7872
Left inferior parietal Cx	Cortical thickness		-0.0848	0.4884	0.7872
Right parahippocampal gyrus	Volume	Cortical	0.0848	0.4885	0.7872
TCI - NS1	Personality trait		0.0838	0.4937	0.7872
TCI - C1	Personality trait		0.0828	0.4988	0.7872
Right paracentral Cx	Cortical thickness		-0.0817	0.5045	0.7872
Right cerebellar cortex	Volume	Subcortical	0.0817	0.5047	0.7872
Right pars orbitalis	Cortical thickness		0.0813	0.5065	0.7872
Left ventral diencephalon	Volume	Subcortical	0.0813	0.5066	0.7872
Right Crus I	Cortical thickness	Cerebellum	0.0811	0.5079	0.7872
Left lingual gyrus	Cortical thickness		0.0777	0.5256	0.8085
Left paracentral Cx	Volume	Cortical	0.0774	0.5274	0.8085
Right Crus II	Cortical thickness	Cerebellum	0.0763	0.5331	0.8127

Right pars opercularis	Volume	Cortical	0.0731	0.5506	0.8285
Left lateral orbitofrontal Cx	Cortical thickness		0.0729	0.5519	0.8285
Right entorhinal Cx	Cortical thickness		0.0728	0.5523	0.8285
Left lateral occipital Cx	Cortical thickness		0.0716	0.5586	0.8334
Right supramarginal gyrus	Cortical thickness		-0.0711	0.5616	0.8334
Right pericalcarine	Cortical thickness		0.0699	0.5682	0.8336
STAXI - Anger Expression Index	Psychological dimension		-0.0695	0.5704	0.8336
TCI - C2	Personality trait		0.0694	0.5707	0.8336
Left cerebellar lobule VIIIa	Volume	Cerebellum	-0.0680	0.5789	0.8381
Right cerebellar lobule III	Cortical thickness	Cerebellum	-0.0678	0.5798	0.8381
Right ventral diencephalon	Volume	Cerebellum	0.0657	0.5916	0.8508
TCI - C5	Personality trait		-0.0636	0.6039	0.8641
Right cerebellar lobule IX	Cortical thickness	Cerebellum	-0.0596	0.6268	0.8900
IRI - Empathic Concern	Psychological dimension		0.0591	0.6293	0.8900
Left pars orbitalis	Cortical thickness		0.0584	0.6337	0.8900
Left superior temporal Cx	Cortical thickness		0.0581	0.6355	0.8900
Right isthmus cingulate Cx	Cortical thickness		0.0576	0.6380	0.8900
Left caudal anterior cingulate Cx	Cortical thickness		-0.0556	0.6501	0.8985
Right pallidum	Volume	Subcortical	-0.0555	0.6505	0.8985
Left posterior cingulate Cx	Cortical thickness		-0.0545	0.6563	0.9020
Age	Socio-demographic variable		-0.0540	0.6596	0.9021
Left caudate	Volume	Subcortical	0.0527	0.6670	0.9077
Right putamen	Volume	Subcortical	0.0520	0.6714	0.9090
Right parahippocampal gyrus	Cortical thickness		-0.0515	0.6744	0.9090
TCI - ST3	Personality trait		-0.0508	0.6782	0.9091
Right rostral middle frontal Cx	Cortical thickness		0.0496	0.6854	0.9091
Left inferiorparietal Cx	Volume	Cortical	-0.0495	0.6863	0.9091
Right inferior parietal Cx	Volume	Cortical	0.0489	0.6898	0.9091
Right temporal pole	Volume	Cortical	0.0483	0.6932	0.9091
Right postcentral Cx	Cortical thickness		-0.0482	0.6940	0.9091
Left Crus II	Cortical thickness	Cerebellum	0.0469	0.7022	0.9140
Right precuneus	Cortical thickness		-0.0460	0.7073	0.9140
Left rostral middle frontal Cx	Cortical thickness		0.0460	0.7076	0.9140
Left cerebellar lobule VIIIa	Cortical thickness	Cerebellum	-0.0453	0.7115	0.9141
Left putamen	Volume	Subcortical	0.0439	0.7204	0.9141
Left cerebellar lobule III	Cortical thickness	Cerebellum	-0.0433	0.7236	0.9141
Left caudal anterior cingulate Cx	Volume	Cortical	0.0433	0.7239	0.9141
Left pericalcarine Cx	Cortical thickness		0.0433	0.7241	0.9141
Right inferior temporal thickness	Cortical thickness		0.0417	0.7335	0.9208
Left rostral anterior cingulate	Cortical thickness		0.0408	0.7391	0.9208
Left fusiform gyrus	Cortical thickness		0.0408	0.7394	0.9208
TCI - NS4	Personality trait		-0.0403	0.7426	0.9208
Right cerebellar lobule IX	Volume	Cerebellum	-0.0393	0.7487	0.9243
Left Crus I	Cortical thickness	Cerebellum	0.0382	0.7552	0.9282
Left postcentral Cx	Cortical thickness		0.0371	0.7625	0.9304

Right caudate	Volume	Subcortical	0.0366	0.7651	0.9304
Left pars triangularis	Cortical thickness		-0.0363	0.7670	0.9304
Right caudal middle frontal Cx	Cortical thickness		0.0357	0.7709	0.9311
Left cerebellar lobule VIIIb	Volume	Cerebellum	-0.0320	0.7941	0.9470
TCI - NS2	Personality trait		0.0316	0.7963	0.9470
Right frontal pole	Volume	Cortical	-0.0315	0.7970	0.9470
Left pars opercularis	Cortical thickness		0.0314	0.7977	0.9470
Left cerebellar lobule III	Volume	Cerebellum	-0.0302	0.8052	0.9490
Right lateral occipital Cx	Cortical thickness		-0.0297	0.8089	0.9490
Right lingual gyrus	Cortical thickness		0.0289	0.8134	0.9490
Right posterior cingulate Cx	Cortical thickness		0.0288	0.8142	0.9490
Right rostral anterior cingulate Cx	Cortical thickness		0.0285	0.8164	0.9490
Left cerebellar cortex	Volume	Subcortical	0.0267	0.8276	0.9581
Right frontal pole	Cortical thickness		-0.0254	0.8359	0.9637
Left superior frontal Cx	Cortical thickness		0.0244	0.8422	0.9644
Right superior parietal	Cortical thickness		0.0239	0.8456	0.9644
Right precentral Cx	Cortical thickness		0.0237	0.8469	0.9644
TCI - RD4	Personality trait		0.0231	0.8503	0.9644
Right transverse temporal Cx	Cortical thickness		0.0189	0.8775	0.9819
Left precuneus	Volume	Cortical	0.0183	0.8814	0.9819
Left paracentral Cx	Cortical thickness		0.0180	0.8832	0.9819
Left frontal pole	Volume	Cortical	0.0173	0.8875	0.9819
Right cerebellar lobule VIIb	Cortical thickness	Cerebellum	0.0165	0.8927	0.9819
Left caudal middle frontal Cx	Cortical thickness		0.0163	0.8943	0.9819
Right postcentral Cx	Volume	Cortical	0.0161	0.8954	0.9819
Left middle temporal gyrus	Cortical thickness		-0.0158	0.8977	0.9819
Left inferior temporal Cx	Cortical thickness		0.0148	0.9040	0.9819
Right cuneus	Cortical thickness		-0.0143	0.9072	0.9819
TCI - RD	Personality trait		0.0142	0.9076	0.9819
Right temporal pole	Cortical thickness		0.0142	0.9080	0.9819
TCI - ST	Personality trait		0.0132	0.9144	0.9849
Right caudal anterior cingulate Cx	Cortical thickness		-0.0115	0.9251	0.9849
Right cerebellar lobule VIIIa	Cortical thickness	Cerebellum	-0.0114	0.9256	0.9849
Right pars opercularis	Cortical thickness		0.0111	0.9279	0.9849
Left cerebellar lobule VIIb	Cortical thickness	Cerebellum	0.0093	0.9397	0.9849
Left superior parietal Cx	Cortical thickness		-0.0090	0.9416	0.9849
Right cerebellar lobule IV	Volume	Cerebellum	0.0084	0.9456	0.9849
Right inferior parietal Cx	Cortical thickness		-0.0083	0.9462	0.9849
TCI - ST1	Personality trait		-0.0077	0.9499	0.9849
Left precentral Cx	Cortical thickness		0.0068	0.9558	0.9849
Right fusiform gyrus	Cortical thickness		-0.0067	0.9561	0.9849
Right caudal middle frontal Cx	Volume	Cortical	-0.0066	0.9569	0.9849
Left parahippocampal gyrus	Volume	Subcortical	-0.0063	0.9591	0.9849
Right accumbens	Volume	Subcortical	0.0061	0.9602	0.9849
Right pars triangularis	Cortical thickness		0.0048	0.9687	0.9885
Left pallidum	Volume	Subcortical	-0.0045	0.9708	0.9885
Right superior frontal Cx	Cortical thickness		-0.0034	0.9776	0.9918

Educational Level	Socio-demographic variable		-0.0027	0.9826	0.9930
Left frontal pole	Cortical thickness		0.0022	0.9859	0.9930
Right cerebellar lobule III	Volume	Cerebellum	0.0011	0.9927	0.9962
Left cerebellar lobule IX	Volume	Cerebellum	-0.0004	0.9976	0.9976