

Figure S1
Example Content from the Online Survey

50% completed

Do these variables change across the lifespan?

You will now be asked about your beliefs regarding if and how much different variables – or characteristics, traits, and qualities – change across the lifespan, on average. A list of variables and their definitions are presented below.

For each variable, indicate if and how much you believe it changes, on average, across the lifespan. When doing so, please think about each variable's average change in the population from age 15 to age 90, not necessarily any changes you may have experienced in your own life.

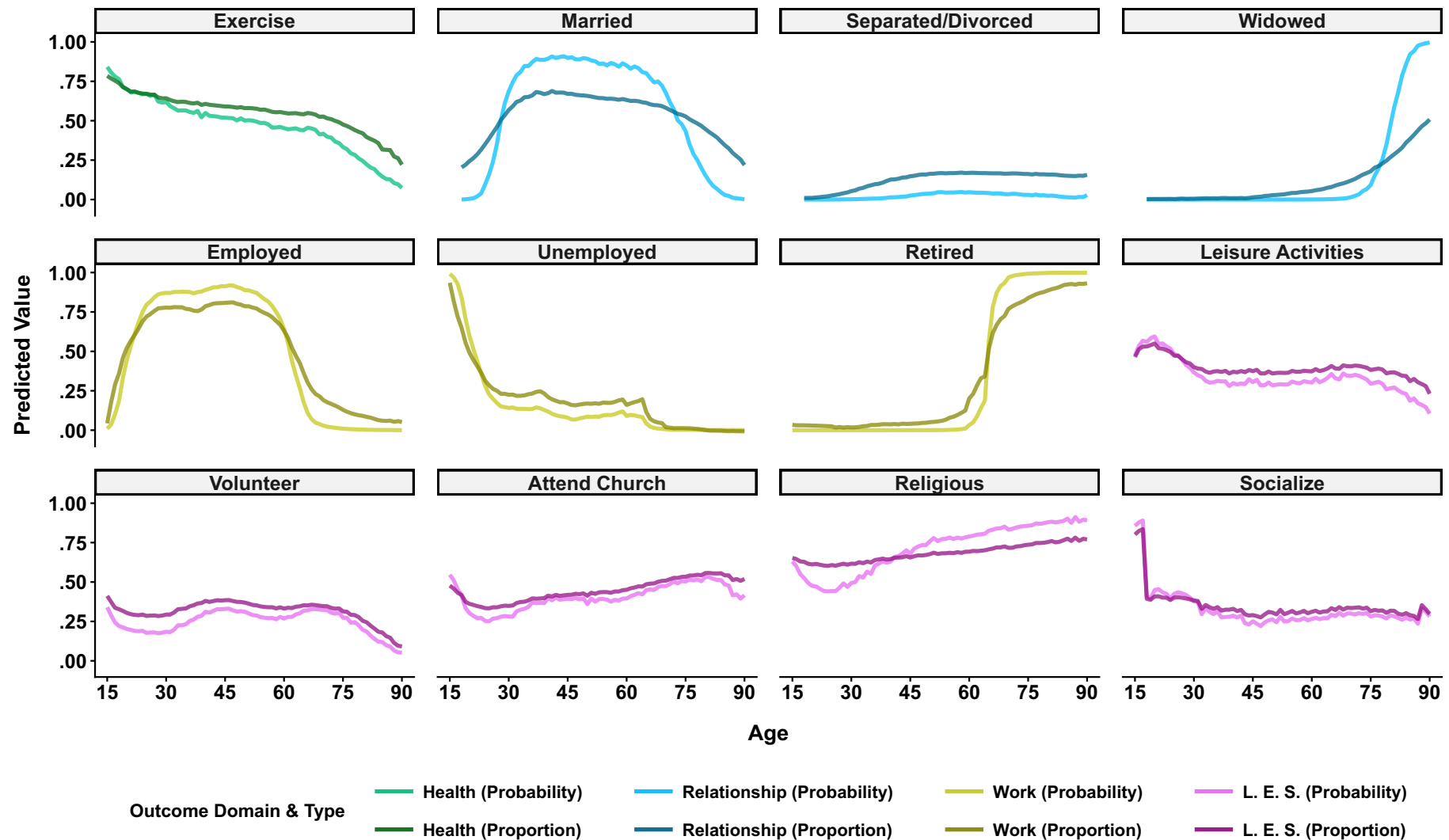
To answer "Not at all," please click on the slider under this option. For all other answers, please click the slider bar and adjust the slider to your desired answer.

Across the lifespan, this variable changes _ _ _ _ , on average

	Very little	A lot	Not at all
Hours of Sleep per Night The average number of hours people tend to sleep each night			
Perceived Control People's beliefs about how much control they have over their own actions, what happens in their lives, and their futures			
Positive Affect Extent to which people tend to feel pleasant emotions including joy, enthusiasm, high energy, inspiration, and contentment			
Frequency of Volunteering How often people tend to engage in volunteer work or community service			
Frequency of Exercising How often people tend to exercise, such as by lifting weights, running, playing sports, etc.			
Life Satisfaction People's overall assessments of how content and fulfilled they are by their lives as a whole			
Agreeableness A personality trait that describes people who are kind, empathetic, altruistic, and highly trusting of others			
Cognitive Ability Extent to which people are capable of thinking, learning, reasoning, and solving problems			
Frequency of Social Interactions How often people tend to contact, have regular talks with, and/or get together with strangers, colleagues, friends, family, and/or romantic partners			
Frequency of Leisure Activities How often people tend to do activities in their free time, such as reading, playing sports, watching television, painting, or listening to music			

Note. A screenshot of the online survey, including a list of 10 variables in randomized order, is shown above. Participants saw versions of this exact screen when responding to the survey (actual screens varied due to randomization of variable order). A total of 25 items, and one attention check item, were included in the survey.

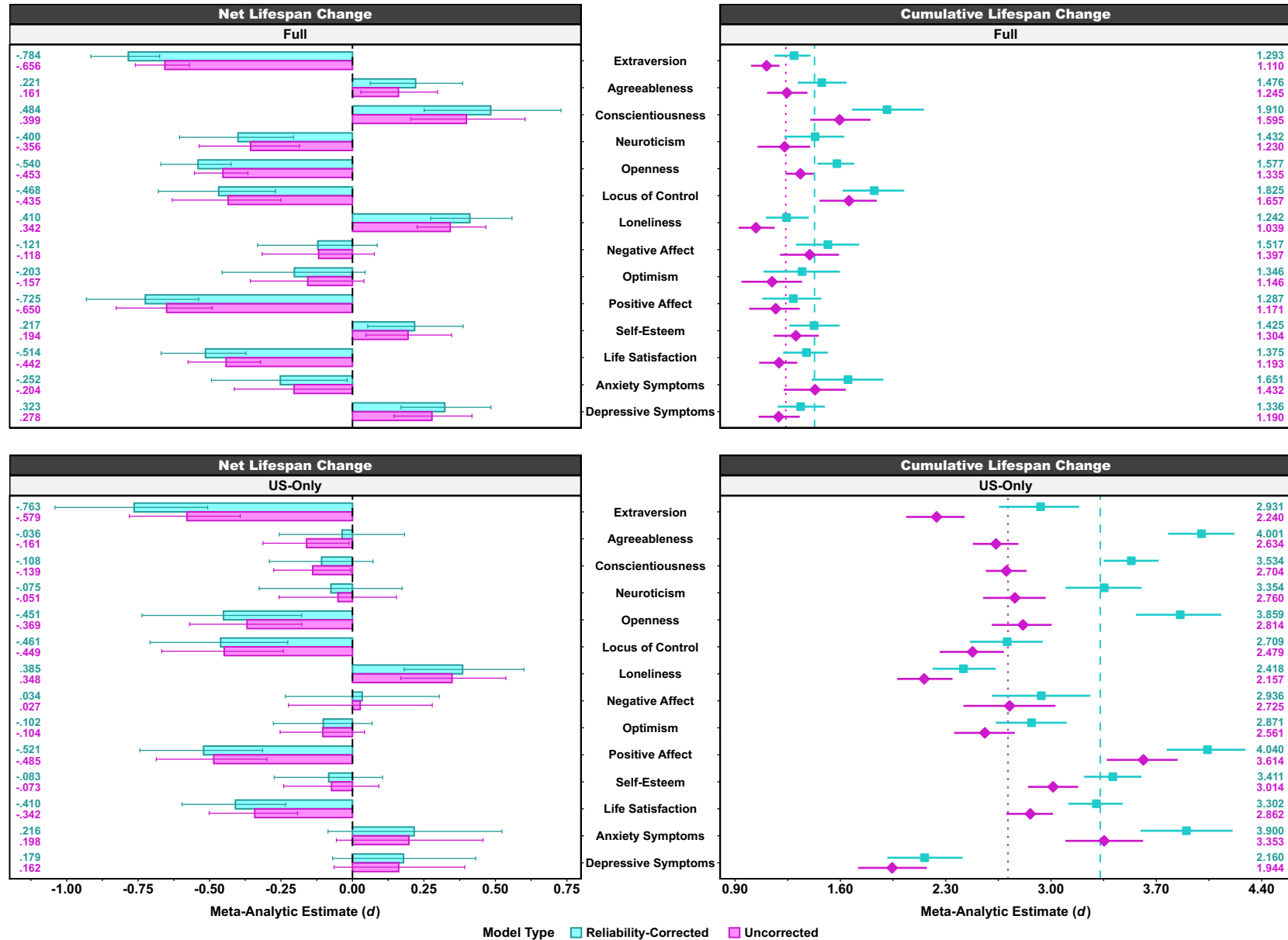
Figure S2
Meta-Analytic Trajectories of Dichotomous Variable Response Probabilities and Proportions Across the Lifespan



Note. Predicted values for dichotomous variables across ages 15 to 90 (or 18 to 90 for relationship variables). Within each panel, meta-analytic trajectories for probabilities and proportions are both shown. A value of .50 on the y-axis either indicates that people are equally likely and unlikely to respond affirmatively to a variable (probability) or that half of the sample at that given age responded affirmatively to the variable (proportion). Estimates for probability and proportions may differ as their effects are estimated with different methods, and these methods may differ in their sensitivity to scarce responses for values of a variable (e.g., given the household panel data structure of many of these studies, in midlife, there is a much smaller number of negative than affirmative responses to being married, and this imbalance can lead to method-specific estimation irregularities).

Figure S3

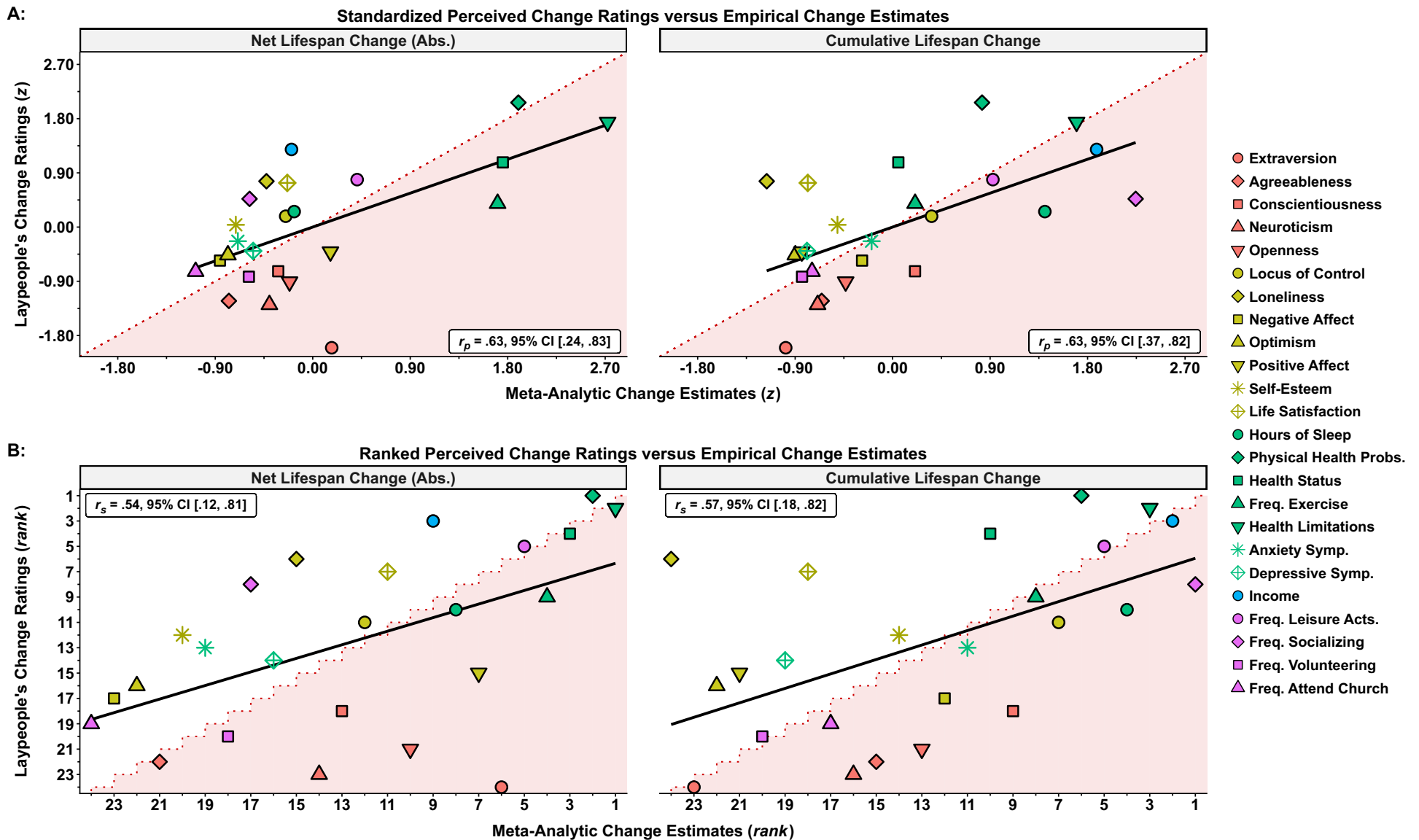
Full and US-Only Datasets: Comparison of Reliability-Corrected and Uncorrected Lifespan Net and Cumulative Changes for Relevant Variables



Note. Lifespan net and cumulative changes in units of Cohen's d with 99% CIs are shown. For net change, the vertical line marks $d = 0.00$. For cumulative change, the vertical line marks the median effect size. Freq. = Frequency. Satis. w/ = Satisfaction with. Acts. = Activities. Relig. = Religion. We encourage caution when interpreting US-only meta-analytic results as estimates were, on average, based on 2.47 datasets and lifespan changes for variables with truncated age ranges were extrapolated from yearly averages across their available years of data (and thus tend to have more imprecise, inflated estimates of change).

Figure S4

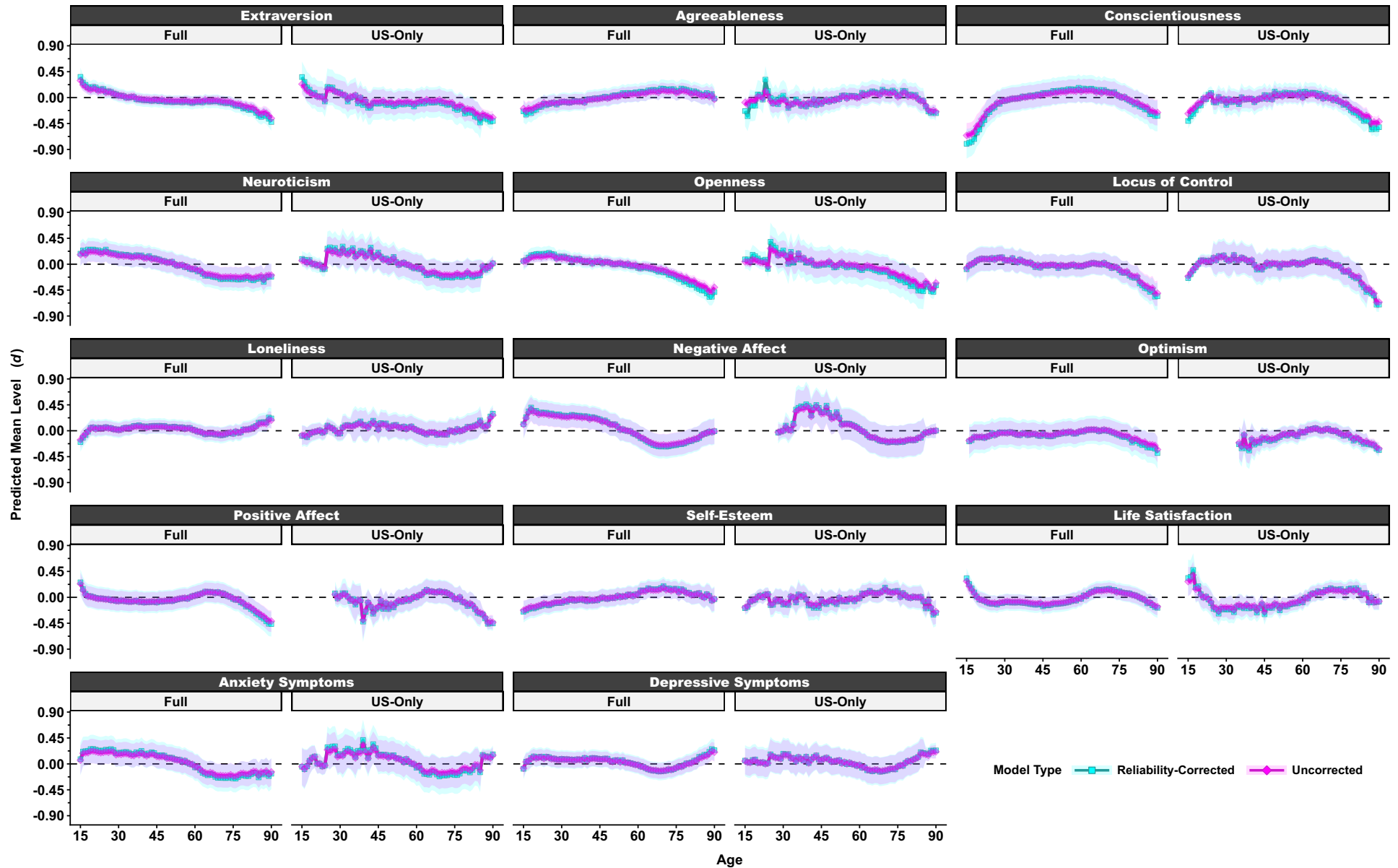
Uncorrected Models: Relationship Between Lifespan Net and Cumulative Changes from the Panel Data and Laypeople's Change Ratings of the Same Variables



Note. Panel A: For each source/type of change, standardized (z) values are shown. This does not affect variables' relative positioning per change type nor source but allows relative positions to be compared across all sources/types. Pearson correlations for laypeople's ratings & empirical change estimates are included in each plot with bootstrapped CIs ($n = 100,000$ iterations). Panel B: Variables are plotted according to their ranked magnitude for a given source/type of change (largest has rank = 1, smallest has rank = 24). Spearman correlations for laypeople's ratings & empirical change estimates are included in each plot with bootstrapped CIs ($n = 100,000$ iterations). Icon colors indicate variable domains & shapes indicate variables in a domain. Freq. = Frequency. Symp. = Symptoms. Acts. = Activities. Abs. = Absolute value.

Figure S5

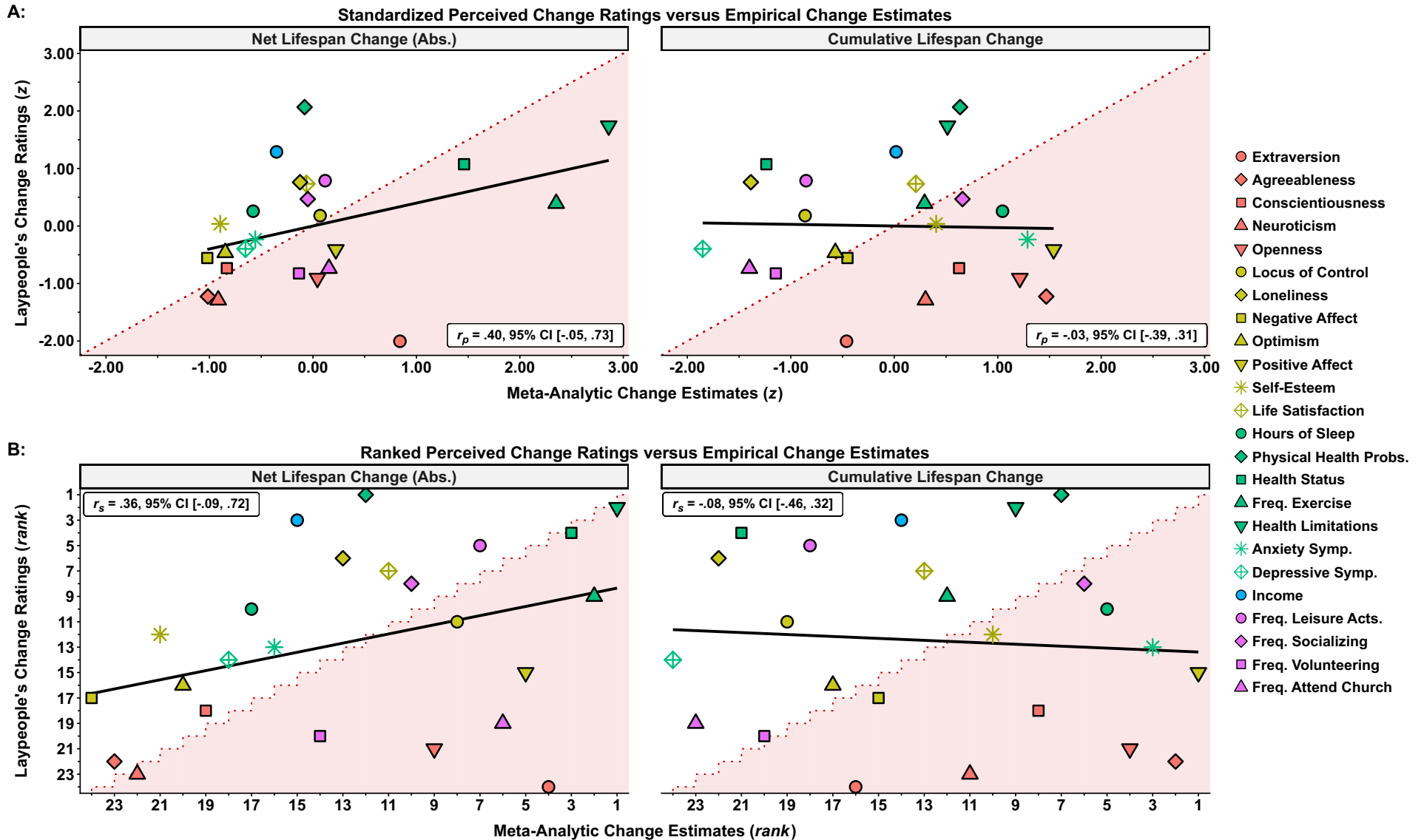
Full and US-Only Datasets: Comparison of Reliability-Corrected and Uncorrected Lifespan Trajectories for Relevant Variables



Note. Full-dataset and US-only reliability-corrected & uncorrected meta-analytic trajectories (Cohen's d) with 99% CIs. Lines at $d = 0.00$ on y-axis indicate a variable is at its lifespan-average level. Differences across ages can be interpreted as standardized changes. For full datasets, average Cronbach's α values are .71 (Extraversion), .64, .65, .71, .65, .78, .75, .83, .72, .80, .79, .76, .77, .81 (Dep. Symp.). For US-only estimates, average Cronbach's α values are .66 (Extraversion), .61, .59, .67, .61, .78, .78, .81, .78, .80, .78, .74, .78, .83 (Dep. Symp.). Uncorrected estimates assume Cronbach's α values of 1.00 for all variables. We encourage caution when interpreting US-only results as, on average, meta-analytic estimates were based on 2.47 datasets & the distribution of age-specific information from different datasets differs across variables.

Figure S6

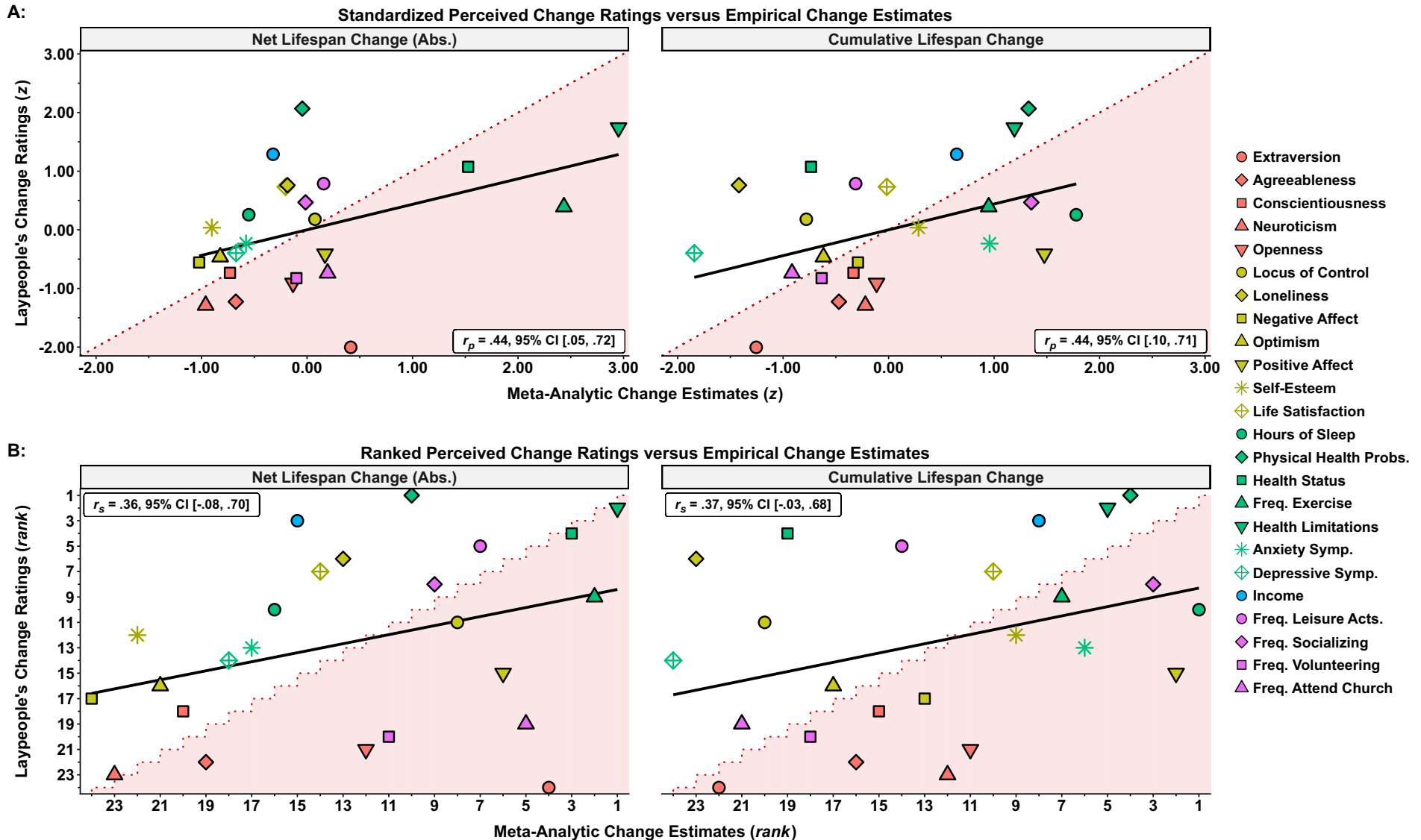
US Datasets: Relationship Between Reliability-Corrected Lifespan Net and Cumulative Changes from the Panel Data and Laypeople's Change Ratings of the Same Variables



Note. Panel A: For each source/type of change, standardized (z) values are shown. This does not affect variables' relative positioning per change type nor source but allows relative positions to be compared across all sources/types. Pearson correlations for laypeople's ratings & empirical change estimates are included in each plot with bootstrapped CIs ($n = 100,000$ iterations). Panel B: Variables are plotted according to their ranked magnitude for a given source/type of change (largest has rank = 1, smallest has rank = 24). Spearman correlations for laypeople's ratings & empirical change estimates are included in each plot with bootstrapped CIs ($n = 100,000$ iterations). Icon colors indicate variable domains & shapes indicate variables in a domain. Freq. = Frequency. Symp. = Symptoms. Acts. = Activities. Abs. = Absolute value. We encourage caution when interpreting meta-analytic results as estimates were, on average, based on 2.35 datasets & lifespan changes for variables with truncated age ranges were extrapolated from yearly averages across available years of data (and thus tend to have more imprecise, inflated change estimates).

Figure S7

US Datasets: Relationship Between Uncorrected Lifespan Net and Cumulative Changes from the Panel Data and Laypeople's Change Ratings of the Same Variables



Note. Panel A: For each source/type of change, standardized (z) values are shown. This does not affect variables' relative positioning per change type nor source but allows relative positions to be compared across all sources/types. Pearson correlations for laypeople's ratings & empirical change estimates are included in each plot with bootstrapped CIs ($n = 100,000$ iterations). Panel B: Variables are plotted according to their ranked magnitude for a given source/type of change (largest has rank = 1, smallest has rank = 24). Spearman correlations for laypeople's ratings & empirical change estimates are included in each plot with bootstrapped CIs ($n = 100,000$ iterations). Icon colors indicate variable domains & shapes indicate variables in a domain. Freq. = Frequency. Symp. = Symptoms. Acts. = Activities. Abs. = Absolute value. We encourage caution when interpreting meta-analytic results as estimates were, on average, based on 2.35 datasets & lifespan changes for variables with truncated age ranges were extrapolated from yearly averages across available years of data (and thus tend to have more imprecise, inflated change estimates). Relative to Fig. S8, all points may differ as variables' rankings are dependent on one another (i.e., information differs for more variables than just the 14 composite scale variables).

Overview of Supplementary Tables & Data

Format	Number	Study	Description
Table	S1	Studies 1 & 2	Unregistered Steps and Deviations from Preregistration
Table	S2	Study 1	Survey Instructions, Items, & Definitions
Table	S3	Study 1	Measurement Scales & Psychometric Information for Composited Variables
Table	S4	Study 2	Exchange & Inflation Rates for Converting Monetary Values to USD in Year 2024
Table	S5	Study 2	Linear Contrasts of Laypeople's Change Ratings
Table	S6	Study 2	Net & Cumulative Change Estimates for All Non-Standardized Variables and All Outcome Domains
Table	S7	Study 2	Comparisons of Magnitudes of Lifespan Change for the Big Five versus Other Variables
Table	S8	Study 2	US-Only Datasets: Net & Cumulative Change Estimates for All Standardized Variables
Table	S9	Study 2	US-Only Datasets: Net & Cumulative Change Estimates for All Non-Standardized Variables and All Outcome Domains
Data	S1	Study 2	Descriptive Statistics, Sample Sizes, and Age/Birth Year/Cohort/Period Information for All Variables
Data	S2	Study 2	Dataset-Specific and Overall Sample Sizes Across Ages, Birth Years, Cohorts, & Periods
Data	S3	Study 2	Meta-Analytic Results for All Variables (Reliability-Corrected)
Data	S4	Study 2	Dataset-Specific Results for All Variables
Data	S5	Study 2	Meta-Analytic Results for All Variables (Uncorrected)
Data	S6	Study 2	US-Only Datasets: Meta-Analytic Results for All Variables (Reliability-Corrected)
Data	S7	Study 2	US-Only Datasets: Meta-Analytic Results for All Variables (Uncorrected)

Table S1*Deviations From Preregistration and Unregistered Steps*

Study	Number	Type	Original	Change	Reason	Consequence
1	1	Deviation	Beyond a laypeople sample, we planned to recruit a sample of psychologists.	We did not recruit a sample of psychologists & rather collected a larger sample of laypeople.	On Prolific, it was not feasible to recruit a large enough sample of psychologists. Comparing laypeople and psychologists' ratings were only a tangential area of interest whereas laypeople's ratings compared to empirical changes from panel data were of key interest.	Survey ratings are from laypeople, or members of the public that did not hold a doctoral degree in psychology. The resulting sample size for laypeople was larger than originally planned as all compensation could go towards this laypeople sample.
	2	Unregistered / Step		We excluded data for people with incorrect responses to the attention check item	The attention check item was a preregistered component of the survey; however, we mistakenly forgot to write that we would subsequently exclude participants that answered this incorrectly.	$n = 116$ responses were excluded. Since it is assumed that these individuals did not carefully respond to the survey, including responses would have likely been unreliable and/or uninformative.
	3	Unregistered / Step		We excluded survey responses from participants with 0 variance in their ratings for different variables	As we were interested in comparisons of people's own ratings of how much variables change over the lifespan, accounting for mean-level differences in ratings across people by centering ratings within each person is necessary. However, 1 person had zero variance in ratings.	$n = 1$ response was excluded. It is possible they believed variables changed an equal amount over the lifespan, but it is more likely an improbable response pattern.
2	1	Deviation	Cognitive ability would be examined in the panel data.	We did not examine lifespan trends of cognitive ability in the panel data.	In any given study, measures of cognitive ability were infrequent (i.e., assessed once or twice) and were rarely validated measures. Across studies, measures varied widely in their specific content.	Insight about cognitive ability is not available in Study 2. This variable was in the survey, though, so perceptions of its changes are available, even if contrasts with its empirical changes are not.
	2	Deviation*	By default, cohorts were to be defined via generations (e.g., Millennials).	Our preregistered alternative method of balancing people in nearby cohorts, stratified by birth years, was used.	Defining cohorts via generations led to too few cohorts and poor granularity in the data, making it sometimes difficult to estimate any random effects and especially to do so in an informative way for our research questions.	Cohort effects are quantified for participants grouped by nearby birth years, ranging from 1-4 years within each other's birth years, rather than for participants grouped by generational birth cohorts that often span 15 to 20 years.
	3	Deviation	For single-dataset models, we planned on using age 40 as the grand intercept.	Instead of a grand intercept or reference age, no-intercept models were fit and precisely estimated unique intercepts (mean levels) per age.	Using a default intercept was imprecise as there were varying ages within & across studies for outcomes. In some instances, age 40 was not present in a study for an outcome, or it had sparse data. Thus, it'd either be inconsistently applied as the grand intercept or it'd result in estimates at other ages having inflated imprecision.	Instead of model-provided estimates comprising a single mean estimate for age 40 and all other age-specific estimates being the difference in the mean values at a given age relative to age 40, there were instead mean-level estimates provided at each age in which a variable was assessed.
	4	Unregistered / Step		A person-level random effect was estimated in all single-dataset models	In unbalanced data, not including a person-level random effect will lead to different weighted-average estimates from a model than if including the random effect. Systematic differences in individuals' average levels for variables were thus previously reflected in fixed effect estimates for age.	By including the person-level random effect, model-provided estimates are now weighted averages across people, cohorts, and periods. Systematic differences in individuals' mean levels of variables are captured by the person-level random intercept, thereby providing more accurate estimates in the fixed effects.
	5	Unregistered / Step		For all variables assessed with a composite scale, we corrected their estimates for the reliability of their study-specific measures	Panel studies use short measures to maximize data. For composite scales, reliability is lower than standard-length forms and change is underestimated. Under classical test theory, this issue is not applicable to non-composite scales. Thus, composite variables had systematically underestimated changes relative to other variables.	Single-study estimates for the Big Five, Self & Identity variables (excluding single-item domain-specific satisfaction variables), and depressive & anxiety symptoms were corrected for the reliability of their measures. Meta-analytic estimates, and changes calculated from them, are less biased and reflect non-attenuated values.
	6	Unregistered / Step		Age effects from single studies were previously meta-analyzed independent of other ages. All estimates are now jointly meta-analyzed.	Our original models assumed independent sampling errors in clusters, which is only sensible if there is no overlap in data across subjects. We have repeated-measures data, so sampling errors are correlated. Thus, when meta-analyzing estimates from longitudinal models, they should be estimated jointly. This corresponds with their estimation in single-dataset models & the nature of the data.	Like single-dataset models, no-intercept models were fit. All age terms were included as moderators (thus giving a meta-analytic estimate per age). For random effects, effects were nested in age terms in the inner portion & age-specific effects were nested in datasets in the outer portion. Given the longitudinal data, an AR(1) variance-covariance structure was assumed for the inner portion.
	7	Unregistered / Step		Comparisons for laypeople's change ratings & empirical changes were done in 2 ways	As the exact association among empirical change estimates and laypeople's change ratings can vary based on the method used to compare them, we provide 2 distinct ways to comprehensively address this.	We have information on which variables empirically changed more or less than average & which had larger- or smaller-than-average ratings. Additionally, we have information about variables' relative positioning of their ranked change estimates.

Note. * = This was not a deviation per se but rather a preregistered alternative method for this analytic component. We nonetheless detail this otherwise for comprehensiveness and transparency.

Table S2*Survey Instructions and Item Definitions*

Purpose	Number	Text Presented to Participants
Introductory Text	/	You will now be asked about your beliefs regarding if and how much different variables – or characteristics, traits, and qualities – change across the lifespan, on average. A list of variables and their definitions are presented below. For each variable, indicate if and how much you believe it changes, on average, across the lifespan. When doing so, please think about <u>each variable's average change in the population from age 15 to age 90</u>, not necessarily any changes you may have experienced in your own life. To answer “Not at all,” please click on the slider under this option. For all other answers, please click the slider bar and adjust the slider to your desired answer.
Question Stem	/	Across the lifespan, this variable changes _____, on average
Items for Participants to Rate	1	Extraversion: a personality trait that describes people who are highly talkative, social, assertive, and outgoing
	2	Agreeableness: a personality trait that describes people who are kind, empathetic, altruistic, and highly trusting of others
	3	Conscientiousness: a personality trait that describes people who are detail oriented, responsible, work towards long-term goals, and have high self-control
	4	Neuroticism: a personality trait that describes people who experience frequent negative emotions, stress, mood swings, and high irritability
	5	Openness: a personality trait that describes people who are highly creative, curious, imaginative, and eager to experience new things
	6	Subjective Health: people's own views or perceptions of their overall health
	7	Frequency of Exercising: how often people tend to exercise, such as by lifting weights, running, playing sports, etc.
	8	Hours of Sleep per Night: the average number of hours people tend to sleep each night
	9	Physical Health Problems: the number of medical conditions people have related to their physical health, such as diabetes, arthritis, cancer, heart problems, etc.
	10	Health Limitations: the number of tasks people struggle with and/or cannot do independently that are essential for daily functioning, such as walking, climbing stairs, getting out of bed, bending down, etc.
	11	Anxiety: severity of people's anxiety symptoms such as restlessness, worrying, nervousness, fearfulness, etc.
	12	Depression: severity of people's depression symptoms such as sadness, melancholy, hopelessness, fatigue, lack of interest in usual activities, etc.
	13	Annual Personal Income: the annual income people receive from salaried jobs, hourly wages, commissions, tips, bonuses, etc.
	14	Frequency of Attending Religious Services: how often people typically attend religious services, usually in churches, temples, or other places of worship
	15	Frequency of Volunteering: how often people tend to engage in volunteer work or community service
	16	Frequency of Social Interactions: how often people tend to contact, have regular talks with, and/or get together with strangers, colleagues, friends, family, and/or romantic partners
	17	Frequency of Leisure Activities: how often people tend to do activities in their free time, such as reading, playing sports, watching television, painting, or listening to music
	18	Perceived Control: people's beliefs about how much control they have over their own actions, what happens in their lives, and their futures
	19	Optimism: a mindset or attitude characterized by hopefulness, a general expectation that positive outcomes will happen, and that challenges can be overcome
	20	Life Satisfaction: people's overall assessments of how content and fulfilled they are by their lives as a whole
	21	Self-Esteem: people's subjective evaluations of their self-worth, confidence, self-respect, competence, and positive beliefs about themselves
	22	Loneliness: extent to which people feel that they are isolated, empty, disconnected from others, and lacking companionship
	23	Negative Affect: extent to which people tend to feel unpleasant emotions including sadness, anger, anxiety, distress, and frustration
	24	Positive Affect: extent to which people tend to feel pleasant emotions including joy, enthusiasm, high energy, inspiration, and contentment
	25	Cognitive Ability: extent to which people are capable of thinking, learning, reasoning, and solving problems
	26	Please select “Not at all” as the answer to this item.

Note. Locus of Control was labeled as "Perceived Control" and Health Status was labeled as "Subjective Health" as it was believed these terms would be more familiar to laypeople. Participants responded to each item by either selecting "No change at all" or moving a slider on a scale that ranged from "Very little" to "A lot." The order of items was randomized and item numbers were not shown to participants. An attention check item (listed as Item #26 in this table) was also included.

Table S3*Psychometric Information for Scale/Composite Variables from Individual Studies*

Variable	GSOEP		HILDA		HRS		LISS		MIDUS		NLSY		PAIRFAM		WLS	
	α	ω	α	ω	α	ω	α	ω	α	ω	α	ω	α	ω	α	ω
Extraversion	.67	.70	.75	.83	.72	.78	.87	.90	.72	.78	.43	**	.76	.81	.76	.85
Agreeableness	.48	.57	.77	.83	.82	.87	.81	.85	.82	.88	.13	**	.57	.63	.68	.76
Conscientiousness	.60	.67	.79	.86	.66	.72	.79	.83	.56	.64	.47	**	.64	.68	.67	.75
Neuroticism	.62	.64	.81	.86	.71	.75	.89	.91	.71	.75	.49	**	.70	.63	.76	.81
Openness	.60	.62	.75	.83	.79	.86	.77	.83	.78	.86	.26	**	.66	.72	.61	.73
Locus of Control	.74	.80	.83	.91	.88	.93	—	—	.87	/	.76	.82	—	—	.59	.67
Loneliness	.75	.80	.62	.63	.83	.86	.80	.88	.76	.79	.78	.82	.68 [^]	*	.75	**
Negative Affect	.76	.83	.84	.89	.90	.92	.93	.95	.86	.90	.62 [^]	*	.86	.88	.86	.91
Optimism	.56	**	—	—	.86	.91	.74	.82	.79	.86	—	—	.67	.77	.70	.82
Positive Affect	.66	.68	.87	.90	.92	.93	.88	.90	.89	.92	.56	**	.81	.82	.84	.88
Satisfaction w/ Life	.73 [^]	*	.77 [^]	*	.88	.91	.89	.92	.72 [^]	*	.66 [^]	*	.70 [^]	*	.69 [^]	*
Self-Esteem	.73 [^]	*	—	—	.84	.88	.90	.93	.66 [^]	*	.87	.90	.77	.80	.73	.67
Anxiety Symp.	.80	.86	.84	.91	.82	.86	.69	**	.52	**	.90	.93	.71	.79	.87	/
Depression Symp.	.59	.66	.90	.94	.80	.85	.82	.83	.91	.94	.74	.81	.88	.90	.87	.91
	r_{Mean}	r_{Median}	r_{Mean}	r_{Median}	r_{Mean}	r_{Median}	r_{Mean}	r_{Median}	r_{Mean}	r_{Median}	r_{Mean}	r_{Median}	r_{Mean}	r_{Median}	r_{Mean}	r_{Median}
Extraversion	.41	.34	.30	.32	.39	.40	.41	.42	.40	.43	.28	.28	.44	.46	.34	.35
Agreeableness	.26	.31	.34	.29	.44	.44	.32	.35	.44	.44	.07	.07	.24	.20	.26	.25
Conscientiousness	.37	.34	.36	.39	.29	.33	.27	.26	.26	.25	.32	.32	.33	.32	.27	.28
Neuroticism	.35	.38	.34	.35	.37	.35	.44	.44	.38	.35	.34	.34	.37	.37	.37	.35
Openness	.35	.33	.33	.32	.36	.35	.25	.23	.34	.33	.15	.15	.28	.26	.20	.17
Locus of Control	.17	.15	.41	.46	.42	.33	—	—	/	/	.31	.29	—	—	.33	.31
Loneliness	.45	.42	.35	.30	.58	.58	.42	.35	.51	.43	.42	.42	*	*	.61	.61
Negative Affect	.40	.42	.52	.52	.43	.40	.59	.58	.49	.46	*	*	.64	.62	.49	.45
Optimism	.41	.41	—	—	.39	.42	.32	.31	.39	.40	—	—	.29	.23	.34	.33
Positive Affect	.40	.40	.63	.61	.48	.48	.42	.43	.61	.61	.39	.39	.59	.56	.55	.54
Satisfaction w/ Life	*	*	*	*	.61	.59	.65	.64	*	*	*	*	*	*	*	*
Self-Esteem	*	*	—	—	.39	.39	.49	.51	*	*	.42	.42	.54	.46	.38	.37
Anxiety Symp.	.38	.30	.59	.58	.48	.47	.53	.53	.37	.37	.55	.52	.39	.36	/	/
Depression Symp.	.34	.26	.64	.63	.35	.31	.60	.56	.47	.45	.30	.31	.49	.48	.29	.29

Note. α = Cronbach's alpha (raw). ω = omega. r_{Mean} = mean inter-item correlation. r_{Median} = median inter-item correlation. Psychometric information is shown for variables that were constructed via compositing individual items from a scale in at least one dataset. [^] = variable assessed with single-item measure in its respective dataset. To ensure reliability corrections were equally applied to variables across available datasets, raw internal consistency estimates were obtained for these variables. To do so, the average ICC (3, *k*) of individuals' responses across waves was obtained as this index is equivalent to Cronbach's α ⁴⁷⁻⁴⁹. * = information not available due to the variable being assessed with a single item. ** = information about ω is not available due to the variable being assessed with only two items. — = variable was not present in a dataset. / = a constructed variable already present in the dataset was used, and an average estimate of Cronbach's α was provided by the study documentation.

Table S4*Currency Conversion & Inflation Values*

Year	Conversion Rates		Inflation Correction Factor
	Euro to USD	AUD to USD	Year X to Year 2024
2024	1.090514	0.664104	1.0000000
2023	1.081269	0.664261	0.9701987
2022	1.053049	0.694542	0.9337748
2021	1.182740	0.751169	0.8642384
2020	1.142196	0.691229	0.8245033
2019	1.119475	0.695090	0.8145695
2018	1.180955	0.747858	0.8013245
2017	1.129686	0.766701	0.7814570
2016	1.106903	0.744208	0.7649007
2015	1.109513	0.752015	0.7549669
2014	1.328501	0.902867	0.7549669
2013	1.328118	0.967601	0.7417219
2012	1.284789	1.035762	0.7317881
2011	1.391930	1.032416	0.7152318
2010	1.325695	0.920477	0.6953642
2009	1.394759	0.793568	0.6821192
2008	1.470755	0.852893	0.6854305
2007	1.370478	0.838902	0.6622517
2006	1.255623	0.753298	0.6423841
2005	1.244114	0.762147	0.6225166
2004	1.243943	0.736366	0.6026490
2003	1.131148	0.652328	0.5860927
2002	0.945574	0.543958	0.5728477
2001	0.895571	0.517459	0.5629139
2000	0.923612	—	0.5496689
1999	1.065929	—	0.5298013
1998	1.114781	—	0.5198675
1997	1.131451	—	0.5099338
1996	1.290422	—	0.5000000
1995	1.332457	—	0.4867550
1994	1.201994	—	0.4735099
1993	1.184672	—	0.4602649
1992	1.301715	—	0.4470199
1991	1.236353	—	0.4337748
1990	1.271003	—	0.4172185
1989	1.091950	—	0.3940397
1988	1.169898	—	0.3774834
1987	1.148627	—	0.3609272
1986	0.972087	—	0.3476821
1985	0.738132	—	0.3443709
1984	0.764744	—	0.3311258

Note. Values prior to 1999 are estimated conversion rates for the Euro to USD. Monetary values in panel data were provided as estimated amounts in Euros for these years (only relevant for GSOEP). USD = United States Dollar. AUD = Australian Dollar.

Table S5

Linear Contrasts of Laypeople's Change Ratings

Level	Comparison Item	Reference Item	Model-Provided Information				
			$d_{\text{Comparison-Reference}}$	99% CI	t value	df	p
Variable	Extraversion	Agreeableness	-0.309	[-0.488, -0.129]	-7.043	22150	.000
		Conscientiousness	-0.504	[-0.684, -0.325]	-11.498	22150	.000
		Neuroticism	-0.284	[-0.464, -0.105]	-6.481	22150	.000
		Openness	-0.434	[-0.614, -0.255]	-9.908	22150	.000
		Locus of Control	-0.866	[-1.046, -0.687]	-19.764	22150	.000
		Loneliness	-1.097	[-1.277, -0.917]	-25.022	22150	.000
		Negative Affect	-0.574	[-0.754, -0.395]	-13.099	22150	.000
		Optimism	-0.611	[-0.791, -0.432]	-13.944	22150	.000
		Positive Affect	-0.632	[-0.812, -0.452]	-14.416	22150	.000
		Self-Esteem	-0.810	[-0.989, -0.630]	-18.473	22150	.000
		Life Satisfaction	-1.086	[-1.266, -0.906]	-24.770	22150	.000
		Cognitive Ability	-1.103	[-1.283, -0.924]	-25.164	22150	.000
		Hours of Sleep	-0.897	[-1.077, -0.718]	-20.462	22150	.000
		Physical Health Problems	-1.615	[-1.795, -1.436]	-36.841	22150	.000
		Health Status	-1.221	[-1.401, -1.042]	-27.856	22150	.000
		Frequency of Exercising	-0.950	[-1.130, -0.771]	-21.679	22150	.000
		Health Limitations	-1.486	[-1.665, -1.306]	-33.891	22150	.000
		Anxiety Symptoms	-0.702	[-0.882, -0.522]	-16.012	22150	.000
		Depression Symptoms	-0.638	[-0.817, -0.458]	-14.542	22150	.000
		Annual Personal Income	-1.306	[-1.486, -1.127]	-29.798	22150	.000
	Agreeableness	Frequency of Leisure Activities	-1.108	[-1.287, -0.928]	-25.264	22150	.000
		Frequency of Socializing	-0.981	[-1.160, -0.801]	-22.372	22150	.000
		Frequency of Volunteering	-0.468	[-0.648, -0.288]	-10.674	22150	.000
		Frequency of Attending Church	-0.502	[-0.682, -0.323]	-11.456	22150	.000
		Conscientiousness	-0.195	[-0.375, -0.016]	-4.456	22150	.002
		Neuroticism	0.025	[-0.155, 0.204]	0.562	22150	1.000
		Openness	-0.126	[-0.305, 0.054]	-2.865	22150	.405
		Locus of Control	-0.558	[-0.737, -0.378]	-12.721	22150	.000
		Loneliness	-0.788	[-0.968, -0.609]	-17.980	22150	.000
		Negative Affect	-0.266	[-0.445, -0.086]	-6.056	22150	.000
		Optimism	-0.303	[-0.482, -0.123]	-6.901	22150	.000
		Positive Affect	-0.323	[-0.503, -0.144]	-7.373	22150	.000
		Self-Esteem	-0.501	[-0.681, -0.322]	-11.430	22150	.000
		Life Satisfaction	-0.777	[-0.957, -0.598]	-17.728	22150	.000
		Cognitive Ability	-0.794	[-0.974, -0.615]	-18.121	22150	.000
		Hours of Sleep	-0.588	[-0.768, -0.409]	-13.419	22150	.000
		Physical Health Problems	-1.306	[-1.486, -1.127]	-29.798	22150	.000
		Health Status	-0.913	[-1.092, -0.733]	-20.813	22150	.000
		Frequency of Exercising	-0.642	[-0.821, -0.462]	-14.637	22150	.000
		Health Limitations	-1.177	[-1.357, -0.998]	-26.849	22150	.000
	Conscientiousness	Anxiety Symptoms	-0.393	[-0.573, -0.214]	-8.969	22150	.000
		Depression Symptoms	-0.329	[-0.508, -0.149]	-7.499	22150	.000
		Annual Personal Income	-0.998	[-1.177, -0.818]	-22.755	22150	.000
		Frequency of Leisure Activities	-0.799	[-0.978, -0.619]	-18.221	22150	.000
		Frequency of Socializing	-0.672	[-0.852, -0.492]	-15.329	22150	.000
		Frequency of Volunteering	-0.159	[-0.339, 0.020]	-3.632	22150	.055
		Frequency of Attending Church	-0.193	[-0.373, -0.014]	-4.414	22150	.003
		Neuroticism	0.220	[0.040, 0.400]	5.017	22150	.000
		Openness	0.070	[-0.110, 0.249]	1.590	22150	.998
		Locus of Control	-0.362	[-0.542, -0.183]	-8.266	22150	.000
		Loneliness	-0.593	[-0.773, -0.413]	-13.524	22150	.000
		Negative Affect	-0.070	[-0.250, 0.109]	-1.601	22150	.997
		Optimism	-0.107	[-0.287, 0.072]	-2.446	22150	.737
		Positive Affect	-0.128	[-0.308, 0.052]	-2.918	22150	.367
		Self-Esteem	-0.306	[-0.485, -0.126]	-6.975	22150	.000
		Life Satisfaction	-0.582	[-0.761, -0.402]	-13.272	22150	.000
		Cognitive Ability	-0.599	[-0.779, -0.420]	-13.666	22150	.000
		Hours of Sleep	-0.393	[-0.573, -0.213]	-8.964	22150	.000
		Physical Health Problems	-1.111	[-1.291, -0.931]	-25.342	22150	.000
		Health Status	-0.717	[-0.897, -0.538]	-16.358	22150	.000
		Frequency of Exercising	-0.446	[-0.626, -0.267]	-10.181	22150	.000
		Health Limitations	-0.982	[-1.161, -0.802]	-22.393	22150	.000
		Anxiety Symptoms	-0.198	[-0.377, -0.018]	-4.513	22150	.002
		Depression Symptoms	-0.133	[-0.313, 0.046]	-3.044	22150	.281
		Annual Personal Income	-0.802	[-0.982, -0.623]	-18.300	22150	.000
		Frequency of Leisure Activities	-0.604	[-0.783, -0.424]	-13.765	22150	.000

Neuroticism		Frequency of Socializing	-0.477	[-0.656, -0.297]	-10.874	22150	.000
		Frequency of Volunteering	0.036	[-0.143, 0.216]	0.824	22150	1.000
		Frequency of Attending Church	0.002	[-0.178, 0.181]	0.042	22150	1.000
		Openness	-0.150	[-0.330, 0.029]	-3.427	22150	.104
		Locus of Control	-0.582	[-0.762, -0.403]	-13.283	22150	.000
		Loneliness	-0.813	[-0.992, -0.633]	-18.541	22150	.000
		Negative Affect	-0.290	[-0.470, -0.111]	-6.618	22150	.000
		Optimism	-0.327	[-0.507, -0.148]	-7.463	22150	.000
		Positive Affect	-0.348	[-0.527, -0.168]	-7.935	22150	.000
		Self-Esteem	-0.526	[-0.705, -0.346]	-11.992	22150	.000
		Life Satisfaction	-0.802	[-0.981, -0.622]	-18.289	22150	.000
		Cognitive Ability	-0.819	[-0.999, -0.640]	-18.683	22150	.000
		Hours of Sleep	-0.613	[-0.793, -0.433]	-13.981	22150	.000
		Physical Health Problems	-1.331	[-1.511, -1.151]	-30.360	22150	.000
		Health Status	-0.937	[-1.117, -0.758]	-21.375	22150	.000
		Frequency of Exercising	-0.666	[-0.846, -0.487]	-15.198	22150	.000
		Health Limitations	-1.202	[-1.381, -1.022]	-27.410	22150	.000
		Anxiety Symptoms	-0.418	[-0.597, -0.238]	-9.530	22150	.000
		Depression Symptoms	-0.353	[-0.533, -0.174]	-8.061	22150	.000
		Annual Personal Income	-1.022	[-1.202, -0.843]	-23.317	22150	.000
Openness		Frequency of Leisure Activities	-0.823	[-1.003, -0.644]	-18.783	22150	.000
		Frequency of Socializing	-0.697	[-0.876, -0.517]	-15.891	22150	.000
		Frequency of Volunteering	-0.184	[-0.363, -0.004]	-4.193	22150	.007
		Frequency of Attending Church	-0.218	[-0.398, -0.039]	-4.975	22150	.000
		Locus of Control	-0.432	[-0.612, -0.253]	-9.856	22150	.000
		Loneliness	-0.663	[-0.842, -0.483]	-15.114	22150	.000
		Negative Affect	-0.140	[-0.319, 0.040]	-3.191	22150	.198
		Optimism	-0.177	[-0.357, 0.003]	-4.036	22150	.013
		Positive Affect	-0.198	[-0.377, -0.018]	-4.508	22150	.002
		Self-Esteem	-0.375	[-0.555, -0.196]	-8.565	22150	.000
		Life Satisfaction	-0.652	[-0.831, -0.472]	-14.862	22150	.000
		Cognitive Ability	-0.669	[-0.848, -0.489]	-15.256	22150	.000
		Hours of Sleep	-0.463	[-0.642, -0.283]	-10.554	22150	.000
		Physical Health Problems	-1.181	[-1.360, -1.001]	-26.933	22150	.000
		Health Status	-0.787	[-0.966, -0.607]	-17.948	22150	.000
		Frequency of Exercising	-0.516	[-0.696, -0.336]	-11.771	22150	.000
		Health Limitations	-1.051	[-1.231, -0.872]	-23.983	22150	.000
		Anxiety Symptoms	-0.268	[-0.447, -0.088]	-6.103	22150	.000
		Depression Symptoms	-0.203	[-0.383, -0.024]	-4.634	22150	.001
Domain	Big Five	Annual Personal Income	-0.872	[-1.052, -0.692]	-19.890	22150	.000
		Frequency of Leisure Activities	-0.673	[-0.853, -0.494]	-15.356	22150	.000
		Frequency of Socializing	-0.546	[-0.726, -0.367]	-12.464	22150	.000
		Frequency of Volunteering	-0.034	[-0.213, 0.146]	-0.766	22150	1.000
		Frequency of Attending Church	-0.068	[-0.247, 0.112]	-1.548	22150	.998
		Self & Identity	-0.840	[-0.973, -0.708]	-20.711	4430	.000
		Health	-1.190	[-1.322, -1.058]	-29.330	4430	.000
		Finances	-1.553	[-1.685, -1.421]	-38.270	4430	.000
		Leisure, Engagement, & Social	-0.712	[-0.844, -0.580]	-17.540	4430	.000

Note. Comparison Item = Big Five-related item being compared to the Reference Item in a contrast. Comparison Items are either a Big Five trait or the broader Big Five domain. Reference Item = item that is the benchmark that the Comparison Item is being compared to. $d_{\text{Comparison-Reference}}$ = average difference in standardized, person-centered ratings for the Comparison Item relative to the Reference Item in the contrast (i.e., Comparison – Reference), whereby negative values indicate people, on average, rated the Big Five-related Comparison Item as having less change than the Reference Item. The significance criterion was $\alpha = .01$ for Tukey-adjusted p values. To obtain standardized effect sizes for comparisons across variables that would instead be obtained from models based on non-person-centered change ratings, simply multiply $d_{\text{Comparison-Reference}}$ for a given contrast by 0.88127. This is the factor by which the magnitude of the grand-average SD for person-centered ratings ($SD = 2.5667$) differs from the magnitude of the grand-average SD for non-person-centered ratings ($SD = 2.9125$), or $2.5667/2.9125 = 0.88127$. For domains, instead multiply $d_{\text{Comparison-Reference}}$ for a given contrast by 0.77915 (i.e., ratio of person-centered domain rating SD of 1.6529 to the non-person-centered domain rating SD of 2.1214). 99% CI = Confidence Interval. $p = p$ value. df = Degrees of freedom. All contrasts were estimated jointly to obtain the most conservative adjusted p values, and thus the model's pooled error and its associated degrees of freedom are what is shown (i.e., df is for the entire model, not any specific pairwise contrast).

Table S6

Meta-Analytic Estimates of Yearly & Lifespan Net and Cumulative Changes for All Non-Standardized/Non-Numeric Variables and All Domains from Ages 15 to 90

Level	Type	Domain	Variable	Net Changes				Cumulative Changes			
				Yearly, Age-to-Age			Lifespan		Yearly, Age-to-Age		Lifespan
				$d_{\text{net},y}$	SD	Range	$d_{\text{net},t}$	99% CI	$d_{\text{cum},y}$	99% CI	$d_{\text{cum},t}$
Variable	Log ($\ln$)	Finances	Personal Income	.0186	.2883	-.3710 to 1.1308	1.391	[-1.602, 4.421]	.1624	[.1225, .2028]	12.178
			Household Income	-.0122	.0364	-.0906 to .0742	-.918	[-2.617, .756]	.0307	[.0081, .0531]	2.306
	Log ($\log_{10}$)	Finances	Personal Income	.0081	.1252	-.1611 to .4911	.604	[-.696, 1.920]	.0705	[.0532, .0881]	5.289
			Household Income	-.0053	.0158	-.0393 to .0322	-.399	[-1.137, .328]	.0134	[.0035, .0230]	1.001
	Probability	Health	Exercise	-.0102	.0138	-.0498 to .0277	-.768	[-1.054, -.493]	.0132	[.0094, .0169]	
			Relationships								
			Married	.0000	.0406	-.0843 to .1493	.002	[-.427, .264]	.0277	[.0217, .0313]	
		Relationships	Separated/Divorced	.0004	.0027	-.0058 to .0125	.028	[.008, .227]	.0019	[.0016, .0047]	
			Widowed	.0138	.0302	-.0000 to .1218	.996	[.895, 1.226]	.0138	[.0125, .0170]	
		Work	Employed	-.0001	.0427	-.1155 to .1465	-.009	[-.213, .126]	.0247	[.0220, .0268]	
			Unemployed	-.0132	.0287	-.1348 to .0103	-.991	[-1.097, -.769]	.0152	[.0138, .0192]	
			Retired	.0133	.0513	-.0001 to .3776	.999	[.884, 1.444]	.0133	[.0121, .0209]	
		L. E. S.	Leisure Activities	-.0049	.0204	-.0487 to .0613	-.368	[-.591, -.056]	.0166	[.0136, .0207]	
			Socializing	-.0077	.0602	-.4814 to .0976	-.574	[-.797, -.215]	.0232	[.0203, .0282]	
			Volunteering	-.0038	.0145	-.0521 to .0278	-.288	[-.418, -.100]	.0108	[.0090, .0133]	
			Religious	.0035	.0180	-.0505 to .0523	.261	[-.148, .490]	.0140	[.0085, .0170]	
			Attend Church	-.0017	.0209	-.0796 to .0361	-.131	[-.328, .098]	.0148	[.0125, .0179]	
	Proportion	Health	Exercise	-.0075	.0095	-.0417 to .0078	-.564	[-.723, -.419]	.0084	[.0063, .0103]	
			Relationships								
			Married	.0002	.0179	-.0351 to .0441	.014	[-.142, .171]	.0138	[.0117, .0160]	
		Relationships	Separated/Divorced	.0020	.0035	-.0033 to .0107	.147	[.111, .190]	.0030	[.0025, .0036]	
			Widowed	.0070	.0087	-.0016 to .0314	.505	[.472, .588]	.0072	[.0068, .0084]	
		Work	Employed	.0001	.0342	-.0655 to .1340	.009	[-.086, .110]	.0212	[.0200, .0226]	
			Unemployed	-.0126	.0265	-.1167 to .0113	-.942	[-1.021, -.859]	.0156	[.0145, .0167]	
			Retired	.0120	.0264	-.0079 to .1769	.898	[.858, .985]	.0129	[.0123, .0140]	
		L. E. S.	Leisure Activities	-.0031	.0142	-.0486 to .0496	-.233	[-.428, -.044]	.0107	[.0081, .0132]	
			Socializing	-.0067	.0540	-.4422 to .0886	-.504	[-.792, -.227]	.0185	[.0147, .0224]	
			Volunteering	-.0043	.0110	-.0385 to .0204	-.320	[-.464, -.184]	.0084	[.0065, .0102]	
			Religious	.0016	.0073	-.0204 to .0212	.117	[-.086, .323]	.0060	[.0033, .0088]	
			Attend Church	.0006	.0103	-.0430 to .0190	.042	[-.086, .172]	.0073	[.0056, .0090]	
Domain	Std. (Adj.)	Big Five	/	-.0006	.0278	-.0988 to .1128	-.044	[-.078, -.010]	.0205	[.0200, .0210]	1.538
			Self & Identity	-.0017	.0271	-.2785 to .0739	-.128	[-.145, -.111]	.0186	[.0183, .0188]	1.392
			Health	-.0131	.0299	-.1527 to .1505	-.979	[-1.015, -.946]	.0235	[.0230, .0240]	1.765
	Std. (Unadj.)	Big Five	/	-.0005	.0235	-.0753 to .0901	-.039	[-.067, -.011]	.0174	[.0170, .0177]	1.303
			Self & Identity	-.0014	.0255	-.2785 to .0739	-.105	[-.121, -.090]	.0173	[.0171, .0175]	1.299
			Health	-.0131	.0292	-.1527 to .1505	-.979	[-1.015, -.947]	.0229	[.0225, .0234]	1.719
	Log ($\ln$)	Finances	/	.0010	.0341	-.0728 to .1090	.077	[-.030, .186]	.0251	[.0236, .0265]	1.881
			L. E. S.	-.0025	.0308	-.1725 to .1663	-.190	[-.232, -.149]	.0204	[.0199, .0210]	1.533
				.0032	.2054	-.3710 to 1.1308	.237	[-.952, 1.428]	.0966	[.0807, .1124]	7.242
	Log ($\log_{10}$)	Finances	/	.0014	.0892	-.1611 to .4911	.103	[-.414, .620]	.0419	[.0351, .0488]	3.145
	Probability	Health	/	-.0102	.0138	-.0498 to .0277	-.768	[-1.058, -.490]	.0132	[.0094, .0170]	
			Relationships								
			Married	-.0047	.0298	-.1218 to .1493	-.341	[-.437, -.298]	.0145	[.0131, .0151]	
		Work	/	-.0001	.0431	-.3776 to .1465	-.006	[-.104, .034]	.0178	[.0165, .0183]	
			Employed								
			Unemployed								
		L. E. S.	/	-.0029	.0317	-.4814 to .0976	-.220	[-.268, -.167]	.0159	[.0152, .0166]	
			Health								
			Relationships								
		Relationships	/	-.0030	.0120	-.0351 to .0441	-.213	[-.244, -.187]	.0080	[.0076, .0084]	
			Married								
			Separated/Divorced								
		Work	/	.0002	.0308	-.1769 to .1340	.017	[-.012, .042]	.0166	[.0162, .0169]	
			Employed								
			Unemployed								
		L. E. S.	/	-.0024	.0261	-.4422 to .0886	-.180	[-.218, -.142]	.0102	[.0097, .0107]	
			Leisure Activities								
			Socializing								

Note. For Level = Variable: Yearly, Age-to-Age Net Change = mean change per 1-unit increase in age from 15 to 90. Lifespan Net Change = difference in estimated values at age 90 vs. 15 (yearly net change x 75). Yearly, Age-to-Age Cumulative Change = mean annual magnitude of change from age 15 to 90. Lifespan Cumulative Change = sum of absolute value of all changes from ages 15 to 90 (yearly cumulative change x 75). For Level = Domain: All metrics have the same conceptual meaning as they do for variables. Values were averaged across all outcomes per domain. When aggregating changes, changes per variable were scored such that increases were in an adaptive or socially desirable direction (e.g., neuroticism values were reversed such that increases = gains in emotional stability, proportions & probabilities for separated/divorced were subtracted from 1 to represent *not* being separated/divorced). For all: For log-transformed values, exponentiate ($\ln$) or raise to the power of 10 ($\log_{10}$) to obtain the ratio of end vs. start values (net) or ratio of all changes to no change (cumulative). To obtain percent change, subtract 1 from the ratio & multiply by 100. Ratios & percent changes will be identical for $\ln$ & $\log$ -base 10 transformations (within rounding), but both are shown for completeness. For probabilities/proportions, negative values may be present since it is the difference in probabilities & proportions that is shown, not probabilities nor proportions themselves. Lifespan cumulative values are omitted for these variables since the sum of all their age-to-age changes is not inherently meaningful & often exceeds 1 since decreases/increases are treated the same for this metric. Values exceeding 1 in 99% CIs for lifespan net changes may occur due to sparse data at low and high values of age. CI = Confidence interval. d = Cohen's d . L. E. S. = Leisure, Engagement, & Social. Bold = Lifespan Net Change does not contain .000 in its 99% CI. Adj. = Adjusted (i.e., from models corrected for reliability). Unadj. = Unadjusted (i.e., from models not corrected for reliability).

Table S7

Rankings and Differences Thereof of Variables' Empirical Change Estimates and Survey Ratings Across Model Specifications

Variable	Ranked Empirical Change Estimates								Comparison of Ranked Empirical Changes								Ranked Survey Ratings	Ranked Survey Ratings vs. Ranked Empirical Changes							
	Full Datasets				US-Only Datasets				RC – UNC				US-Only – Full					Net Changes				Cumulative Changes			
	Net		Cumulative		Net		Cumulative		Full		US-Only		RC		UNC			Full		US-Only		Full		US-Only	
	RC	UNC	RC	UNC	RC	UNC	RC	UNC	Net	Cum	Net	Cum	Net	Cum	Net	Cum		RC	UNC	RC	UNC	RC	UNC	RC	UNC
Extraversion	5	6	20	23	4	4	16	22	-1	-3	0	-6	-1	-4	-2	-1	24	+19	+18	+20	+20	+4	+1	+8	+2
Agreeableness	20	21	14	15	23	19	2	16	-1	-1	+4	-14	+3	-12	-2	+1	22	+2	+1	-1	+3	+8	+7	+20	+6
Conscientiousness	10	13	5	9	19	20	8	15	-3	-4	-1	-7	+9	+3	+7	+6	18	+8	+5	-1	-2	+13	+9	+10	+3
Neuroticism	15	14	15	16	22	23	11	12	+1	-1	-1	-1	+7	-4	+9	-4	23	+8	+9	+1	0	+8	+7	+12	+11
Openness	8	10	11	13	9	12	4	11	-2	-2	-3	-7	+1	-7	+2	-2	21	+13	+11	+12	+9	+10	+8	+17	+10
Locus of Control	12	12	8	7	8	8	19	20	0	+1	0	-1	-4	+11	-4	+13	11	-1	-1	+3	+3	+3	+4	-8	-9
Loneliness	14	15	22	24	13	13	22	23	-1	-2	0	-1	-1	0	-2	-1	6	-8	-9	-7	-7	-16	-18	-16	-17
Negative Affect	23	23	13	12	24	24	15	13	0	+1	0	+2	+1	+2	+1	+1	17	-6	-6	-7	-7	+4	+5	+2	+4
Optimism	22	22	18	22	20	21	17	17	0	-4	-1	0	-2	-1	-1	-5	16	-6	-6	-4	-5	-2	-6	-1	-1
Positive Affect	7	7	21	21	5	6	1	2	0	0	-1	-1	-2	-20	-1	-19	15	+8	+8	+10	+9	-6	-6	+14	+13
Self-Esteem	21	20	16	14	21	22	10	9	+1	+2	-1	+1	0	-6	+2	-5	12	-9	-8	-9	-10	-4	-2	+2	+3
Life Satisfaction	9	11	17	18	11	14	13	10	-2	-1	-3	+3	+2	-4	+3	-8	7	-2	-4	-4	-7	-10	-11	-6	-3
Hours of Sleep	11	8	4	4	17	16	5	1	+3	0	+1	+4	+6	+1	+8	-3	10	-1	+2	-7	-6	+6	+6	+5	+9
Phys. Health Conds.	2	2	7	6	12	10	7	4	0	+1	+2	+3	+10	0	+8	-2	1	-1	-1	-11	-9	-6	-5	-6	-3
Health Status	3	3	12	10	3	3	21	19	0	+2	0	+2	0	+9	0	+9	4	+1	+1	+1	+1	-8	-6	-17	-15
Freq. Exercising	4	4	10	8	2	2	12	7	0	+2	0	+5	-2	+2	-2	-1	9	+5	+5	+7	+7	-1	+1	-3	+2
Health Limitations	1	1	3	3	1	1	9	5	0	0	0	+4	0	+6	0	+2	2	+1	+1	+1	+1	-1	-1	-7	-3
Anxiety Symp.	19	19	9	11	16	17	3	6	0	-2	-1	-3	-3	-6	-2	-5	13	-6	-6	-3	-4	+4	+2	+10	+7
Depressive Symp.	16	16	19	19	18	18	24	24	0	0	0	0	+2	+5	+2	+5	14	-2	-2	-4	-4	-5	-5	-10	-10
Personal Income	13	9	2	2	15	15	14	8	+4	0	0	+6	+2	+12	+6	+6	3	-10	-6	-12	-12	+1	+1	-11	-5
Freq. Leisure Acts.	6	5	6	5	7	7	18	14	+1	+1	0	+4	+1	+12	+2	+9	5	-1	0	-2	-2	-1	0	-13	-9
Freq. Socializing	17	17	1	1	10	9	6	3	0	0	+1	+3	-7	+5	-8	+2	8	-9	-9	-2	-1	+7	+7	+2	+5
Freq. Volunteering	18	18	24	20	14	11	20	18	0	+4	+3	+2	-4	-4	-7	-2	20	+2	+2	+6	+9	-4	0	0	+2
Freq. Relig. Service	24	24	23	17	6	5	23	21	0	+6	+1	+2	-18	0	-19	+4	19	-5	-5	+13	+14	-4	+2	-4	-2

Abs. Mean Diff. .83 1.67 1.00 3.42 3.67 5.67 .17 4.83 5.58 5.25 6.17 6.33 5.67 5.00 8.50 6.42

Note. RC = Reliability-Corrected Model. UNC = Uncorrected Model. Cum. = Cumulative. Abs. Mean Diff. = Absolute mean difference. All values under the "Ranked Empirical Change Estimates" column are the assigned ranking for each variable based on the magnitude of its change estimate, with 1 = largest changes and 24 = smallest changes. All values under the "Comparison of Ranked Empirical Changes" column are the difference in rankings of empirical change estimates, with the direction of the comparisons noted in the 2nd top-most column header. All values under the "Ranked Survey Ratings vs. Ranked Empirical Changes" column are differences in rankings of variables' survey ratings versus ranked empirical change estimates. Values for absolute mean differences are the average of absolute values of all cells in each column, indicating the general magnitude of disagreement in the values being compared.

Table S8

US-Only Datasets: Meta-Analytic, Reliability-Corrected and Uncorrected Estimates of Yearly and Lifespan Net and Cumulative Changes for All Standardized Variables from Ages 15 to 90

Estimate Type	Domain	Standardized Variable	Net Changes						Cumulative Changes			
			Yearly, Age-to-Age			Lifespan			Yearly, Age-to-Age		Lifespan	
			$d_{net,y}$	SD	Range	$d_{net,l}$	99% CI	Rank	$d_{cum,y}$	99% CI	$d_{cum,l}$	Rank
Reliability-Corrected	Big Five	Extraversion	-.0102	.0566	-.1406 to .2541	-.764	[-1.040, -.507]	5	.0391	[.0354, .0425]	2.931	20
		Agreeableness	-.0005	.0773	-.1991 to .3473	-.036	[-.256, .182]	31	.0533	[.0504, .0563]	4.001	2
		Conscientiousness	-.0014	.0588	-.1580 to .1337	-.108	[-.291, .072]	26	.0471	[.0447, .0495]	3.534	10
	Self & Identity	Neuroticism	-.0010	.0669	-.1661 to .3541	-.075	[-.327, .174]	30	.0447	[.0413, .0480]	3.354	13
		Openness	-.0060	.0835	-.1877 to .4686	-.451	[-.736, -.178]	11	.0515	[.0475, .0551]	3.859	4
		Locus of Control	-.0062	.0468	-.1602 to .0785	-.461	[-.709, -.226]	10	.0361	[.0328, .0393]	2.709	25
		Loneliness	.0051	.0434	-.0925 to .1481	.385	[.181, .600]	16	.0322	[.0295, .0351]	2.418	28
		Negative Affect	.0005	.0612	-.1651 to .2438	.034	[-.235, .304]	32	.0391	[.0348, .0435]	2.936	19
		Optimism	-.0019	.0609	-.2289 to .2299	-.102	[-.277, .069]	28	.0383	[.0351, .0414]	2.871	21
		Positive Affect	-.0084	.0782	-.3715 to .1729	-.521	[-.744, -.314]	7	.0539	[.0503, .0572]	4.040	1
		Self-Esteem	-.0011	.0623	-.1900 to .1454	-.083	[-.274, .105]	29	.0455	[.0429, .0480]	3.411	12
		Satisfaction w/ Life	-.0055	.0660	-.3014 to .1210	-.410	[-.596, -.234]	14	.0440	[.0415, .0464]	3.302	15
		Satisfaction w/ Family	-.0045	.0696	-.2761 to .1593	-.289	[-.443, -.143]	21	.0488	[.0463, .0510]	3.657	7
		Satisfaction w/ Finances	.0160	.0670	-.1764 to .2131	1.021	[.785, 1.289]	3	.0503	[.0466, .0545]	3.774	5
		Satisfaction w/ Home	.0132	.0578	-.1845 to .1606	.636	[.525, .772]	6	.0397	[.0374, .0425]	2.975	18
		Satisfaction w/ Leisure	.0061	.0651	-.1831 to .2643	.292	[.179, .416]	20	.0426	[.0401, .0452]	3.192	17
		Satisfaction w/ Relationship	-.0045	.0597	-.2547 to .1665	-.339	[-.560, -.127]	18	.0381	[.0351, .0409]	2.857	22
	Health	Nightly Hours of Sleep	-.0028	.0666	-.1358 to .1934	-.208	[-.465, .045]	23	.0502	[.0467, .0536]	3.766	6
		Body Mass Index (BMI)	.0057	.0654	-.4421 to .1019	.431	[.012, .862]	12	.0378	[.0321, .0437]	2.833	23
		Physical Health Problems	.0054	.0750	-.4074 to .1080	.403	[.084, .732]	15	.0472	[.0429, .0516]	3.539	9
		Health Status	-.0134	.0468	-.1124 to .2372	-1.006	[-1.363, -.676]	4	.0333	[.0285, .0378]	2.501	27
		Freq. of Exercising	-.0181	.0710	-.1285 to .3731	-1.355	[-1.844, -.901]	2	.0447	[.0381, .0507]	3.349	14
		Health Limitations	.0239	.0567	-.0999 to .1965	1.554	[.804, 2.351]	1	.0463	[.0347, .0585]	3.471	11
		Anxiety Symptoms	.0029	.0801	-.1793 to .3158	.216	[-.086, .523]	22	.0520	[.0479, .0561]	3.900	3
		Depression Symptoms	.0024	.0402	-.1116 to .1513	.179	[-.069, .431]	24	.0288	[.0255, .0322]	2.160	32
		Personal Income	.0039	.0596	-.1825 to .1659	.296	[.019, .581]	19	.0426	[.0389, .0464]	3.196	16
		Household Income (Adj.)	.0022	.0399	-.1206 to .0895	.163	[-.096, .426]	25	.0312	[.0277, .0347]	2.340	30
	Leisure, Social & Engagement	Freq. of Leisure Activities	-.0064	.0442	-.1282 to .0921	-.480	[-.628, -.345]	9	.0362	[.0342, .0380]	2.714	24
		Freq. of Socializing	.0064	.0659	-.1878 to .1898	.415	[.235, .607]	13	.0474	[.0446, .0503]	3.552	8
		Freq. of Volunteering	-.0051	.0436	-.1392 to .1180	-.381	[-.513, -.259]	17	.0340	[.0323, .0357]	2.552	26
		Importance of Religion	-.0014	.0535	-.3240 to .1303	-.107	[-.462, .246]	27	.0307	[.0260, .0354]	2.304	31
		Freq. of Attending Church	-.0066	.0476	-.1949 to .0966	-.495	[-.686, -.316]	8	.0321	[.0296, .0346]	2.410	29
Baseline/Uncorrected	Big Five	Extraversion	-.0077	.0426	-.1084 to .1921	-.579	[-.780, -.393]	6	.0299	[.0272, .0323]	2.2398	30
		Agreeableness	-.0021	.0446	-.1010 to .1252	-.161	[-.313, -.012]	26	.0351	[.0331, .0371]	2.6343	22
		Conscientiousness	-.0019	.0444	-.1161 to .1055	-.139	[-.275, -.007]	27	.0360	[.0342, .0378]	2.7037	21
	Self & Identity	Neuroticism	-.0007	.0550	-.1411 to .2864	-.051	[-.257, .154]	31	.0368	[.0340, .0395]	2.7601	18
		Openness	-.0049	.0585	-.1231 to .3150	-.369	[-.570, -.178]	15	.0375	[.0348, .0401]	2.8137	17
		Locus of Control	-.0060	.0429	-.1503 to .0714	-.449	[-.667, -.242]	10	.0330	[.0301, .0358]	2.4787	26
		Loneliness	.0046	.0388	-.0824 to .1349	.349	[.169, .537]	16	.0288	[.0264, .0313]	2.1573	31
		Negative Affect	.0004	.0568	-.1489 to .2365	.027	[-.224, .279]	32	.0363	[.0322, .0404]	2.7250	19
		Optimism	-.0019	.0533	-.1984 to .2011	-.104	[-.253, .042]	29	.0341	[.0314, .0368]	2.5606	23
		Positive Affect	-.0078	.0707	-.3377 to .1644	-.485	[-.686, -.299]	8	.0482	[.0449, .0512]	3.6141	4
		Self-Esteem	-.0010	.0551	-.1716 to .1293	-.073	[-.240, .092]	30	.0402	[.0380, .0424]	3.0141	12
		Satisfaction w/ Life	-.0046	.0561	-.2449 to .1032	-.342	[-.501, -.192]	17	.0382	[.0360, .0402]	2.8625	14
		Satisfaction w/ Family	-.0045	.0696	-.2761 to .1593	-.289	[-.443, -.143]	21	.0488	[.0463, .0510]	3.6570	3
		Satisfaction w/ Finances	.0160	.0670	-.1764 to .2131	1.021	[.785, 1.289]	3	.0503	[.0466, .0545]	3.7742	1
		Satisfaction w/ Home	.0132	.0578	-.1845 to .1606	.636	[.525, .772]	5	.0397	[.0374, .0425]	2.9753	13
		Satisfaction w/ Leisure	.0061	.0651	-.1831 to .2643	.292	[.179, .416]	20	.0426	[.0401, .0452]	3.1921	11
		Satisfaction w/ Relationship	-.0045	.0597	-.2547 to .1665	-.339	[-.560, -.127]	18	.0381	[.0351, .0409]	2.8567	15
	Health	Nightly Hours of Sleep	-.0028	.0666	-.1358 to .1934	-.208	[-.465, .045]	22	.0502	[.0467, .0536]	3.7662	2
		Body Mass Index (BMI)	.0057	.0654	-.4421 to .1019	.431	[.012, .862]	11	.0378	[.0321, .0437]	2.8329	16
		Physical Health Problems	.0054	.0750	-.4074 to .1080	.403	[.084, .732]	13	.0472	[.0429, .0516]	3.5391	6

	Health Status	-.0134	.0468	-.1124 to .2372	-1.006	[-1.363, -.676]	4	.0333	[.0285, .0378]	2.5012	25
	Freq. of Exercising	-.0181	.0710	-.1285 to .3731	-1.355	[-1.844, -.901]	2	.0447	[.0381, .0507]	3.3488	9
	Health Limitations	.0239	.0567	-.0999 to .1965	1.554	[.804, 2.351]	1	.0463	[.0347, .0585]	3.4713	7
	Anxiety Symptoms	.0026	.0672	-.1400 to .2691	.198	[-.056, .457]	23	.0447	[.0413, .0482]	3.3531	8
	Depression Symptoms	.0022	.0364	-.1015 to .1395	.162	[-.065, .392]	25	.0259	[.0229, .0290]	1.9444	32
Finances	Personal Income	.0039	.0596	-.1825 to .1659	.296	[.019, .581]	19	.0426	[.0389, .0464]	3.1962	10
	Household Income (Adj.)	.0022	.0399	-.1206 to .0895	.163	[-.096, .426]	24	.0312	[.0277, .0347]	2.3401	28
Leisure, Social & Engagement	Freq. of Leisure Activities	-.0064	.0442	-.1282 to .0921	-.480	[-.628, -.345]	9	.0362	[.0342, .0380]	2.7141	20
	Freq. of Socializing	.0064	.0659	-.1878 to .1898	.415	[.235, .607]	12	.0474	[.0446, .0503]	3.5519	5
	Freq. of Volunteering	-.0051	.0436	-.1392 to .1180	-.381	[-.513, -.259]	14	.0340	[.0323, .0357]	2.5519	24
	Importance of Religion	-.0014	.0535	-.3240 to .1303	-.107	[-.462, .246]	28	.0307	[.0260, .0354]	2.3038	29
	Freq. of Attending Church	-.0066	.0476	-.1949 to .0966	-.495	[-.686, -.316]	7	.0321	[.0296, .0346]	2.4105	27

Note. Yearly net change = mean change per 1-unit increase in age from 15 to 90. Lifespan net change = difference in values at age 90 vs. 15 (yearly net change x 75). Yearly cumulative change = mean annual magnitude of change from age 15 to 90. Lifespan cumulative change = sum of magnitude of all changes across ages 15 to 90 (yearly cumulative change x 75). Bold value = lifespan net change does not contain .000 in its 99% CI. Relative to full meta-analytic results, many variables have truncated age ranges due to including fewer datasets. Lifespan change estimates are thus often larger due to extrapolating beyond the data. Across Reliability-Corrected versus Baseline/Uncorrected Estimates, the estimates themselves only differ for the Big Five, all Self & Identity variables excluding domain-specific satisfaction variables, and anxiety and depressive symptoms. All variables' rankings of their change estimates can vary across Reliability-Corrected versus Baseline/Uncorrected Estimates as these depend on all variables' values.

Table S9

US-Dataset Meta-Analytic Estimates of Yearly & Lifespan Changes for All Non-Standardized/Non-Numeric Variables and All Domains from Ages 15 to 90

Level	Type	Domain	Variable	Net Changes				Cumulative Changes			
				Yearly, Age-to-Age			Lifespan		Yearly, Age-to-Age		Lifespan
				$d_{\text{net},y}$	SD	Range	$d_{\text{net},t}$	99% CI	$d_{\text{cum},y}$	99% CI	$d_{\text{cum},t}$
Variable	Log ($\ln$)	Finances	Personal Income	-.0269	.7478	-5.050 to 3.033	-2.02	[-6.076, 1.988]	.3010	[.2459, .3548]	22.572
			Household Income	.0053	.4499	-3.011 to 1.318	.396	[-2.026, 2.829]	.1942	[.1618, .2267]	14.568
			Household Income	.0023	.1954	-1.308 to .5722	.172	[-.880, 1.229]	.0844	[.0703, .0985]	9.803
	Log ($\log_{10}$)	Finances	Personal Income	-.0117	.3248	-2.193 to 1.317	-.876	[-2.639, .863]	.1307	[.1068, .1541]	9.803
			Household Income	.0023	.1954	-1.308 to .5722	.172	[-.880, 1.229]	.0844	[.0703, .0985]	6.327
			Household Income	.0023	.1954	-1.308 to .5722	.172	[-.880, 1.229]	.0844	[.0703, .0985]	6.327
	Probability	Health	Exercise	-.0113	.0414	-.2068 to .0969	-.851	[-1.161, -.530]	.0272	[.0230, .0315]	
			Married	.0000	.0696	-.0638 to .5121	.002	[-.469, .315]	.0335	[.0267, .0378]	
			Separated/Divorced	.0001	.0051	-.0122 to .0139	.007	[-.012, .246]	.0038	[.0036, .0072]	
	Relationships	Married	Widowed	.0135	.0459	-.1530 to .2009	.893	[.868, 1.053]	.0190	[.0186, .0215]	
			Employed	-.0016	.0392	-.1101 to .1277	-.121	[-.281, -.002]	.0251	[.0229, .0267]	
			Unemployed	-.0117	.0289	-.1277 to .0336	-.876	[-.939, -.786]	.0152	[.0144, .0168]	
	Work	Retired	Retired	.0151	.0299	-.0036 to .1660	.993	[.897, 1.349]	.0154	[.0139, .0213]	
			Leisure Activities	.0008	.0320	-.0781 to .1207	.062	[-.129, .279]	.0234	[.0208, .0263]	
			Socializing	.0052	.0476	-.0896 to .2178	.337	[.200, .588]	.0316	[.0294, .0354]	
	L. E. S.	Volunteering	Volunteering	-.0053	.0329	-.1169 to .0988	-.394	[-.587, -.139]	.0243	[.0217, .0277]	
			Religious	.0003	.0236	-.1603 to .0432	.025	[-.113, .092]	.0127	[.0108, .0136]	
			Attend Church	-.0029	.0322	-.0675 to .0847	-.218	[-.394, -.053]	.0261	[.0237, .0283]	
	Proportion	Health	Exercise	-.0105	.0246	-.1260 to .0561	-.787	[-.976, -.622]	.0190	[.0164, .0212]	
			Married	.0008	.0484	-.0811 to .3487	.059	[-.208, .336]	.0246	[.0207, .0284]	
			Separated/Divorced	.0020	.0132	-.0483 to .0450	.145	[.075, .223]	.0093	[.0084, .0104]	
	Relationships	Widowed	Widowed	.0095	.0176	-.0442 to .0732	.627	[.616, .684]	.0127	[.0123, .0136]	
			Employed	-.0016	.0362	-.0723 to .1141	-.123	[-.227, -.011]	.0253	[.0238, .0268]	
			Unemployed	-.0115	.0293	-.1142 to .0288	-.861	[-.947, -.759]	.0184	[.0172, .0198]	
	Work	Retired	Retired	.0144	.0233	-.0297 to .1281	.951	[.919, 1.029]	.0172	[.0166, .0183]	
			Leisure Activities	.0010	.0242	-.0596 to .1030	.076	[-.092, .245]	.0171	[.0149, .0193]	
			Socializing	.0048	.0473	-.0830 to .1908	.313	[.122, .515]	.0327	[.0297, .0358]	
	L. E. S.	Volunteering	Volunteering	-.0045	.0264	-.0999 to .1078	-.338	[-.516, -.169]	.0182	[.0158, .0205]	
			Religious	-.0015	.0231	-.1744 to .0222	-.116	[-.217, -.018]	.0111	[.0097, .0124]	
			Attend Church	-.0015	.0221	-.0883 to .0620	-.112	[-.196, -.031]	.0164	[.0153, .0175]	
Domain	Std. (Adj.)	Big Five	/	-.0034	.0692	-.3541 to .4686	-.257	[-.306, -.209]	.0471	[.0465, .0478]	3.536
			Self & Identity	-.0009	.0617	-.3715 to .2643	-.056	[-.073, -.040]	.0413	[.0410, .0415]	3.094
			Health	-.0091	.0642	-.3158 to .4421	-.669	[-.719, -.621]	.0424	[.0417, .0430]	3.179
	Std. (Unadj.)	Big Five	/	-.0032	.0493	-.2864 to .3150	-.239	[-.276, -.204]	.0351	[.0346, .0355]	2.630
			Self & Identity	-.0007	.0579	-.3377 to .2643	-.042	[-.058, -.027]	.0386	[.0384, .0389]	2.898
			Health	-.0090	.0620	-.2691 to .4421	-.665	[-.714, -.618]	.0411	[.0404, .0417]	3.082
	Finances	/	Finances	.0031	.0506	-.1825 to .1659	.230	[.094, .368]	.0369	[.0351, .0388]	2.768
			L. E. S.	-.0029	.0511	-.3240 to .1898	-.210	[-.251, -.170]	.0357	[.0351, .0362]	2.675
			Finances	-.0108	.6152	-5.050 to 3.033	-.811	[-2.453, .820]	.2476	[.2254, .2694]	18.570
	Log ($\ln$)	Finances	/	-.0047	.2672	-2.193 to 1.317	-.352	[-1.065, .356]	.1075	[.0979, .1170]	8.065
			Log ($\log_{10}$)	-.0047	.2672	-2.193 to 1.317	-.352	[-1.065, .356]	.1075	[.0979, .1170]	8.065
			Probability	-.0113	.0414	-.2068 to .0969	-.851	[-1.165, -.526]	.0272	[.0230, .0315]	
	Relationships	/	Relationships	-.0043	.0484	-.2009 to .5121	-.299	[-.398, -.258]	.0187	[.0173, .0193]	
			Work	-.0011	.0347	-.1660 to .1277	-.080	[-.146, -.048]	.0186	[.0177, .0191]	
			L. E. S.	-.0005	.0341	-.1603 to .2178	-.038	[-.072, .001]	.0233	[.0229, .0238]	
	Proportion	Health	Health	-.0105	.0246	-.1260 to .0561	-.787	[-.978, -.620]	.0190	[.0164, .0212]	
			Relationships	-.0034	.0311	-.0811 to .3487	-.237	[-.284, -.196]	.0156	[.0149, .0162]	
			Work	-.0010	.0319	-.1281 to .1142	-.071	[-.103, -.044]	.0203	[.0199, .0207]	
	L. E. S.	/	L. E. S.	-.0005	.0295	-.1744 to .1908	-.036	[-.064, -.007]	.0187	[.0183, .0191]	

Note. For Level = Variable: Yearly Net Change = mean change per 1-unit increase in age from 15 to 90. Lifespan Net Change = difference in estimated values at age 90 vs. 15 (yearly net change x 75). Yearly Cumulative Change = mean annual magnitude of change from age 15 to 90. Lifespan Cumulative Change = sum of absolute value of all changes from ages 15 to 90 (yearly cumulative change x 75). For Level = Domain: All metrics have the same meaning as they do for variables. Values were averaged across all outcomes per domain. When aggregating changes, changes per variable were scored such that increases were in an adaptive or socially desirable direction (e.g., neuroticism values were reversed such that increases = gains in emotional stability, proportions & probabilities for separated/divorced were subtracted from 1 to represent *not* being separated/divorced). For all: For log-transformed values, exponentiate ($\ln$) or raise to the power of 10 ($\log_{10}$) to obtain the ratio of end vs. start values (net) or ratio of all changes to no change (cumulative). To obtain percent change, subtract 1 from the ratio & multiply by 100. Ratios & percent changes will be identical for $\ln$ & $\log$ -base 10 transformations (within rounding), but both are shown for completeness. For probabilities/proportions, negative values may be present since it is the difference in probabilities/proportions that is shown, not probabilities/proportions themselves. Lifespan cumulative values are omitted for these variables since the sum of their age-to-age changes is not inherently meaningful & often exceeds 1 since decreases/increases are treated the same in this metric. Values exceeding 1 in 99% CIs for lifespan net changes may occur due to sparse data at low and high values of age. CI = Confidence interval. d = Cohen's d . L. E. S. = Leisure, Engagement, & Social. Bold = Lifespan Net Change does not contain .000 in its 99% CI. Unadj. = Unadjusted (i.e., baseline values, uncorrected for reliability).