Supplementary information: Standardized Coefficients for all models

Notes:

achstrivindirect: Indirect path (i.e., the hypothesized effect) from achievement striving, to personal project dimension, to basic psychological need satisfaction, to well-being

aps.discrep: Discrepencies

aps.stand: Personal standards

as.5f.R2: Achievement striving facet scale from the five factor model, revised to reflect reverse coded items

discrepindirect: Indirect path (i.e., the hypothesized effect) from discrepencies, to personal project dimension, to basic psychological need satisfaction, to well-being

engagementR: Life purpose

mhcR: Positive mental health score

pp.autonomy: Personal project autonomy dimension

pp.competence: Personal project competence dimension

pp.support: Personal project support

standardsindirect: Indirect path (i.e., the hypothesized effect) from personal standards, to personal project dimension, to basic psychological need satisfaction, to well-being

zestR: Zest for life

~ : coefficient of regression path (variable on the right is the dependent variable)

~~ : coefficient of covariance

:= : labelled paths (e.g., indirect, direct)

Table S1

Model 1 Outcome: Positive Mental Health			est.std	se	z	pvalue	ci.lower	ci.upper
mhcR	~	competence	.337	.056	6.040	0	.227	.446
mhcR	~	pp.competence	.145	.057	2.525	.012	.032	.257
mhcR	~	as.5f.R	.119	.075	1.586	.113	-.028	.266
mhcR	~	aps.stand	.037	.073	.499	.618	-.107	.180
mhcR	~	aps.discrep	-.263	.054	-4.883	0.00000	-.369	-.158
pp.competence	~	as.5f.R	.141	.083	1.700	.089	-.022	.304
pp.competence	~	aps.stand	.313	.091	3.444	.001	.135	.491
pp.competence	~	aps.discrep	-.225	.058	-3.862	.0001	-.339	-.111
competence	~	pp.competence	.210	.058	3.599	.0003	.096	.325
competence	~	aps.stand	.149	.083	1.783	.075	-.015	.312
competence	~	aps.discrep	-.236	.056	-4.246	.00002	-.345	-.127
competence	~	as.5f.R	.318	.075	4.238	.00002	.171	.465
as.5f.R	~~	aps.stand	.710	.035	20.486	0	.642	.777
as.5f.R	~~	sample	.167	.057	2.944	.003	.056	.278
as.5f.R	~~	aps.discrep	-.166	.063	-2.619	.009	-.290	-.042
aps.stand	~~	aps.discrep	.146	.061	2.403	.016	.027	.265
aps.stand	~~	sample	.244	.055	4.413	.00001	.135	.352
aps.discrep	~~	sample	.141	.059	2.405	.016	.026	.257
competence	~	sample	-.064	.045	-1.416	.157	-.153	.025
pp.competence	~	sample	.046	.057	.806	.420	-.066	.158
mhcR	~	sample	-.045	.048	-.948	.343	-.139	.048
mhcR	~~	mhcR	.581	.043	13.520	0	.497	.665
pp.competence	~~	pp.competence	.771	.044	17.594	0	.685	.857
competence	~~	competence	.603	.044	13.678	0	.516	.689
as.5f.R	~~	as.5f.R	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
mhcR			1.863	.417	4.465	.00001	1.045	2.681
pp.competence			1.962	.525	3.736	.0002	.933	2.991
competence			1.324	.417	3.174	.002	.506	2.142
as.5f.R			5.494	.289	18.983	0	4.927	6.061
aps.stand			5.588	.366	15.263	0	4.870	6.305
aps.discrep			2.956	.106	27.880	0	2.748	3.164
sample			1.376	.080	17.266	0	1.220	1.532
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.098	.035	2.761	.006	.028	.167
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.136	.042	3.262	.001	.054	.218
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.117	.029	-3.974	.0001	-.174	-.059
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.217	.075	2.889	.004	.070	.364
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.173	.082	2.107	.035	.012	.334
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.380	.055	-6.891	0	-.488	-.272

Table S2

Model 2: Competence and Zest			est.std	se	z	pvalue	ci.lower	ci.upper
zestR	~	competence	.216	.059	3.668	.0002	.100	.331
zestR	~	pp.competence	.092	.067	1.362	.173	-.040	.223
zestR	~	as.5f.R2	.140	.075	1.872	.061	-.007	.286
zestR	~	aps.stand	-.034	.070	-.479	.632	-.172	.104
zestR	~	aps.discrep	-.393	.051	-7.681	0	-.493	-.293
pp.competence	~	as.5f.R2	.137	.085	1.612	.107	-.029	.303
pp.competence	~	aps.stand	.313	.093	3.361	.001	.131	.496
pp.competence	~	aps.discrep	-.225	.058	-3.844	.0001	-.339	-.110
competence	~	pp.competence	.210	.058	3.649	.0003	.097	.323
competence	~	aps.stand	.149	.086	1.738	.082	-.019	.317
competence	~	aps.discrep	-.237	.058	-4.064	.00005	-.351	-.123
competence	~	as.5f.R2	.320	.077	4.138	.00004	.168	.472
as.5f.R2	~~	aps.stand	.710	.034	20.696	0	.643	.777
as.5f.R2	~~	sample	.167	.056	2.993	.003	.058	.276
as.5f.R2	~~	aps.discrep	-.160	.065	-2.446	.014	-.288	-.032
aps.stand	~~	aps.discrep	.150	.063	2.366	.018	.026	.275
aps.stand	~~	sample	.244	.055	4.438	.00001	.136	.352
aps.discrep	~~	sample	.145	.059	2.451	.014	.029	.261
competence	~	sample	-.063	.046	-1.368	.171	-.153	.027
pp.competence	~	sample	.045	.058	.778	.437	-.068	.158
zestR	~	sample	.007	.052	.143	.886	-.094	.109
zestR	~~	zestR	.636	.053	12.064	0	.533	.740
pp.competence	~~	pp.competence	.775	.042	18.583	0	.693	.857
competence	~~	competence	.602	.045	13.353	0	.514	.691
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
zestR			3.102	.401	7.727	0	2.315	3.889
pp.competence			2.000	.528	3.791	.0002	.966	3.034
competence			1.311	.427	3.071	.002	.474	2.148
as.5f.R2			5.494	.295	18.652	0	4.917	6.071
aps.stand			5.584	.365	15.288	0	4.868	6.299
aps.discrep			2.955	.106	27.887	0	2.747	3.162
sample			1.376	.080	17.243	0	1.220	1.533
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.061	.031	1.996	.046	.001	.122
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.087	.032	2.729	.006	.025	.150
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.074	.026	-2.850	.004	-.126	-.023
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.201	.076	2.661	.008	.053	.350
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.054	.072	.748	.455	-.087	.194
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.467	.050	-9.287	0	-.566	-.369

Table S3

Model 3: Competence and Life Purpose			est.std	se	z	pvalue	ci.lower	ci.upper
engagementR	~	competence	.177	.059	2.987	.003	.061	.293
engagementR	~	pp.competence	.191	.062	3.103	.002	.070	.312
engagementR	~	as.5f.R2	.113	.081	1.394	.163	-.046	.273
engagementR	~	aps.stand	.051	.078	.656	.512	-.102	.204
engagementR	~	aps.discrep	-.356	.055	-6.492	0	-.463	-.248
pp.competence	~	as.5f.R2	.139	.084	1.641	.101	-.027	.304
pp.competence	~	aps.stand	.312	.093	3.363	.001	.130	.494
pp.competence	~	aps.discrep	-.226	.059	-3.852	.0001	-.341	-.111
competence	~	pp.competence	.208	.058	3.596	.0003	.094	.321
competence	~	aps.stand	.150	.085	1.765	.078	-.017	.317
competence	~	aps.discrep	-.237	.057	-4.131	.00004	-.350	-.125
competence	~	as.5f.R2	.320	.078	4.123	.00004	.168	.472
as.5f.R2	~~	aps.stand	.710	.035	20.520	0	.642	.778
as.5f.R2	~~	sample	.167	.058	2.901	.004	.054	.280
as.5f.R2	~~	aps.discrep	-.160	.066	-2.429	.015	-.289	-.031
aps.stand	~~	aps.discrep	.150	.063	2.369	.018	.026	.274
aps.stand	~~	sample	.244	.056	4.321	.00002	.133	.355
aps.discrep	~~	sample	.145	.059	2.458	.014	.029	.261
competence	~	sample	-.063	.046	-1.382	.167	-.153	.027
pp.competence	~	sample	.047	.057	.830	.407	-.064	.158
engagementR	~	sample	-.026	.051	-.513	.608	-.127	.074
engagementR	~~	engagementR	.624	.049	12.870	0	.529	.719
pp.competence	~~	pp.competence	.773	.044	17.595	0	.687	.860
competence	~~	competence	.603	.044	13.691	0	.517	.689
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
engagementR			5.890	.485	12.140	0	4.939	6.841
pp.competence			1.992	.529	3.763	.0002	.955	3.030
competence			1.317	.417	3.156	.002	.499	2.135
as.5f.R2			5.494	.287	19.163	0	4.932	6.056
aps.stand			5.583	.365	15.297	0	4.868	6.299
aps.discrep			2.955	.107	27.716	0	2.746	3.164
sample			1.376	.081	17.045	0	1.218	1.534
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.091	.032	2.868	.004	.029	.154
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.096	.034	2.796	.005	.029	.164
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.094	.026	-3.624	.0003	-.145	-.043
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.205	.080	2.550	.011	.047	.362
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.148	.083	1.775	.076	-.015	.310
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.450	.053	-8.415	0	-.555	-.345

Table S4

Model 4: Competence and Passion			est.std	se	z	pvalue	ci.lower	ci.upper
passion	~	competence	.144	.062	2.311	.021	.022	.267
passion	~	pp.competence	.192	.062	3.088	.002	.070	.314
passion	~	as.5f.R2	.143	.074	1.934	.053	-.002	.288
passion	~	aps.stand	.163	.078	2.081	.037	.010	.317
passion	~	aps.discrep	-.136	.053	-2.538	.011	-.241	-.031
pp.competence	~	as.5f.R2	.137	.086	1.587	.112	-.032	.307
pp.competence	~	aps.stand	.314	.093	3.387	.001	.132	.495
pp.competence	~	aps.discrep	-.223	.059	-3.801	.0001	-.338	-.108
competence	~	pp.competence	.210	.056	3.723	.0002	.100	.321
competence	~	aps.stand	.149	.084	1.780	.075	-.015	.313
competence	~	aps.discrep	-.237	.057	-4.162	.00003	-.349	-.126
competence	~	as.5f.R2	.320	.077	4.177	.00003	.170	.470
as.5f.R2	~~	aps.stand	.710	.034	21.001	0	.644	.776
as.5f.R2	~~	sample	.167	.057	2.912	.004	.055	.279
as.5f.R2	~~	aps.discrep	-.160	.064	-2.513	.012	-.285	-.035
aps.stand	~~	aps.discrep	.150	.062	2.407	.016	.028	.272
aps.stand	~~	sample	.244	.056	4.375	.00001	.135	.353
aps.discrep	~~	sample	.145	.059	2.464	.014	.030	.260
competence	~	sample	-.062	.045	-1.367	.172	-.150	.027
pp.competence	~	sample	.039	.057	.678	.498	-.073	.150
passion	~	sample	-.006	.047	-.135	.892	-.099	.086
passion	~~	passion	.710	.049	14.450	0	.614	.807
pp.competence	~~	pp.competence	.777	.042	18.283	0	.693	.860
competence	~~	competence	.602	.044	13.795	0	.517	.688
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
passion			2.517	.534	4.711	0.00000	1.470	3.564
pp.competence			2.006	.533	3.760	.0002	.960	3.051
competence			1.309	.418	3.134	.002	.490	2.128
as.5f.R2			5.494	.292	18.840	0	4.922	6.066
aps.stand			5.583	.363	15.383	0	4.872	6.294
aps.discrep			2.955	.107	27.487	0	2.744	3.165
sample			1.376	.080	17.240	0	1.220	1.533
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.087	.029	3.015	.003	.030	.143
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.087	.033	2.600	.009	.021	.152
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.087	.025	-3.499	.0005	-.135	-.038
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.230	.073	3.154	.002	.087	.373
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.250	.085	2.935	.003	.083	.417
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.223	.051	-4.348	.00001	-.323	-.122

Table S5

Model 5: Relatedness and Positive Mental Health			est.std	se	z	pvalue	ci.lower	ci.upper
mhcR	~	relatedness	.416	.044	9.419	0	.329	.502
mhcR	~	pp.support	.135	.044	3.078	.002	.049	.221
mhcR	~	as.5f.R2	.177	.063	2.804	.005	.053	.300
mhcR	~	aps.stand	.093	.067	1.402	.161	-.037	.224
mhcR	~	aps.discrep	-.249	.050	-5.011	0.00000	-.346	-.151
pp.support	~	as.5f.R2	.176	.085	2.071	.038	.009	.342
pp.support	~	aps.stand	.118	.086	1.371	.170	-.051	.287
pp.support	~	aps.discrep	-.022	.060	-.372	.710	-.140	.096
relatedness	~	pp.support	.170	.055	3.106	.002	.063	.278
relatedness	~	aps.stand	.089	.084	1.059	.289	-.076	.255
relatedness	~	aps.discrep	-.339	.062	-5.467	0.00000	-.460	-.217
relatedness	~	as.5f.R2	.092	.086	1.074	.283	-.076	.261
as.5f.R2	~~	aps.stand	.710	.034	20.917	0	.643	.776
as.5f.R2	~~	sample	.167	.057	2.919	.004	.055	.279
as.5f.R2	~~	aps.discrep	-.166	.065	-2.541	.011	-.295	-.038
aps.stand	~~	aps.discrep	.145	.063	2.292	.022	.021	.269
aps.stand	~~	sample	.243	.056	4.333	.00001	.133	.353
aps.discrep	~~	sample	.141	.060	2.370	.018	.024	.258
relatedness	~	sample	-.030	.053	-.564	.573	-.134	.074
pp.support	~	sample	.112	.058	1.916	.055	-.003	.226
mhcR	~	sample	-.070	.044	-1.583	.113	-.157	.017
mhcR	~~	mhcR	.509	.041	12.558	0	.429	.588
pp.support	~~	pp.support	.900	.041	22.068	0	.820	.980
relatedness	~~	relatedness	.807	.043	18.992	0	.724	.891
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
mhcR			1.552	.369	4.203	.00003	.828	2.276
pp.support			1.211	.456	2.657	.008	.318	2.104
relatedness			2.340	.471	4.969	0.00000	1.417	3.262
as.5f.R2			5.494	.291	18.877	0	4.924	6.064
aps.stand			5.589	.372	15.030	0	4.860	6.317
aps.discrep			2.953	.108	27.320	0	2.741	3.164
sample			1.376	.080	17.159	0	1.219	1.533
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.090	.040	2.249	.025	.012	.168
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.064	.042	1.536	.124	-.018	.145
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.056	.032	-1.746	.081	-.118	.007
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.266	.072	3.673	.0002	.124	.408
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.157	.084	1.873	.061	-.007	.322
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.304	.059	-5.122	0.00000	-.421	-.188

Table S6

Model 6: Relatedness and Zest			est.std	se	z	pvalue	ci.lower	ci.upper
zestR	~	relatedness	.289	.052	5.517	0.00000	.187	.392
zestR	~	pp.support	.084	.052	1.629	.103	-.017	.186
zestR	~	as.5f.R2	.181	.073	2.464	.014	.037	.325
zestR	~	aps.stand	.002	.066	.023	.982	-.127	.130
zestR	~	aps.discrep	-.375	.052	-7.236	0	-.476	-.273
pp.support	~	as.5f.R2	.172	.083	2.078	.038	.010	.335
pp.support	~	aps.stand	.117	.084	1.388	.165	-.048	.282
pp.support	~	aps.discrep	-.022	.060	-.371	.711	-.140	.096
relatedness	~	pp.support	.171	.056	3.069	.002	.062	.280
relatedness	~	aps.stand	.094	.085	1.117	.264	-.071	.260
relatedness	~	aps.discrep	-.342	.062	-5.538	0.00000	-.463	-.221
relatedness	~	as.5f.R2	.088	.087	1.006	.315	-.083	.258
as.5f.R2	~~	aps.stand	.710	.034	20.740	0	.643	.777
as.5f.R2	~~	sample	.167	.058	2.886	.004	.054	.280
as.5f.R2	~~	aps.discrep	-.166	.066	-2.527	.012	-.295	-.037
aps.stand	~~	aps.discrep	.145	.064	2.279	.023	.020	.270
aps.stand	~~	sample	.243	.056	4.334	.00001	.133	.353
aps.discrep	~~	sample	.141	.060	2.345	.019	.023	.259
relatedness	~	sample	-.027	.054	-.507	.612	-.132	.078
pp.support	~	sample	.112	.058	1.941	.052	-.001	.225
zestR	~	sample	-.005	.048	-.110	.913	-.100	.090
zestR	~~	zestR	.590	.050	11.732	0	.492	.689
pp.support	~~	pp.support	.902	.042	21.743	0	.821	.984
relatedness	~~	relatedness	.806	.042	19.334	0	.725	.888
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
zestR			2.773	.378	7.341	0	2.032	3.513
pp.support			1.238	.469	2.638	.008	.318	2.158
relatedness			2.341	.464	5.042	0.00000	1.431	3.251
as.5f.R2			5.494	.287	19.137	0	4.931	6.057
aps.stand			5.589	.368	15.186	0	4.867	6.310
aps.discrep			2.952	.106	27.947	0	2.745	3.159
sample			1.376	.080	17.205	0	1.219	1.533
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.060	.028	2.100	.036	.004	.115
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.044	.028	1.535	.125	-.012	.099
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.036	.026	-1.370	.171	-.087	.015
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.240	.073	3.315	.001	.098	.383
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.045	.071	.633	.527	-.095	.185
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.410	.058	-7.124	0	-.523	-.297

Table S7

Table 7: Relatedness and Life Purpose			est.std	se	z	pvalue	ci.lower	ci.upper
engagementR	~	relatedness	.282	.053	5.334	0.00000	.178	.386
engagementR	~	pp.support	.095	.050	1.887	.059	-.004	.193
engagementR	~	as.5f.R2	.154	.078	1.969	.049	.001	.307
engagementR	~	aps.stand	.108	.078	1.392	.164	-.044	.260
engagementR	~	aps.discrep	-.351	.054	-6.554	0	-.456	-.246
pp.support	~	as.5f.R2	.173	.085	2.032	.042	.006	.340
pp.support	~	aps.stand	.116	.086	1.347	.178	-.053	.286
pp.support	~	aps.discrep	-.023	.061	-.380	.704	-.143	.097
relatedness	~	pp.support	.172	.056	3.063	.002	.062	.282
relatedness	~	aps.stand	.093	.082	1.142	.254	-.067	.254
relatedness	~	aps.discrep	-.341	.063	-5.452	0.00000	-.464	-.218
relatedness	~	as.5f.R2	.088	.084	1.049	.294	-.077	.253
as.5f.R2	~~	aps.stand	.710	.034	20.868	0	.643	.776
as.5f.R2	~~	sample	.167	.058	2.866	.004	.053	.281
as.5f.R2	~~	aps.discrep	-.166	.063	-2.631	.009	-.289	-.042
aps.stand	~~	aps.discrep	.145	.062	2.342	.019	.024	.267
aps.stand	~~	sample	.243	.055	4.404	.00001	.135	.351
aps.discrep	~~	sample	.141	.059	2.385	.017	.025	.257
relatedness	~	sample	-.028	.053	-.527	.598	-.133	.077
pp.support	~	sample	.112	.057	1.961	.050	.0001	.225
engagementR	~	sample	-.033	.050	-.663	.507	-.131	.065
engagementR	~~	engagementR	.596	.050	11.962	0	.498	.693
pp.support	~~	pp.support	.902	.041	21.783	0	.821	.983
relatedness	~~	relatedness	.806	.042	19.185	0	.724	.888
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
engagementR			5.685	.456	12.470	0	4.791	6.578
pp.support			1.237	.465	2.660	.008	.326	2.148
relatedness			2.337	.466	5.011	0.00000	1.423	3.252
as.5f.R2			5.494	.292	18.820	0	4.922	6.066
aps.stand			5.588	.364	15.340	0	4.874	6.302
aps.discrep			2.952	.105	28.042	0	2.746	3.158
sample			1.376	.080	17.171	0	1.219	1.533
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.060	.029	2.056	.040	.003	.117
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.044	.029	1.526	.127	-.012	.100
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.039	.025	-1.561	.119	-.089	.010
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.214	.076	2.806	.005	.064	.363
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.152	.083	1.818	.069	-.012	.315
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.390	.059	-6.614	0	-.506	-.275

Table S8

Model 8: Relatedness and Passion			est.std	se	z	pvalue	ci.lower	ci.upper
passion	~	relatedness	.181	.056	3.239	.001	.071	.290
passion	~	pp.support	.095	.060	1.602	.109	-.021	.212
passion	~	as.5f.R2	.182	.072	2.524	.012	.041	.324
passion	~	aps.stand	.225	.081	2.777	.005	.066	.383
passion	~	aps.discrep	-.157	.053	-2.999	.003	-.260	-.055
pp.support	~	as.5f.R2	.173	.085	2.038	.042	.007	.339
pp.support	~	aps.stand	.116	.087	1.338	.181	-.054	.287
pp.support	~	aps.discrep	-.021	.061	-.347	.728	-.140	.098
relatedness	~	pp.support	.170	.055	3.087	.002	.062	.278
relatedness	~	aps.stand	.094	.084	1.120	.263	-.070	.258
relatedness	~	aps.discrep	-.341	.062	-5.470	0.00000	-.464	-.219
relatedness	~	as.5f.R2	.089	.086	1.035	.301	-.079	.257
as.5f.R2	~~	aps.stand	.710	.034	20.849	0	.643	.776
as.5f.R2	~~	sample	.167	.058	2.896	.004	.054	.280
as.5f.R2	~~	aps.discrep	-.166	.064	-2.584	.010	-.292	-.040
aps.stand	~~	aps.discrep	.145	.063	2.294	.022	.021	.270
aps.stand	~~	sample	.243	.055	4.401	.00001	.135	.351
aps.discrep	~~	sample	.141	.059	2.380	.017	.025	.258
relatedness	~	sample	-.027	.054	-.505	.613	-.133	.078
pp.support	~	sample	.108	.058	1.860	.063	-.006	.221
passion	~	sample	-.013	.051	-.258	.796	-.112	.086
passion	~~	passion	.717	.050	14.416	0	.619	.814
pp.support	~~	pp.support	.904	.041	22.045	0	.823	.984
relatedness	~~	relatedness	.807	.043	18.958	0	.723	.890
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
passion			2.544	.553	4.597	0.00000	1.459	3.628
pp.support			1.245	.460	2.707	.007	.344	2.147
relatedness			2.338	.461	5.071	0.00000	1.434	3.241
as.5f.R2			5.494	.293	18.748	0	4.920	6.068
aps.stand			5.588	.373	14.992	0	4.857	6.318
aps.discrep			2.952	.106	27.774	0	2.744	3.160
sample			1.376	.082	16.780	0	1.215	1.537
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.042	.022	1.898	.058	-.001	.086
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.032	.022	1.481	.139	-.010	.074
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.037	.023	-1.568	.117	-.083	.009
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.225	.069	3.243	.001	.089	.361
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.257	.086	2.974	.003	.088	.426
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.194	.056	-3.448	.001	-.304	-.084

Table S9

Model 9: Autonomy and Positive Mental Health			est.std	se	z	pvalue	ci.lower	ci.upper
mhcR	~	autonomy	.322	.050	6.412	0	.224	.421
mhcR	~	pp.autonomy	.028	.052	.534	.593	-.074	.130
mhcR	~	as.5f.R2	.185	.070	2.632	.008	.047	.323
mhcR	~	aps.stand	.110	.072	1.526	.127	-.031	.252
mhcR	~	aps.discrep	-.323	.054	-5.993	0	-.429	-.218
pp.autonomy	~	as.5f.R2	.133	.087	1.533	.125	-.037	.304
pp.autonomy	~	aps.stand	.318	.095	3.351	.001	.132	.504
pp.autonomy	~	aps.discrep	.008	.055	.142	.887	-.100	.116
autonomy	~	pp.autonomy	.113	.070	1.604	.109	-.025	.251
autonomy	~	aps.stand	.074	.109	.679	.497	-.140	.287
autonomy	~	aps.discrep	-.214	.061	-3.484	.0005	-.335	-.094
autonomy	~	as.5f.R2	.190	.091	2.104	.035	.013	.368
as.5f.R2	~~	aps.stand	.710	.034	20.730	0	.643	.777
as.5f.R2	~~	sample	.167	.058	2.898	.004	.054	.280
as.5f.R2	~~	aps.discrep	-.165	.064	-2.579	.010	-.291	-.040
aps.stand	~~	aps.discrep	.146	.062	2.340	.019	.024	.268
aps.stand	~~	sample	.243	.055	4.405	.00001	.135	.352
aps.discrep	~~	sample	.143	.059	2.428	.015	.027	.258
autonomy	~	sample	.017	.059	.295	.768	-.098	.133
pp.autonomy	~	sample	-.051	.056	-.924	.356	-.161	.058
mhcR	~	sample	-.061	.049	-1.246	.213	-.156	.035
mhcR	~~	mhcR	.594	.044	13.516	0	.508	.680
pp.autonomy	~~	pp.autonomy	.828	.052	15.865	0	.726	.930
autonomy	~~	autonomy	.849	.044	19.379	0	.763	.935
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
mhcR			1.696	.427	3.975	.0001	.860	2.532
pp.autonomy			1.820	.566	3.213	.001	.710	2.930
autonomy			2.890	.562	5.146	0.00000	1.789	3.991
as.5f.R2			5.494	.293	18.720	0	4.919	6.069
aps.stand			5.587	.372	15.028	0	4.858	6.315
aps.discrep			2.954	.105	28.129	0	2.748	3.160
sample			1.376	.080	17.308	0	1.220	1.532
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.049	.031	1.578	.115	-.012	.109
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.106	.037	2.879	.004	.034	.178
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.003	.021	-.160	.873	-.045	.038
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.234	.069	3.391	.001	.099	.369
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.216	.081	2.682	.007	.058	.374
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.327	.057	-5.752	0	-.438	-.215

Table S10

Model 10: Autonomy and Zest			est.std	se	z	pvalue	ci.lower	ci.upper
zestR	~	autonomy	.278	.054	5.158	0.00000	.173	.384
zestR	~	pp.autonomy	.058	.060	.971	.332	-.059	.176
zestR	~	as.5f.R2	.165	.070	2.364	.018	.028	.302
zestR	~	aps.stand	-.017	.065	-.259	.796	-.144	.110
zestR	~	aps.discrep	-.412	.052	-7.982	0	-.514	-.311
pp.autonomy	~	as.5f.R2	.133	.088	1.518	.129	-.039	.304
pp.autonomy	~	aps.stand	.318	.093	3.419	.001	.136	.500
pp.autonomy	~	aps.discrep	.008	.055	.140	.889	-.099	.115
autonomy	~	pp.autonomy	.113	.069	1.653	.098	-.021	.248
autonomy	~	aps.stand	.075	.111	.675	.500	-.143	.294
autonomy	~	aps.discrep	-.218	.060	-3.611	.0003	-.336	-.100
autonomy	~	as.5f.R2	.190	.090	2.113	.035	.014	.367
as.5f.R2	~~	aps.stand	.710	.034	21.073	0	.644	.776
as.5f.R2	~~	sample	.167	.057	2.944	.003	.056	.278
as.5f.R2	~~	aps.discrep	-.158	.065	-2.428	.015	-.286	-.030
aps.stand	~~	aps.discrep	.151	.063	2.401	.016	.028	.275
aps.stand	~~	sample	.244	.055	4.393	.00001	.135	.352
aps.discrep	~~	sample	.147	.059	2.470	.014	.030	.263
autonomy	~	sample	.018	.059	.313	.754	-.097	.134
pp.autonomy	~	sample	-.051	.056	-.916	.360	-.160	.058
zestR	~	sample	.00004	.049	.001	.999	-.097	.097
zestR	~~	zestR	.611	.050	12.328	0	.513	.708
pp.autonomy	~~	pp.autonomy	.829	.050	16.507	0	.730	.927
autonomy	~~	autonomy	.848	.044	19.227	0	.761	.934
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
zestR			2.719	.393	6.912	0	1.948	3.490
pp.autonomy			1.826	.550	3.319	.001	.748	2.904
autonomy			2.892	.573	5.045	0.00000	1.768	4.016
as.5f.R2			5.494	.294	18.701	0	4.918	6.070
aps.stand			5.585	.372	15.028	0	4.857	6.313
aps.discrep			2.952	.107	27.683	0	2.743	3.161
sample			1.376	.080	17.255	0	1.220	1.532
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.049	.029	1.694	.090	-.008	.106
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.095	.033	2.858	.004	.030	.160
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.011	.022	-.483	.629	-.053	.032
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.214	.073	2.910	.004	.070	.358
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.078	.073	1.068	.286	-.065	.221
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.423	.055	-7.636	0	-.531	-.314

Table S11

Model 11: Autonomy and Life Purpose			est.std	se	z	pvalue	ci.lower	ci.upper
engagementR	~	autonomy	.193	.059	3.268	.001	.077	.309
engagementR	~	pp.autonomy	.127	.055	2.298	.022	.019	.234
engagementR	~	as.5f.R2	.147	.080	1.841	.066	-.009	.303
engagementR	~	aps.stand	.082	.079	1.037	.300	-.073	.236
engagementR	~	aps.discrep	-.406	.056	-7.235	0	-.517	-.296
pp.autonomy	~	as.5f.R2	.134	.086	1.562	.118	-.034	.302
pp.autonomy	~	aps.stand	.317	.092	3.466	.001	.138	.497
pp.autonomy	~	aps.discrep	.006	.056	.114	.909	-.103	.116
autonomy	~	pp.autonomy	.114	.068	1.683	.092	-.019	.247
autonomy	~	aps.stand	.075	.110	.684	.494	-.140	.290
autonomy	~	aps.discrep	-.218	.061	-3.551	.0004	-.338	-.098
autonomy	~	as.5f.R2	.190	.089	2.137	.033	.016	.364
as.5f.R2	~~	aps.stand	.710	.034	20.643	0	.643	.777
as.5f.R2	~~	sample	.167	.058	2.882	.004	.053	.280
as.5f.R2	~~	aps.discrep	-.158	.064	-2.463	.014	-.284	-.032
aps.stand	~~	aps.discrep	.151	.063	2.406	.016	.028	.275
aps.stand	~~	sample	.244	.055	4.402	.00001	.135	.352
aps.discrep	~~	sample	.147	.059	2.502	.012	.032	.262
autonomy	~	sample	.018	.059	.312	.755	-.097	.134
pp.autonomy	~	sample	-.049	.056	-.881	.378	-.159	.061
engagementR	~	sample	-.023	.053	-.429	.668	-.126	.081
engagementR	~~	engagementR	.637	.047	13.672	0	.545	.728
pp.autonomy	~~	pp.autonomy	.828	.051	16.304	0	.729	.928
autonomy	~~	autonomy	.847	.043	19.539	0	.762	.932
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
engagementR			5.770	.490	11.785	0	4.811	6.730
pp.autonomy			1.821	.555	3.282	.001	.733	2.909
autonomy			2.891	.566	5.110	0.00000	1.782	3.999
as.5f.R2			5.494	.290	18.967	0	4.926	6.062
aps.stand			5.584	.370	15.077	0	4.858	6.310
aps.discrep			2.952	.108	27.352	0	2.741	3.164
sample			1.376	.081	17.087	0	1.218	1.534
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.052	.025	2.091	.036	.003	.100
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.075	.032	2.369	.018	.013	.138
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.026	.018	-1.489	.137	-.061	.008
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.199	.078	2.539	.011	.045	.352
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.157	.084	1.873	.061	-.007	.322
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.433	.058	-7.449	0	-.547	-.319

Table S12

Model 12: Autonomy and Passion			est.std	se	z	pvalue	ci.lower	ci.upper
passion	~	autonomy	.214	.057	3.761	.0002	.103	.326
passion	~	pp.autonomy	.167	.056	2.992	.003	.058	.277
passion	~	as.5f.R2	.157	.071	2.193	.028	.017	.297
passion	~	aps.stand	.171	.082	2.070	.038	.009	.332
passion	~	aps.discrep	-.172	.053	-3.274	.001	-.276	-.069
pp.autonomy	~	as.5f.R2	.133	.087	1.524	.127	-.038	.304
pp.autonomy	~	aps.stand	.318	.093	3.411	.001	.135	.501
pp.autonomy	~	aps.discrep	.009	.055	.169	.866	-.099	.118
autonomy	~	pp.autonomy	.113	.068	1.652	.098	-.021	.247
autonomy	~	aps.stand	.075	.112	.672	.502	-.144	.295
autonomy	~	aps.discrep	-.218	.062	-3.518	.0004	-.340	-.097
autonomy	~	as.5f.R2	.190	.090	2.107	.035	.013	.367
as.5f.R2	~~	aps.stand	.710	.034	20.771	0	.643	.777
as.5f.R2	~~	sample	.167	.057	2.936	.003	.056	.278
as.5f.R2	~~	aps.discrep	-.158	.063	-2.495	.013	-.282	-.034
aps.stand	~~	aps.discrep	.151	.061	2.474	.013	.031	.271
aps.stand	~~	sample	.244	.056	4.368	.00001	.134	.353
aps.discrep	~~	sample	.147	.059	2.501	.012	.032	.262
autonomy	~	sample	.019	.060	.322	.748	-.098	.136
pp.autonomy	~	sample	-.057	.055	-1.051	.293	-.164	.050
passion	~	sample	-.002	.051	-.040	.968	-.102	.097
passion	~~	passion	.696	.051	13.551	0	.595	.797
pp.autonomy	~~	pp.autonomy	.829	.051	16.186	0	.728	.929
autonomy	~~	autonomy	.848	.043	19.690	0	.763	.932
as.5f.R2	~~	as.5f.R2	1	0			1	1
aps.stand	~~	aps.stand	1	0			1	1
aps.discrep	~~	aps.discrep	1	0			1	1
sample	~~	sample	1	0			1	1
passion			2.210	.553	3.999	.0001	1.127	3.293
pp.autonomy			1.830	.556	3.289	.001	.740	2.920
autonomy			2.893	.579	4.998	0.00000	1.758	4.027
as.5f.R2			5.494	.288	19.107	0	4.930	6.058
aps.stand			5.584	.364	15.334	0	4.871	6.298
aps.discrep			2.952	.107	27.637	0	2.743	3.162
sample			1.376	.081	16.936	0	1.217	1.535
achstrivindirect	:=	a1* b1+a2* b2+a1* d21* b2	.063	.027	2.368	.018	.011	.115
standardsindirect	:=	aa1* b1+aa2* b2+aa1* d21* b2	.087	.037	2.361	.018	.015	.159
discrepindirect	:=	aaa1* b1+aaa2* b2+aaa1* d21* b2	-.034	.020	-1.693	.090	-.074	.005
total1	:=	c1+(a1* b1+a2* b2+a1* d21* b2)	.219	.072	3.068	.002	.079	.360
total2	:=	c2+(aa1* b1+aa2* b2+aa1* d21* b2)	.257	.089	2.893	.004	.083	.432
total3	:=	c3+(aaa1* b1+aaa2* b2+aaa1* d21* b2)	-.207	.056	-3.663	.0002	-.317	-.096