S1 Appendix. Glossary of common terms

Term	Description	
Acute stress	Short-term stress, often relatively intense. In the context of this review, acute stress occurs within a single day, often combining multiple forms of stressor within one session.	
Agency	Proactive and flexible engagement with the environment beyond immediate needs to promote individual well-being (1).	
Chronic stress	Stress that occurs over a period of time. In the context of this review, chronic stress is categorised as occurring over at least ten days.	
Cognitive skills	Skills in cognitive processes related to sensory input, e.g. learning, memory, and causal reasoning (2).	
Elevated platform stress	A rodent stress protocol involving placing subjects on an elevated platform in a brightly-lit environment (e.g. 3).	
Emotional intelligence	The capacity to make intelligent use of emotional information (4).	
Flexibility	The ability to adapt to different kinds of situations and challenges.	
Hardiness	A combination of self-control, persistence, and self-motivation to overcome challenges (5).	
Learned helplessness	The inability to avoid stressor(s), having experienced inescapable stress (6).	
Meditation	An umbrella term for various methods of regulating focus and emotions (7).	
Mindfulness	The practice of intentionally maintaining focus on the present moment in a non-judgmental way (8).	
Optimism/pessimism	The tendency to believe that future events will be favourable/unfavourable (9).	
Positive psychology	Psychological perspective which emphasises helping patients to flourish, rather than focusing only on pathology (10).	
Positive/ negative affect	Positive/negative emotional state.	
Self-awareness, self-reflection	The capacity/activity of being aware of one's own thoughts, behaviour, emotions, and influences.	
Self-confidence/ self-esteem	Positive conceptualisation and feelings about oneself (11).	
Self-control/ behavioural inhibition	The ability to self-regulate behaviour, for example to delay gratification.	
Social defeat	Subordination by a dominant, usually physically larger, intruder of the same species (e.g. 12).	
Stress inoculation	Exposure to manageable stress leading to resistance against future stress (13,14).	

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S2 Appendix. Overview of common tools to measure resilience in humans

Category	Name of measure	Citation
	Adult Resilience Scale	(1)
	Adult Resilience Social Acceptability Measure	(2)
	Brief Resilience Scale	(3)
	Child and Youth Resilience Measure	(4)
	Connor-Davidson Resilience Scale	(5)
	Coping Inventory for Stressful Situations	
	Coping Orientations to Problems Experienced (COPE) Scale	
	Coping Responses Inventory	(7)
D '11'	Dispositional Resilience Scale	(9)
Resilience	Distress Tolerance Scale	(10)
	MeQuilibrium Resilience Measure	(11)
	Resilience at Work (R@W) Scale	(12)
	Resilience Scale	(13)
	Resilience Scale for Adolescents (READ-28)	(14)
	Resilience Scale for Adults	(15)
	Strategic Approach to Coping Scale	(16)
	Utrecht Coping List	(17)
	Ways of Coping Checklist	(18)
	Brief Symptom Inventory (Global Distress)	(19)
	Depression, Anxiety, and Stress Scale	(20)
	Perceived Stress Questionnaire	(21)
Stress	Perceived Stress Scale	(22)
Suess	PTSD Checklist	(23)
	PTSD Symptom Scale - Self-Report	(24)
	Symptoms of Stress Inventory	(25)
	Tension Thermometer	(26)
	Cognitive Emotion Regulation Questionnaire	(27)
	Difficulties in Emotion Regulation Scale	(28)
	Emotion Regulation Questionnaire	(29)
Emotional	Implicit Theories of Emotion Scale	(30)
regulation	Proneness to Provocation	(31)
	Strengths and Difficulties Questionnaire - Emotional Problems Score	(32)
	Self-monitoring of anger reactions	(33)
	State-Trait Anger Expression Inventory	(34)
	Beck Depression Inventory	(35)
Depression	Center for Epidemiologic Studies Depression Scale	(36)
	Depression, Anxiety, and Stress Scale	(20)

Category	Name of measure	Citation	
	Mini International Neuropsychiatric Interview (MINI) Depression Scale	(37)	
	Patient Health Questionnaire (for depression)	(38)	
	Patient-Reported Outcomes Measurement Information System (PROMIS) Depression and Anxiety symptom measures	(39)	
	Reynolds Adolescent Depression Scale	(40)	
	AN-UD Anxiety Scale	(41)	
	Cognitive-Somatic Anxiety Questionnaire	(42)	
	Depression, Anxiety, and Stress Scale	(20)	
Anxiety	Generalised Anxiety Disorder Scale	(43)	
	Patient-Reported Outcomes Measurement Information System (PROMIS) Depression and Anxiety symptom measures	(39)	
	State-Trait Anxiety Inventory Trait Anxiety Scale (STAI A-TRAIT)	(44)	
	Mental Health Continuum	(45)	
	PERMA Profiler	(46)	
Psychological wellbeing	Positive and Negative Affect Scale (PANAS)	(47)	
wendenig	Psychological Well-Being Scale	(48)	
	Warwick-Edinburgh Mental Wellbeing Scale	(49)	
	ABCD-M personality test	(50)	
	Formal Characteristics of Behaviour - Temperament Inventory	(51)	
Personality	Revised NEO Personality Inventory	(52)	
	Ten-Item Personality Inventory	(53)	
	Coping Self-Efficacy	(54)	
Salf afficacy	General Self-Efficacy Scale	(55)	
Self-efficacy	Internal Control Index	(56)	
	Self-Efficacy Scale	(57)	
	Coopersmith Self-Esteem Inventory	(58)	
Self-esteem	Rosenberg Self-Esteem Scale	(59)	
	State Self-Esteem Scale - Current Thoughts	(60)	
Mindfulness	Five Facet Mindfulness Questionnaire	(61)	
	Freiburg Mindfulness Inventory	(62)	
	Acceptance and Action Questionnaire	(63)	
	Achievement Goal Scale	(64)	
	Cognitive Fusion Questionnaire	(65)	
	Fear Survey Schedule	(66)	
Other	Igroup Presence Questionnaire	(67)	
	Interpersonal Support Evaluation List	(68)	
	Life Orientation Test (for optimism)	(69)	
	Self-Compassion Scale	(70)	
	Social Adjustment Scale	(71)	

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S3 Appendix. Overview of common types of non-human animal behavioural measurements relevant to resilience

Attribute	Relevance	Name of measure	Taxonomic groups
Anxiety	Stress indicator	Elevated plus maze/elevated zero maze	Rodents
		Open field test	Rodents/ agricultural
		Light/dark test	Rodents/birds
		Novelty suppressed feeding test	Rodents
		Behavioural observations	Any
		'Behaviourally anchored' criteria for generalised anxiety disorder.	Primates
		Porsolt forced swim test	Rodents
		Social interaction test (with stranger)	Rodents
		Tail suspension	Rodents
Depression	Stress indicator	Latency to escape electric shock.	Rodents/dogs
1		Sucrose consumption test (quantity).	Rodents
		Sucrose preference test (over water).	Rodents
		Body weight.	Rodents
		Radial arm maze (win-shift tasks)	Rodents
		Fear conditioning	Rodents
		Two-way shuttle-box	Rodents/dogs
Memory	Related to problem-solving/ planning	Morris water maze/Dry Morris water maze (on land)	Rodents
and spatial		Spatial foraging task	Birds
learning		Associative learning task	Birds
		Novel odour recognition memory test	Rodents
		Barnes maze	Rodents
		Y-maze	Rodents
	Low emotional reactivity is an aspect of resilience	Acoustic startle	Rodents/ primates
Fear &		Two-way shuttle-box	Rodents/dogs
emotional		Fear conditioning/extinction	Rodents
reactivity		Tonic immobility test	Birds
1000011109		Hole-in-the-wall test	Birds
		Novel object test	Any
	Curiosity and physical activity are indicators of resilience	Open field test / novel environment	Any
		Novel object	Any
		Novel odour	Rodents
Evaloration		Novelty-suppressed feeding test	Rodents
Exploration		Social exploration/juvenile social exploration	Rodents
		Approach/avoidance test	Primates
		Behavioural observations	Any

Attribute	Relevance	Name of measure	Taxonomic groups
Anxiety	Stress indicator	Elevated plus maze/elevated zero maze	Rodents
		Open field test	Rodents/ agricultural
		Light/dark test	Rodents/birds
		Novelty suppressed feeding test	Rodents
		Behavioural observations	Any
		'Behaviourally anchored' criteria for generalised anxiety disorder.	Primates
Inhibition	Inhibitory control is an aspect of resilience	Detour-reaching task	Primates
Other		Behavioural observations (e.g. aggression, vigilance)	Any
		Human-rated personality/behaviour assessments	Dogs
		Locomotion	Any
		Coping profile assessment	Rodents
		Condition of fur	Rodents
		Olfactory discrimination task.	Rodents
		Problem solving digging task.	Rodents
		Vocalisations	Any