Supporting Information

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SI Text

Table S1 describes, for each sample, the interrater reliabilities of the mean scores across raters of the individual well-being items and the composite well-being score. Interrater reliabilities estimates were defined as intraclass correlation formula ICC(3,k), which is defined as the proportion of the variance between subjects that is true score variance (1). The estimates were derived from all subjects in each sample that were rated by more than one individual. We used standard guidelines (2) to interpret the reliability of ratings. None of the items in our three samples had poor reliability [ICC(3,k) < 0.4] and, in all but one instance (the reliability of asking how successful an orangutan was in achieving its goals was fair), the reliabilities were good [ICC(3,k) = 0.60-0.74] or excellent [ICC(3,k) > 0.60-0

0.74]. The reliabilities of the well-being composites were high (Table S1). Table S2 is included as a general robustness sheak. It exercises

Table S2 is included as a general robustness check. It examines the appropriateness of fitting the shape discussed in the human well-being literature, namely a quadratic, to the full ape dataset. To do this check, the analysis presented in Table S2 estimates a wellbeing equation without imposing any parameterized structure or polynomial function. The results reveal that, even with an elementary set of 11 banded dummy variables, the low point is reached between age 30 and age 35, and that, although subsample sizes are inevitably too small within each age band to allow precision on individual coefficients or a perfect nonparametric U, there is evidence broadly consistent with the study's parameterized approach.

 Shrout PE, Fleiss JL (1979) Intraclass correlations: Uses in assessing rater reliability. Psychol Bull 86(2):420–428. Cicchetti DV (1994) Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychol Assess* 6:284–290.

	Sample		
Interrater reliabilities	А	В	с
Descriptive statistics			
n _{subjects}	155	176	149
n _{raters}	51	71	100
n _{ratings}	483	610	392
Maximum number of raters	5	7	6
Mean \pm SD raters per subject	3.12 ± 0.57	3.47 ± 1.45	2.63 ± 1.03
ICC(3,k)			
Item 1: Moods	0.76	0.75	0.71
Item 2: Social	0.72	0.79	0.72
Item 3: Goals	0.74	0.81	0.50
ltem 4: Be subject	0.74	0.68	0.65
Well-being	0.81	0.83	0.73

Table S1. Interrater reliabilities for well-being items and the wellbeing composite in samples A, B, and C

In this table, n_{subjects} indicates the number of subjects used in the analyses, n_{raters} indicates the number of raters used in the analyses, and n_{ratings} indicates the total number of ratings in the analyses.

Table S2. Regression equation for chimpanzee and orangutan well-being with age as a banded variable (N = 508)

Estimate	b	SE	t	Р
Intercept	56.135	1.434	39.140	<0.001
Sample A	-1.634	0.606	-2.697	0.007
Sample B	-3.555	0.589	-6.033	<0.001
Male	1.282	0.417	3.073	0.002
Age ≥ 5 < 10	-4.367	1.757	-2.485	0.013
Age ≥ 10 < 15	-6.234	1.783	-3.497	0.001
Age ≥ 15 < 20	-7.472	1.786	-4.183	<0.001
Age ≥ 20 < 25	-7.728	1.807	-4.276	<0.001
Age ≥ 25 < 30	-4.932	1.888	-2.612	0.009
Age ≥ 30 < 35	-7.850	1.922	-4.084	<0.001
Age ≥ 35 < 40	-6.415	2.252	-2.848	0.005
Age \geq 40 < 45	-7.701	2.772	-2.778	0.006
Age ≥ 45 < 50	-5.474	3.006	-1.821	0.069
Age \geq 50	-5.426	3.990	-1.360	0.174

The *b* coefficients for "Male," "Sample A," and "Sample B" indicate the deviation of well-being of these groups from the unweighted grand mean of well-being. The *b* coefficients for each age group refer to effects of a dummy-coded variable, equal to 1 if the subject is within that age band and 0 if it is not. The reference category was comprised of individuals aged less than 5 y; the coefficient on this category is thus normalized to zero.

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