Supplement 5: Measurement invariance

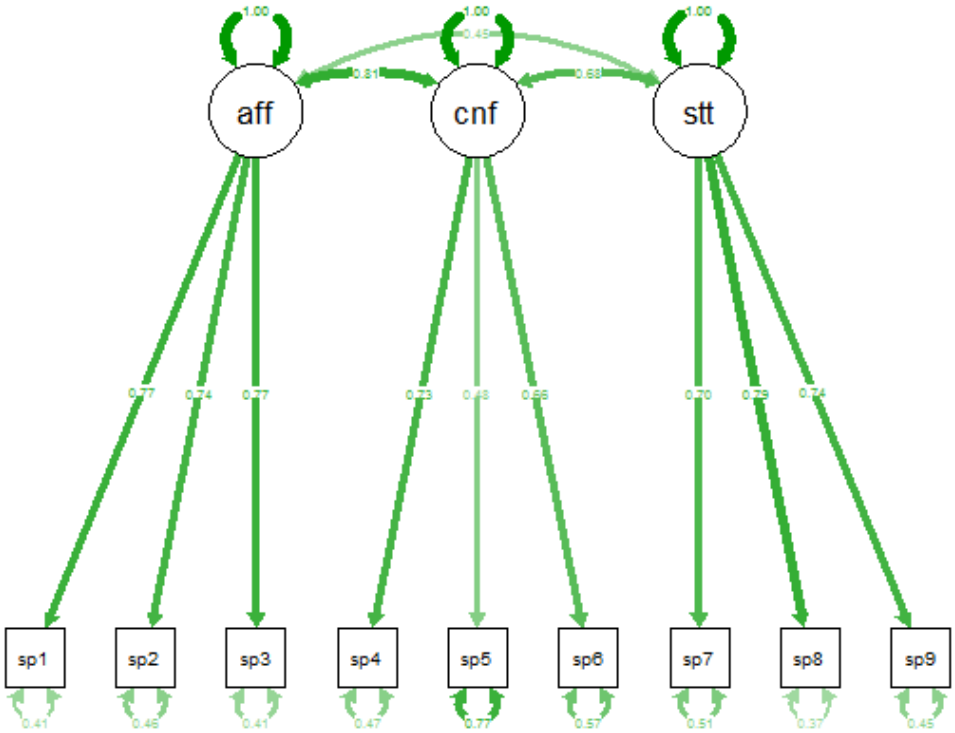

Figure S5. A path diagram of Confirmatory Factor Analysis (CFA). Residual variances are fixed to 1.0. Numbers indicate the standardized parameter estimates as weighted edges.

Table S5

Results measurement invariance tests over all age groups

	X2	df	p-value	CFI	ΔCFI	TLI	RMSEA	BIC	AIC
Model 1 – Conf. invar.	674.90	144	<.001	.985		.977	.044	169970	168648
Model 2[a] – Metric invar.	783.50	174	<.001	.983	.002	.978	.043	169798	168697
Model 3[b] – Scalar invar.	1112.05	204	<.001	.974	.009	.973	.048	169846	168965
Model 4[c] – Strict invar.	1426.86	219	<.001	.966	.009	.966	.054	170021	169250

[a]Equal loadings; [b]Equal loadings, equal intercepts; [c]Equal loadings, equal intercepts, equal means

Measurement invariance

To examine whether comparisons of average social need fulfilment levels between age groups are valid, we fit measurement invariance tests (see Figure S5 and Table S5), which supported configural, metric, scalar, and strict invariance (Putnick & Bornstein, 2016). Configural invariance (CFI = .99; RMSEA = .04) indicates that the social needs can be seen as three distinguishable constructs. Metric invariance (CFI = .98; RMSEA = .04) indicates that each item contributes about the same to the corresponding social need. Scalar invariance (CFI = .97; RMSEA = .05) indicates that the item intercepts do not differ too much between the age groups. This would be the case if, for example, 'feeling loved' as item of affection is typically scored higher by young adults than older respondents, but does not simultaneously increase levels of affection. Finally, strict invariance (CFI = .97; RMSEA = .05) indicates that none of the item residuals is very different across the age groups. Chi-squared statistics are not interpreted because in large samples they tend to be all significant.