



Figure S1. Complete structural equation model based on FFT and literature

Table S1. Descriptive statistics and simple correlation coefficients between observed variables (N = 351)

| | E1 | E2 | E3 | N1 | N2 | N3 | St1 | St2 | St3 | D1 | D2 | D3 | D4 | D5 | Sl1 | Sl2 | Sl3 | Sl4 | Sl5 | Sl6 | Sl7 | P1 | P2 | P3 | P4 | P5 | P6 | | |
|-----|-----|------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|-----|----|----|--|--|
| E1 | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E2 | | .64* | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E3 | | | .48* | .46* | 1.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| N1 | | | | -.11* | -.04 | -.13* | 1.0 | | | | | | | | | | | | | | | | | | | | | | |
| N2 | | | | | -.26* | -.18* | -.09 | .47* | 1.0 | | | | | | | | | | | | | | | | | | | | |
| N3 | | | | | | -.21* | -.12* | -.19* | .54* | .45* | 1.0 | | | | | | | | | | | | | | | | | | |
| St1 | | | | | | | .01 | -.08 | .06 | .09 | .28* | .06 | 1.0 | | | | | | | | | | | | | | | | |
| St2 | | | | | | | | -.03 | -.09 | .03 | .13* | .31* | .09 | .87* | 1.0 | | | | | | | | | | | | | | |
| St3 | | | | | | | | | -.03 | -.10 | .00 | .14* | .36* | .14* | .87* | .85* | 1.0 | | | | | | | | | | | | |
| D1 | | | | | | | | | | -.16* | -.22* | -.05 | .06 | .36* | .06 | .58* | .59* | .61* | 1.0 | | | | | | | | | | |
| D2 | | | | | | | | | | | -.21* | -.23* | -.14* | .28* | .49* | .31* | .58* | .58* | .64* | .68* | 1.0 | | | | | | | | |
| D3 | | | | | | | | | | | | -.20* | -.23* | -.11* | .20* | .44* | .17* | .63* | .64* | .68* | .76* | .84* | 1.0 | | | | | | |
| D4 | | | | | | | | | | | | | -.17* | -.18* | -.06 | .13* | .42* | .19* | .54* | .59* | .56* | .78* | .75* | .77* | 1.0 | | | | |

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|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| D5 | -.18* | -.26* | -.09 | .01 | .26* | .01 | .54* | .53* | .56* | .70* | .54* | .67* | .59* | 1.0 | | | | | | | | | | | | | |
| Sl1 | -.27* | -.16* | -.14* | .24* | .35* | .20* | .15* | .25* | .22* | .31* | .35* | .35* | .32* | .26* | 1.0 | | | | | | | | | | | | |
| Sl2 | -.21* | -.13* | -.10 | .14* | .24* | .18* | .06 | .12* | .14* | .25* | .25* | .24* | .28* | .20* | .56* | 1.0 | | | | | | | | | | | |
| Sl3 | -.07 | -.05 | -.03 | .14* | .14* | .05 | .05 | .08 | .11* | .15* | .12* | .12* | .15* | .14* | .37* | .24* | 1.0 | | | | | | | | | | |
| Sl4 | -.13* | -.06 | -.04 | .01 | .16* | .04 | .08 | .09 | .12* | .19* | .17* | .17* | .19* | .21* | .40* | .39* | .54* | 1.0 | | | | | | | | | |
| Sl5 | -.15* | -.12* | -.14* | .18* | .24* | .18* | .11* | .20* | .20* | .23* | .32* | .28* | .24* | .14* | .44* | .36* | .17* | .23* | 1.0 | | | | | | | | |
| Sl6 | -.11* | -.06 | .01 | .06 | .20* | .03 | .20* | .27* | .22* | .26* | .22* | .28* | .25* | .24* | .51* | .38* | .22* | .21* | .27* | 1.0 | | | | | | | |
| Sl7 | -.15* | -.03 | -.15* | .23* | .25* | .25* | .10 | .17* | .13* | .17* | .33* | .30* | .26* | .13* | .38* | .29* | .07 | .08 | .33* | .23* | 1.0 | | | | | | |
| P1 | .30* | .39* | .34* | -.01 | -.14* | -.06 | -.12* | -.12* | -.12* | -.30* | -.25* | -.33* | -.26* | -.36* | -.17* | -.19* | -.14* | -.17* | -.21* | -.01 | -.13* | 1.0 | | | | | |
| P2 | .20* | .25* | .17* | -.10 | -.17* | -.10 | -.06 | -.06 | -.08 | -.20* | -.22* | -.25* | -.21* | -.32* | -.20* | -.17* | -.05 | -.13* | -.15* | -.06 | -.09 | .43* | 1.0 | | | | |
| P3 | .24* | .25* | .12* | -.10 | -.25* | -.13* | -.11* | -.12* | -.17* | -.39* | -.35* | -.33* | -.38* | -.36* | -.17* | -.18* | -.05 | -.10 | -.17* | -.04 | -.18* | .46* | .53* | 1.0 | | | |
| P4 | .30* | .37* | .22* | -.04 | -.20* | -.02 | .00 | -.06 | -.05 | -.32* | -.25* | -.29* | -.30* | -.34* | -.17* | -.18* | -.11* | -.16* | -.19* | .03 | -.05 | .56* | .43* | .49* | 1.0 | | |
| P5 | .27* | .31* | .17* | -.09 | -.18* | -.03 | -.09 | -.12* | -.10 | -.41* | -.27* | -.31* | -.34* | -.39* | -.20* | -.18* | -.11* | -.11* | -.18* | -.08 | -.08 | .46* | .40* | .47* | .69* | 1.0 | |
| P6 | .38* | .40* | .27* | -.22* | -.28* | -.18* | -.14* | -.19* | -.21* | -.40* | -.44* | -.47* | -.42* | -.46* | -.26* | -.27* | -.16* | -.18* | -.25* | -.09 | -.24* | .48* | .45* | .53* | .52* | .57* | 1.0 |
| Mean | 3.48 | 3.45 | 3.32 | 3.62 | 2.56 | 3.45 | 6.54 | 5.88 | 7.01 | 5.16 | 7.87 | 8.37 | 4.88 | 5.64 | 1.56 | 1.68 | 1.20 | 0.81 | 1.65 | 0.78 | 0.92 | 14.19 | 12.80 | 14.70 | 14.90 | 13.66 | 13.40 |

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|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| SD | 0.91 | 0.93 | 1.08 | 1.11 | 1.15 | 5.51 | 4.66 | 6.01 | 3.53 | 4.33 | 5.09 | 3.24 | 2.92 | 0.86 | 0.84 | 0.94 | 1.04 | 0.63 | 1.19 | 0.80 | 2.51 | 2.80 | 2.48 | 2.62 | 2.93 | 2.75 |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

Note: Using Pearson correlation coefficients for a total of the 27 observed variables. E1–E3 represent three extraversion item scores; N1–N3 represent three neuroticism item scores; St1–St3 indicate subscale scores, respectively, as perceptions of unpredictability, perceptions of uncontrollability, and perceptions of a heavy psychological load in the Stress of Breast Cancer after Primary Therapy Scale; D1–D5 indicate subscale scores, respectively, as loss of meaning and purpose, dysphoria, disheartenment, helplessness, and sense of failure in the Demoralization Scale; Sl1–Sl7 indicate subscale scores, respectively, as subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction in Pittsburgh Sleep Quality Inventory; and P1–P6 indicate subscale scores, respectively, as Ryff's personal growth, purpose of life, positive relationships with others, autonomy, environmental mastery, and self-acceptance in the Psychological Well-Being Scale—Short Form. * represents at least $p < .05$ (two-tailed)

Table S2. Estimated coefficients in the measurement model (N = 351)

| Observed variables | Factor loadings | S.E. | t | Completely standardized factor loadings | Measurement errors | S.E. | t | Completely Standardized measurement errors |
|---------------------------|-----------------|-------|-------|-----------------------------------------|--------------------|-------|-------|--------------------------------------------|
| Extraversion | | | | | | | | |
| E1 | 0.75 | 0.046 | 16.27 | 0.82 | 0.26 | 0.041 | 6.48 | 0.32 |
| E2 | 0.73 | 0.048 | 15.32 | 0.78 | 0.35 | 0.043 | 8.02 | 0.39 |
| E3 | 0.63 | 0.058 | 11.02 | 0.59 | 0.77 | 0.066 | 11.67 | 0.66 |
| Neuroticism | | | | | | | | |
| N1 | 0.93 | 0.105 | 8.84 | 0.84 | 0.36 | 0.177 | 2.06 | 0.30 |
| N2 | 1.09 | 0.111 | 9.88 | 0.98 | 0.05 | 0.223 | 0.24 | 0.04 |
| N3 | 0.60 | 0.077 | 7.76 | 0.52 | 0.95 | 0.096 | 9.97 | 0.73 |
| Post-breast-cancer stress | | | | | | | | |
| St1 | 4.98 | --- | --- | 0.90 | 5.64 | 0.724 | 7.79 | 0.19 |
| St2 | 4.15 | 0.130 | 32.04 | 0.88 | 4.80 | 0.552 | 8.70 | 0.22 |
| St3 | 5.74 | 0.212 | 27.01 | 0.96 | 2.89 | 0.79 | 3.66 | 0.08 |
| Demoralization | | | | | | | | |
| D1 | 2.93 | --- | --- | 0.83 | 3.86 | 0.353 | 10.95 | 0.31 |
| D2 | 3.86 | 0.195 | 19.81 | 0.90 | 3.60 | 0.383 | 9.39 | 0.19 |
| D3 | 4.73 | 0.208 | 22.73 | 0.93 | 3.60 | 0.424 | 8.50 | 0.14 |

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|--------------------------|------|-------|-------|------|------|-------|-------|------|
| D4 | 2.65 | 0.119 | 22.19 | 0.82 | 3.32 | 0.278 | 11.93 | 0.32 |
| D5 | 2.16 | 0.117 | 18.45 | 0.74 | 3.93 | 0.326 | 12.07 | 0.46 |
| Sleep disturbances | | | | | | | | |
| Sl1 | 0.75 | --- | --- | 0.88 | 0.17 | 0.034 | 4.99 | 0.23 |
| Sl2 | 0.54 | 0.047 | 11.42 | 0.64 | 0.42 | 0.037 | 11.36 | 0.59 |
| Sl3 | 0.38 | 0.053 | 7.06 | 0.40 | 0.74 | 0.058 | 12.78 | 0.84 |
| Sl4 | 0.46 | 0.060 | 7.69 | 0.44 | 0.88 | 0.069 | 12.78 | 0.81 |
| Sl5 | 0.31 | 0.035 | 8.79 | 0.50 | 0.29 | 0.024 | 12.40 | 0.75 |
| Sl6 | 0.67 | 0.066 | 10.08 | 0.56 | 0.97 | 0.080 | 12.02 | 0.69 |
| Sl7 | 0.31 | 0.045 | 7.04 | 0.39 | 0.53 | 0.042 | 12.82 | 0.84 |
| Psychological well-being | | | | | | | | |
| P1 | 1.67 | --- | --- | 0.67 | 3.40 | 0.334 | 10.19 | 0.55 |
| P2 | 1.52 | 0.174 | 8.74 | 0.55 | 5.45 | 0.439 | 12.42 | 0.70 |
| P3 | 1.61 | 0.160 | 10.03 | 0.65 | 3.57 | 0.304 | 11.74 | 0.58 |
| P4 | 1.79 | 0.158 | 11.30 | 0.69 | 3.53 | 0.363 | 9.73 | 0.52 |
| P5 | 2.01 | 0.192 | 10.45 | 0.68 | 4.60 | 0.401 | 11.46 | 0.53 |
| P6 | 2.34 | 0.200 | 11.70 | 0.84 | 2.21 | 0.330 | 6.71 | 0.29 |

Note: S.E. means standard error. Maximum likelihood estimates based on the final model with modification. However, the correlation coefficient estimates between errors were not listed here for simplicity. All the factor loadings are at 0.001 significant level. All measurement error estimates and their correlation estimates (not shown) are at least 0.05 significant level except for one (N2).