

## **Supplementary Material**

Do We Know Whether We're Happier?

Corroborating Perceived Retrospective Assessments of Improvements in Well-Being

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We conducted a confirmatory factor analysis (CFA) on the measures at intake: global well-being, CESD, life satisfaction, and the HEXACO. All items were allowed to load freely on their respective factor, and the factors were scaled by setting the variance to equal to 1.0. Fit indices suggested good fit to the data:  $\chi^2(1,616, N = 1,247) = 8,846.97, p < .001$ ; root mean square error of approximation (RMSEA) = .060 (90% confidence interval = .059 to .061); Comparative Fit Index (CFI) = .79; and standardized root mean residual (SRMR) = .07 (for a discussion of fit indices, see Kline, 2005). While CFI values over .90 indicate a good fit (Kline, 2005), Kenny and McCoach (2003) note that “the CFI tend[s] to demonstrate worse fit as the number of variables in the model increases. . . Therefore, it appears that the CFI. . .do[es] not function well with correctly specified models that include a large number of variables” (p. 349). Kenny and McCoach’s “large “model had 40 variables; the current model had 59.

## References

Kline, R. B. (2005). *Principles and Practice of Structural Equation Modeling (2nd ed.)*. New York: Guilford.

Kenny, D. A., & McCoach, D. B. (2003). Effect of the number of variables on measures of fit in structural equation modeling. *Structural Equation Modeling, 10*, 333–351.

**Supplementary Table 1***Differences between participants with data at T52 vs. participants with missing data at T52*

	Present at T52		Missing at T52		<i>z</i>	Diff <i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Female	50%		51%		-0.463	0.643
Age	48.77	13.95	43.82	15.14	5.986	<.001
BIT Intake	3.61	0.85	3.62	0.81	-0.223	0.824
CESD Intake	1.66	0.56	1.80	0.62	-3.963	<.001
SWL Intake	4.15	1.58	4.01	1.67	1.551	0.121
EWB 1	3.66	0.75	3.64	0.79	0.533	0.594
IB 1	2.19	1.15	2.29	1.22	-1.275	0.202

**Note.** Present at T52 *n* = 592; Missing at T52 *n* = 655.

**Supplementary Table 2***Means, standard deviations, and sample size for Weekly Well-Being (EWB) and Ill-Being (IB)*

	Eudaimonic Well-Being			Ill-Being		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Week 1	3.65	0.77	1036	1.94	0.96	1036
Week 2	3.64	0.77	1005	1.94	0.97	1005
Week 3	3.59	0.80	734	1.98	0.99	734
Week 4	3.60	0.78	948	1.88	0.91	946
Week 5	3.54	0.78	956	1.97	1.00	956
Week 6	3.55	0.74	919	1.92	0.95	918
Week 7	3.56	0.75	911	1.93	0.93	911
Week 8	3.54	0.74	862	1.91	0.94	863
Week 9	3.52	0.77	877	1.96	0.97	876
Week 10	3.52	0.76	857	1.94	0.95	857
Week 11	3.51	0.76	844	1.91	0.92	844
Week 12	3.51	0.76	845	1.91	0.92	844
Week 13	3.52	0.77	820	1.92	0.95	821
Week 14	3.50	0.79	844	1.91	0.95	844
Week 15	3.52	0.78	842	1.93	0.97	842
Week 17	3.53	0.77	805	1.91	0.95	805
Week 18	3.52	0.77	804	1.91	0.92	803
Week 19	3.50	0.78	792	1.95	0.94	791
Week 20	3.51	0.76	791	1.90	0.93	790
Week 22	3.52	0.75	768	1.91	0.93	768
Week 23	3.54	0.77	773	1.89	0.93	772
Week 24	3.51	0.75	771	1.89	0.92	772
Week 25	3.51	0.78	768	1.92	0.94	768
Week 26	3.53	0.75	756	1.86	0.90	756
Week 27	3.50	0.75	757	1.88	0.90	757
Week 28	3.53	0.75	740	1.91	0.94	740
Week 29	3.50	0.76	736	1.89	0.90	736
Week 31	3.54	0.74	727	1.90	0.93	726
Week 32	3.52	0.76	726	1.90	0.92	726
Week 33	3.52	0.76	712	1.93	0.95	712
Week 34	3.51	0.77	714	1.91	0.93	714
Week 35	3.50	0.74	700	1.91	0.93	700
Week 36	3.53	0.74	699	1.90	0.91	699
Week 37	3.49	0.78	699	1.94	0.91	699
Week 38	3.53	0.78	703	1.91	0.92	703
Week 39	3.52	0.79	692	1.91	0.93	692
Week 40	3.60	0.75	691	1.86	0.92	691

Week 42	3.53	0.76	684	1.87	0.90	684
Week 43	3.55	0.76	676	1.88	0.89	674
Week 44	3.55	0.78	668	1.92	0.94	668
Week 48	3.55	0.79	628	1.90	0.91	628
Week 49	3.54	0.78	642	1.91	0.91	642
Week 50	3.52	0.77	639	1.88	0.90	639
Week 51	3.51	0.77	637	1.92	0.93	637

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*Note.* Eudaimonic Well-Being intraclass correlation (ICC) = .59; Ill-Being ICC = .63.

**Supplementary Table 3**

*Percent of Participants who Increased or Decreased based on Reliable Change Index (RCI; Zahra & Hedge, 2010) Estimates*

	% Increase	% Decrease	<i>n</i>
State Well-Being	2.7%	4.3%	625
Global Well-Being	3.2%	2.0%	592
Satisfaction With Life	3.5%	3.2%	592
State Ill-Being	2.6%	3.4%	625
CES-D	1.7%	3.4%	592

**Supplementary Table 4***Latent Growth Model Fit Statistics*

Latent Growth Model	$\chi^2$	<i>df</i>	<i>p</i>	RMSEA	RMSEA 90% CI	CFI	SRMR
State Well-Being T0-T45	1726.23	892	<.001	0.029	.027 - .031	0.952	0.062
State Ill-Being T0-T45	1350.26	892	<.001	0.021	.019 - .023	0.965	0.043



**Supplementary Table 5**

*Means and variances of changes in Weekly Well-Being (EWB) and Ill-Being (IB)*

	$\Delta T1-45$	
	<i>M</i>	<i>Var</i>
State Well-Being	0.00**	0.00***
Global Well-Being	-0.01	0.32***
Satisfaction With Life	-0.03	1.31***
State Ill-Being	0.00*	0.00***
CES-D	-0.03†	0.16***

*Note.* Latent change variables are latent change scores (LCS) for models with only two time points (i.e., Trait Well-Being, Satisfaction with Life, and CES-D from T0 to T45) and linear slope terms from latent growth curves (LGCs) for variables with more than two time points (i.e., the State Well-Being and Ill-Being models).

† $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Supplementary Table 6**

*Standardized path coefficients of perceived change predicting actual changes in well-being and ill-being at T45*

	Perceived Change at T45
State Well-Being	0.25***
Global Well-Being	0.27***
Satisfaction With Life	0.22***
State Ill-Being	0.25***
CES-D	0.29***

*Note.* Latent change variables are latent change scores (LCS; see Supplementary Figure 1) for models with only two time points (i.e., Trait Well-Being, Satisfaction with Life, and CES-D from T0 to T45) and linear slope terms from latent growth curves (LGCs) for variables with more than two time points (i.e., the State Well-Being and Ill-Being models).

**Supplementary Table 7**

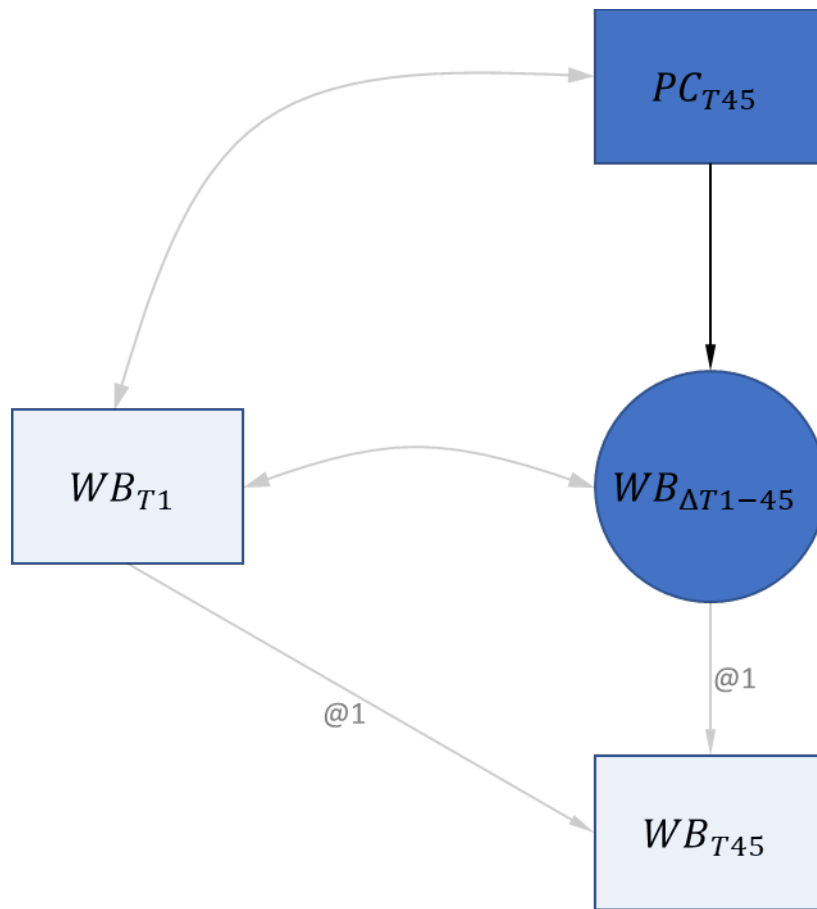
*Standardized path coefficients of perceived change predicting actual changes in well-being and ill-being controlling for age, gender, and negative life events*

	Perceived Change at T45	Perceived Change at T52
State Well-Being	0.25***	0.27***
Global Well-Being	0.27***	0.29***
Satisfaction With Life	0.23***	0.27***
State Ill-Being	0.26***	0.17**
CES-D	0.30***	0.30**

*Note.*

\* $p < .05$ . \*\*\* $p < .001$ .

*Note.* Results for Ill-Being and CES-D refer to perceived change in ill-being. Except for state variables, changes at T45 are latent change scores (LCS; see Supplementary Figure 1). Changes at T52 as well as state variables at T45 are slopes from latent growth models (LGCs; see Figure 1).



*Supplementary Figure 1.* Latent Change Score (LCS) illustration with perceived change predicting actual change.

*Note.* PC = Perceived Change. WB = Well-Being.

## Figure Captions

*Supplementary Figure 1.* Latent Change Score (LCS) illustration with perceived change predicting actual change.

**Life Satisfaction.** We also assessed global SWB using the current life satisfaction subscale of the Temporal Satisfaction of Life scale (Pavot et al., 1998). This measure was administered at the baseline, Week 45, and Week 52 assessments. The observed reliability for satisfaction with life was  $\omega_{\text{Between}} = .97$  at the between-person level, and  $\omega_{\text{Within}} = .78$  at the within-person level.

The life satisfaction growth curve model fit the data well:  $\chi^2(4) = 7.33, p = .12$ ; RMSEA = .026; CFI = .996; SRMR = .026. The average linear slope (0.00) did not differ significantly from zero ( $p = 0.66$ ), but there was significant variance (0.00) around the average slope ( $p < .001$ ) with a Growth Rate Reliability (GRR; see Rast & Hofer, 2014) of 0.54. The relationship between perceived change in well-being and actual changes in life satisfaction was  $\beta = 0.27, p < .001$ .