# Study 1

## Table S1. Three Factor EFA on Wellbeing Method 4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Scale** | **Items** | **Factor 1** | **Factor 2** | **Factor 3** |
| Meaning and Purpose | Domain 3.1: Overall, to what extent do you feel the things you do in your life are worthwhile?  | 0.85 | -0.09 | 0.03 |
| Happiness and Life Satisfaction | Domain 1.1: Overall, how satisfied are you with life as a whole these days? | 0.82 | -0.01 | 0.10 |
| SWLS | SWLS3: I am satisfied with my life | 0.79 | 0.06 | 0.01 |
| SWLS | SWLS2: The conditions of my life are excellent | 0.73 | 0.05 | -0.02 |
| Meaning and Purpose | Domain 3.2: I understand my purpose in life. | 0.71 | -0.08 | 0.08 |
| SWLS | SWLS1: In most ways my life is close to my ideal | 0.69 | -0.05 | 0.09 |
| Happy | Happy2: I felt happy. | 0.65 | 0.31 | -0.10 |
| Happy | Happy1: I felt cheerful. | 0.60 | 0.30 | -0.10 |
| Character and Virtue | Domain 4.1: I always act to promote good in all circumstances, even in difficult and challenging situations. | 0.58 | -0.11 | 0.02 |
| Character and Virtue | Domain 4.2: I am always able to give up some happiness now for greater happiness later. | 0.58 | -0.25 | -0.01 |
| Happiness and Life Satisfaction | Domain 1.2: In general, how happy or unhappy do you usually feel? | 0.57 | 0.21 | 0.20 |
| Mental and Physical Health | Domain 2.1: In general, how would you rate your physical health? | 0.50 | 0.09 | 0.09 |
| Mental and Physical Health | Domain 2.2: How would you rate your overall mental health?  | 0.49 | 0.37 | 0.11 |
| Anxious | Anxious1: I felt anxious. | 0.00 | 0.74 | 0.03 |
| Anxious | Anxious2: I felt worried. | 0.04 | 0.75 | -0.06 |
| Sad | Sad1: I felt sad. | 0.11 | 0.64 | 0.11 |
| Anger | Anger2: I felt irritated. | -0.03 | 0.54 | 0.18 |
| Anger | Anger1: I felt angry. | -0.09 | 0.53 | 0.24 |
| Sad | Sad2: I felt depressed. | 0.30 | 0.53 | 0.10 |
| Close Social Relationship | Domain 5.2: My relationships are as satisfying as I would want them to be. | 0.06 | -0.01 | 0.91 |
| Close Social Relationship | Domain 5.1: I am content with my friendships and relationships. | 0.00 | 0.05 | 0.84 |
|  | **Correlations** |  |  |  |
|  |  | Factor 2 | Factor 3 |  |
|  | Factor 1 | 0.58 | 0.62 |  |
|   | Factor 2 | - | 0.40 |   |

## Table S2. CFA on Wellbeing Method 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Life Satisfaction | 3. I am satisfied with my life in the past week. | 1.04 (0.92) | 0.07 | 0.90 | 1.18 |
| 1. In most ways my life is close to my ideal in the past week. | 1.00 (0.89) | 0.00 | 1.00 | 1.00 |
| 2. The conditions of my life are excellent in the past week. | 0.88 (0.76) | 0.07 | 0.73 | 1.02 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | .000 |  |  | 0.000 | 1.000 |
| Metric | 5.601 | 4 | 0.231 | 0.048 | 0.998 |
| Scalar | 13.507 | 8 | 0.096 | 0.063 | 0.994 |

*Note. No* significant changes in model fit from the saturated (configural model)

## Table S3. CFA on Wellbeing Method 2 – No Covariances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | I am satisfied with my life in the past week. | 1.04 (0.87) | 0.07 | 0.90 | 1.19 |
| In most ways my life is close to my ideal in the past week. | 1.00 (0.84) | 0.00 | 1.00 | 1.00 |
| The conditions of my life are excellent in the past week. | 0.93 (0.77) | 0.08 | 0.77 | 1.09 |
| I felt happy. | 0.81 (0.87) | 0.06 | 0.69 | 0.92 |
| I felt cheerful. | 0.71 (0.78) | 0.06 | 0.59 | 0.83 |
| WB Negative | I felt depressed. | 1.22 (0.83) | 0.12 | 0.98 | 1.45 |
| I felt angry. | 1.00 (0.71) | 0.00 | 1.00 | 1.00 |
| I felt sad. | 0.97 (0.81) | 0.10 | 0.78 | 1.16 |
| I felt anxious. | 0.94 (0.77) | 0.10 | 0.75 | 1.14 |
| I felt irritated. | 0.88 (0.71) | 0.10 | 0.68 | 1.07 |
| I felt worried. | 0.86 (0.72) | 0.10 | 0.67 | 1.05 |
| **Covariances** |  |  |  |  |  |
|   | WB Positive ~~ WB Negative | 1.29 (0.81) | 0.20 | 0.89 | 1.69 |

*Note.* All p-values are less than .001.

## Table S4. CFA on Wellbeing Method 2 – Including Covariances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | I am satisfied with my life in the past week. | 1.03 (0.94) | 0.06 | 0.93 | 1.14 |
| In most ways my life is close to my ideal in the past week. | 1.00 (0.89) | 0.00 | 1.00 | 1.00 |
| The conditions of my life are excellent in the past week. | 0.89 (0.82) | 0.06 | 0.93 | 1.14 |
| I felt happy. | 0.70 (0.80) | 0.05 | 0.60 | 0.80 |
| I felt cheerful. | 0.61 (0.73) | 0.05 | 0.51 | 0.71 |
| WB Negative | I felt depressed. | 1.38 (0.87) | 0.14 | 1.10 | 1.65 |
| I felt sad. | 1.16 (0.87) | 0.12 | 0.93 | 1.40 |
| I felt angry. | 1.00 (0.70) | 0.00 | 1.00 | 1.00 |
| I felt worried. | 0.92 (0.70) | 0.11 | 0.70 | 1.14 |
| I felt irritated. | 0.89 (0.69) | 0.09 | 0.72 | 1.07 |
| I felt anxious. | 0.88 (0.71) | 0.10 | 0.67 | 1.08 |
| **Covariances** |  |  |  |  |  |
|  | Anxious ~~ Worried | 0.52 (0.54) | 0.10 | 0.33 | 0.72 |
|  | Cheerful ~~ Happy | 0.33 (0.53) | 0.06 | 0.21 | 0.45 |
|  | Angry ~~ Irritated | 0.32 (0.29) | 0.11 | 0.12 | 0.53 |
|  | Sad ~~ Depressed | 0.02 (0.03) | 0.10 | -0.18 | 0.21 |
|   | WB Positive ~~ WB Negative | 1.23 (0.79) | 0.20 | 0.84 | 1.62 |

*Note.* All p-values are less than .001 except for covariance between Sad and Depressed (p=.87). RMSEA=.08[.06, .11], CFI=.97.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 248.890 | 117 |  | 0.080 | 0.967 |
| Metric | 263.335 | 135 | 0.700 | 0.074 | 0.968 |
| Scalar | 287.895 | 153 | 0.138 | 0.071 | 0.966 |

*Note. No* significant changes in model fit from the configural model

## Table S5. CFA on Wellbeing Method 3 – No Covariance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Flourishing | Domain 3.2: I understand my purpose in life. | 1.01 (0.72) | 0.08 | 0.85 | 1.18 |
| Domain 1.1: Overall, how satisfied are you with life as a whole these days? | 1.00 (0.89) | 0.00 | 1.00 | 1.00 |
| Domain 2.2: How would you rate your overall mental health? | 1.00 (0.81) | 0.07 | 0.86 | 1.13 |
| Domain 3.1: Overall, to what extent do you feel the things you do in your life are worthwhile? | 0.93 (0.79) | 0.07 | 0.80 | 1.06 |
| Domain 5.2: My relationships are as satisfying as I would want them to be. | 0.90 (0.69) | 0.08 | 0.75 | 1.06 |
| Domain 1.2: In general, how happy or unhappy do you usually feel? | 0.86 (0.85) | 0.05 | 0.76 | 0.97 |
| Domain 5.1: I am content with my friendships and relationships. | 0.80 (0.65) | 0.08 | 0.65 | 0.95 |
| Domain 2.1: In general, how would you rate your physical health? | 0.76 (0.63) | 0.08 | 0.61 | 0.91 |
| Domain 4.1: I always act to promote good in all circumstances, even in difficult and challenging situations. | 0.61 (0.55) | 0.07 | 0.46 | 0.75 |
| Domain 4.2: I am always able to give up some happiness now for greater happiness later. | 0.48 (0.42) | 0.08 | 0.32 | 0.64 |

*Note.* All p-values are less than .001. RMSEA = 0.16 [0.14, 0.19], CFI = 0.84.

## Table S6. CFA on Wellbeing Method 3 – Including Covariances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Flourishing | Domain 2.2: How would you rate your overall mental health? | 1.14 (0.88) | 0.07 | 1.00 | 1.28 |
| Domain 3.2: I understand my purpose in life. | 1.06 (0.78) | 0.08 | 0.90 | 1.22 |
| Domain 1.2: In general, how happy or unhappy do you usually feel? | 1.02 (0.87) | 0.06 | 0.89 | 1.14 |
| Domain 1.1: Overall, how satisfied are you with life as a whole these days? | 1.00 (0.89) | 0.00 | 1.00 | 1.00 |
| Domain 3.1: Overall, to what extent do you feel the things you do in your life are worthwhile? | 0.92 (0.82) | 0.07 | 0.79 | 1.05 |
| Domain 4.1: I always act to promote good in all circumstances, even in difficult and challenging situations. | 0.84 (0.72) | 0.07 | 0.70 | 0.98 |
| Domain 5.2: My relationships are as satisfying as I would want them to be. | 0.82 (0.66) | 0.08 | 0.66 | 0.98 |
| Domain 5.1: I am content with my friendships and relationships. | 0.81 (0.66) | 0.08 | 0.65 | 0.97 |
| Domain 2.1: In general, how would you rate your physical health? | 0.80 (0.61) | 0.09 | 0.63 | 0.98 |
| Domain 4.2: I am always able to give up some happiness now for greater happiness later. | 0.54 (0.49) | 0.08 | 0.38 | 0.69 |
| **Covariances** |  |  |  |  |  |
|   | Domain 5.1: I am content with my friendships and relationships. ~~ Domain 5.2: My relationships are as satisfying as I would want them to be | 2.84 (0.80) | 0.37 | 2.12 | 3.57 |

All p-values are less than .001. RMSEA = .10 [.07, .12], CFI=.96.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 289.091 | 102 |  | 0.102 | 0.951 |
| Metric | 305.427 | 120 | 0.569 | 0.094 | 0.952 |
| Scalar | 333.653 | 138 | 0.059 | .090 | 0.949 |

*Note.* No significant changes in model fit from the configural model

## Table S7. CFA on Wellbeing Method 4 – No Covariances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Domain 2.2: How would you rate your overall mental health? | 1.77 (0.87) | 0.13 | 1.51 | 2.02 |
| Domain 3.2: I understand my purpose in life. | 1.61 (0.76) | 0.14 | 1.33 | 1.89 |
| Domain 1.2: In general, how happy or unhappy do you usually feel? | 1.60 (0.88) | 0.12 | 1.38 | 1.83 |
| Domain 1.1: Overall, how satisfied are you with life as a whole these days? | 1.56 (0.89) | 0.11 | 1.34 | 1.78 |
| Domain 3.1: Overall, to what extent do you feel the things you do in your life are worthwhile? | 1.42 (0.81) | 0.12 | 1.20 | 1.65 |
| Domain 5.2: My relationships are as satisfying as I would want them to be. | 1.27 (0.66) | 0.14 | 1.00 | 1.53 |
| Domain 4.1: I always act to promote good in all circumstances, even in difficult and challenging situations. | 1.27 (0.70) | 0.13 | 1.03 | 1.52 |
| Domain 2.1: In general, how would you rate your physical health? | 1.25 (0.61) | 0.15 | 0.97 | 1.54 |
| Domain 5.1: I am content with my friendships and relationships. | 1.23 (0.64) | 0.14 | 0.97 | 1.50 |
| I am satisfied with my life in the past week. | 1.07 (0.85) | 0.08 | 0.91 | 1.23 |
| In most ways my life is close to my ideal in the past week. | 1.00 (0.80) | 0.00 | 1.00 | 1.00 |
| The conditions of my life are excellent in the past week. | 0.95 (0.74) | 0.09 | 0.78 | 1.12 |
| I felt happy. | 0.81 (0.83) | 0.06 | 0.69 | 0.94 |
| Domain 4.2: I am always able to give up some happiness now for greater happiness later. | 0.79 (0.46) | 0.13 | 0.54 | 1.04 |
| I felt cheerful. | 0.73 (0.76) | 0.07 | 0.60 | 0.86 |
| WB Negative | I felt depressed. | 1.26 (0.85) | 0.12 | 1.02 | 1.50 |
| I felt angry. | 1.00 (0.70) | 0.00 | 1.00 | 1.00 |
| I felt sad. | 1.00 (0.82) | 0.10 | 0.80 | 1.19 |
| I felt anxious. | 0.95 (0.76) | 0.10 | 0.75 | 1.15 |
| I felt irritated. | 0.88 (0.70) | 0.10 | 0.68 | 1.08 |
| I felt worried. | 0.86 (0.71) | 0.10 | 0.67 | 1.06 |
| **Covariances** |  |  |  |  |  |
|   | WB Positive ~~ WB Negative | 1.26 (0.85) | 0.20 | 0.87 | 1.65 |

*Note.* All p-values are less than .001. RMSEA = .12 [.11, .13], CFI=.84.

## Table S8. CFA on Wellbeing Method 4 – Including Covariances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Domain 2.2: How would you rate your overall mental health? | 1.76 (0.87) | 0.13 | 1.50 | 2.01 |
| Domain 3.2: I understand my purpose in life. | 1.61 (0.76) | 0.14 | 1.33 | 1.89 |
| Domain 1.2: In general, how happy or unhappy do you usually feel? | 1.60 (0.88) | 0.12 | 1.38 | 1.83 |
| Domain 1.1: Overall, how satisfied are you with life as a whole these days? | 1.56 (0.89) | 0.11 | 1.34 | 1.78 |
| Domain 3.1: Overall, to what extent do you feel the things you do in your life are worthwhile? | 1.42 (0.81) | 0.12 | 1.19 | 1.65 |
| Domain 4.1: I always act to promote good in all circumstances, even in difficult and challenging situations. | 1.27 (0.70) | 0.13 | 1.02 | 1.51 |
| Domain 2.1: In general, how would you rate your physical health? | 1.26 (0.62) | 0.15 | 0.97 | 1.54 |
| Domain 5.2: My relationships are as satisfying as I would want them to be. | 1.23 (0.64) | 0.14 | 0.96 | 1.49 |
| Domain 5.1: I am content with my friendships and relationships. | 1.19 (0.62) | 0.14 | 0.92 | 1.46 |
| I am satisfied with my life in the past week. | 1.07 (0.86) | 0.08 | 0.91 | 1.23 |
| In most ways my life is close to my ideal in the past week. | 1.00 (0.80) | 0.00 | 1.00 | 1.00 |
| The conditions of my life are excellent in the past week. | 0.95 (0.75) | 0.09 | 0.78 | 1.12 |
| I felt happy. | 0.82 (0.84) | 0.06 | 0.69 | 0.94 |
| Domain 4.2: I am always able to give up some happiness now for greater happiness later. | 0.79 (0.46) | 0.13 | 0.54 | 1.04 |
| I felt cheerful. | 0.73 (0.77) | 0.07 | 0.61 | 0.86 |
| WB Negative | I felt depressed. | 1.26 (0.85) | 0.12 | 1.02 | 1.50 |
| I felt angry. | 1.00 (0.70) | 0.00 | 1.00 | 1.00 |
| I felt sad. | 0.99 (0.82) | 0.10 | 0.80 | 1.19 |
| I felt anxious. | 0.95 (0.76) | 0.10 | 0.75 | 1.15 |
| I felt irritated. | 0.88 (0.70) | 0.10 | 0.68 | 1.08 |
| I felt worried. | 0.86 (0.71) | 0.10 | 0.67 | 1.06 |
| **Covariances** |  |  |  |  |  |
|  | Domain 5.1: I am content with my friendships and relationships. ~~ Domain 5.2: My relationships are as satisfying as I would want them to be | 3.10 (0.81) | 0.39 | 2.33 | 3.86 |
|   | WB Positive ~~ WB Negative | 1.26 (0.85) | 0.20 | 0.88 | 1.66 |

All p-values are less than .001. RMSEA=.09[.08, .11], CFI=.90.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 1573.451 | 561 |  | 0.102 | 0.885 |
| Metric | 1599.908 | 599 | 0.921 | 0.098 | 0.886 |
| Scalar | 1657.08 | 637 | 0.024 | 0.096 | 0.884 |

*Note.* No changes in model fit between the configural model and metric models, but introducing scalar invariance led to significantly worse fit, and indication of intercept change across time periods.

## Table S9. CFA on Decentering – No Covariances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Meta-Awareness | 3. I can watch my thoughts and emotions drift by like leaves on a stream. | 1.25 (0.80) | 0.13 | 0.99 | 1.51 |
| 4. I can watch my thoughts and emotions come and go like clouds.  | 1.11 (0.72) | 0.13 | 0.86 | 1.35 |
| 5. I am able to step back and watch my mind work. | 1.09 (0.71) | 0.13 | 0.85 | 1.34 |
| 2. I am able to watch my thoughts and feelings like someone watching a movie. | 1.08 (0.69) | 0.13 | 0.83 | 1.33 |
| 1. I am able to watch myself thinking. | 1.00 (0.70) | 0.00 | 1.00 | 1.00 |
| Disidentification | 10. I am separate from my changing thoughts and feelings. | 1.43 (0.82) | 0.20 | 1.04 | 1.81 |
| 9. My thoughts and emotions are part of me, but they are not me. | 1.39 (0.69) | 0.21 | 0.99 | 1.80 |
| 8. My sense of self is separate from my changing thoughts and feelings. | 1.26 (0.69) | 0.19 | 0.89 | 1.62 |
| 7. I am more than my thoughts and feelings. | 1.20 (0.66) | 0.18 | 0.84 | 1.56 |
| 6. My sense of self is larger than my thoughts and feelings. | 1.00 (0.55) | 0.00 | 1.00 | 1.00 |
| Nonreactivity | 13. When I have distressing thoughts or emotions, I just notice them and let them go. | 3.58 (0.80) | 1.21 | 1.21 | 5.95 |
| 12. I can step back and be aware of distressing thoughts and emotions without being taken over by them. | 3.33 (0.73) | 1.13 | 1.11 | 5.55 |
| 15. When I have distressing thoughts or feelings I am able just to notice them without reacting. | 3.22 (0.79) | 1.09 | 1.09 | 5.36 |
| 14. I can be aware of unpleasant thoughts or feelings without immediately reacting to them. | 2.98 (0.72) | 1.02 | 0.99 | 4.97 |
| 11. I can observe unpleasant thoughts and feelings without trying to change them. | 1.00 (0.23) | 0.00 | 1.00 | 1.00 |
| **Covariances** |  |  |  |  |  |
|  | Meta-Awareness ~~ Disidentification | 0.17 (0.43) | 0.04 | 0.08 | 0.25 |
|  | Meta-Awareness ~~ Nonreactivity | 0.06 (0.37) | 0.02 | 0.01 | 0.10 |
|   | Disidentification ~~ Nonreactivity | 0.04 (0.34) | 0.02 | 0.01 | 0.07 |

*Note.* All item estimates are significant at p < 0.001, and factor covariance p-values are less than 0.03.

## Table S10. CFA on Decentering – Including Covariances

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Meta-Awareness | 2. I am able to watch my thoughts and feelings like someone watching a movie. | 1.12 (0.76) | 0.12 | 0.89 | 1.34 |
| 5. I am able to step back and watch my mind work. | 1.00 (0.78) | 0.10 | 0.80 | 1.20 |
| 1. I am able to watch myself thinking. | 1.00 (0.78) | 0.00 | 1.00 | 1.00 |
| 3. I can watch my thoughts and emotions drift by like leaves on a stream. | 0.99 (0.75) | 0.10 | 0.79 | 1.20 |
| 4. I can watch my thoughts and emotions come and go like clouds.  | 0.76 (0.58) | 0.11 | 0.55 | 0.97 |
| Disidentification | 10. I am separate from my changing thoughts and feelings. | 1.30 (0.84) | 0.15 | 1.00 | 1.60 |
| 9. My thoughts and emotions are part of me, but they are not me. | 1.22 (0.74) | 0.16 | 0.92 | 1.53 |
| 8. My sense of self is separate from my changing thoughts and feelings. | 1.11 (0.73) | 0.14 | 0.83 | 1.39 |
| 6. My sense of self is larger than my thoughts and feelings. | 1.00 (0.64) | 0.00 | 1.00 | 1.00 |
| 7. I am more than my thoughts and feelings. | 1.09 (0.73) | 0.14 | 0.81 | 1.36 |
| Nonreactivity | 15. When I have distressing thoughts or feelings I am able just to notice them without reacting. | 2.45 (0.85) | 0.49 | 1.49 | 3.41 |
| 12. I can step back and be aware of distressing thoughts and emotions without being taken over by them. | 2.30 (0.81) | 0.47 | 1.39 | 3.21 |
| 14. I can be aware of unpleasant thoughts or feelings without immediately reacting to them. | 2.14 (0.80) | 0.44 | 1.29 | 3.00 |
| 13. When I have distressing thoughts or emotions, I just notice them and let them go. | 2.09 (0.72) | 0.44 | 1.23 | 2.94 |
| 11. I can observe unpleasant thoughts and feelings without trying to change them. | 1.00 (0.39) | 0.00 | 1.00 | 1.00 |
| **Covariances** |  |  |  |  |  |
|  | 3. I can watch my thoughts and emotions drift by like leaves on a stream. ~~ 4. I can watch my thoughts and emotions come and go like clouds.  | 0.27 (0.55) | 0.05 | 0.17 | 0.37 |
|  | Meta-Awareness ~~ Disidentification | 0.17 (0.42) | 0.04 | 0.09 | 0.26 |
|  | Meta-Awareness ~~ Nonreactivity | 0.12 (0.52) | 0.03 | 0.06 | 0.19 |
|   | Disidentification ~~ Nonreactivity | 0.07 (0.35) | 0.02 | 0.02 | 0.11 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 534.195 | 258 |  | 0.078 | 0.930 |
| Metric | 561.648 | 282 | 0.284 | 0.075 | 0.929 |
| Scalar | 591.890 | 306 | 0.177 | .0730 | 0.927 |

*Note.* No significant changes in model fit from the configural model

## Table S11. CFA on Reappraisal

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **p-value** | **95% CI** |
| Change Efficacy | 6. When I want to feel less negative emotion, I change the way I’m thinking about the situation.  | 1.38 (0.89) | 0.12 | 0.00 | 1.14 | 1.62 |
| 4. When I want to feel more positive emotion, I change the way I’m thinking about the situation. | 1.32 (0.91) | 0.12 | 0.00 | 1.09 | 1.54 |
| 5. I control my emotions by changing the way I think about the situation I’m in.  | 1.24 (0.83) | 0.12 | 0.00 | 1.01 | 1.48 |
| 3. When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm.  | 1.09 (0.71) | 0.12 | 0.00 | 0.85 | 1.33 |
| 1. When I want to feel more positive emotion (such as joy or amusement), I change what I’m thinking about.  | 1.00 (0.72) | 0.00 | NA | 1.00 | 1.00 |
| 2. When I want to feel less negative emotion (such as sadness or anger), I change what I’m thinking about. | 0.97 (0.69) | 0.11 | 0.00 | 0.75 | 1.19 |
|  Perspective Taking | 8. I like to look at difficult situations from many different angles. | 1.05 (0.88) | 0.07 | 0.00 | 0.91 | 1.19 |
| 7. I consider multiple options before making a decision. | 1.00 (0.86) | 0.00 | NA | 1.00 | 1.00 |
| 10. I often look at a situation from different viewpoints. | 0.99 (0.84) | 0.07 | 0.00 | 0.85 | 1.14 |
| 11. When I encounter difficult situations, I stop and try to think of several ways to resolve it. | 0.99 (0.84) | 0.07 | 0.00 | 0.85 | 1.13 |
| 9. When in difficult situations, I consider multiple options before deciding how to behave. | 0.89 (0.79) | 0.07 | 0.00 | 0.75 | 1.04 |
|  Approach Positive | 13. I try to look for something positive in what happened this week. | 1.12 (0.97) | 0.07 | 0.00 | 0.99 | 1.25 |
| 14. I try to think of positive aspects of this week. | 1.09 (0.94) | 0.07 | 0.00 | 0.96 | 1.22 |
| 12. I try to think of positive consequences of this week. | 1.00 (0.83) | 0.00 | NA | 1.00 | 1.00 |
| Avoid Negative   | 16. This week has less effect on my life than I thought it would have. | 1.21 (0.88) | 0.15 | 0.00 | 0.92 | 1.50 |
| 15. The consequences of this week are not as significant as I thought they would be. | 1.00 (0.72) | 0.00 | NA | 1.00 | 1.00 |
| 17. This week is not as meaningful as I initially thought it was. | 0.95 (0.71) | 0.12 | 0.00 | 0.72 | 1.17 |
| **Covariances** |  |  |  |  |  |  |
|  | Change Efficacy ~~ Perspective Taking | 0.32 (0.43) | 0.07 | 0.00 | 0.18 | 0.46 |
|  | Change Efficacy ~~ Approach Positive | 0.57 (0.60) | 0.11 | 0.00 | 0.37 | 0.78 |
|  | Change Efficacy ~~ Avoid Negative   | -0.11 (-0.12) | 0.08 | 0.18 | -0.26 | 0.05 |
|  | Perspective Taking ~~ Approach Positive | 0.26 (0.24) | 0.09 | 0.01 | 0.07 | 0.44 |
|  | Perspective Taking ~~ Avoid Negative   | -0.11 (-0.11) | 0.09 | 0.20 | -0.29 | 0.06 |
|   |  Approach Positive ~~ Avoid Negative   | -0.08 (-0.06) | 0.11 | 0.50 | -0.30 | 0.14 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 788.286 | 339 |  | 0.087 | 0.921 |
| Metric | 842.033 | 365 | .001 | 0.087 | 0.916 |
| Scalar | 870.142 | 391 | .353 | 0.084 | 0.916 |

*Note.* Introducing metric invariance led to significant changes in the χ2 but did not reduce the RMSEA.

# Study 2 Confirmatory Factor Analyses (CFA)

## Table S12. CFA on Wellbeing Method 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Life Satisfaction | 2. The conditions of my life are excellent in the past week. | 1.02 (0.84) | 0.09 | 0.85 | 1.18 |
| 3. I am satisfied with my life in the past week. | 1.01 (0.84) | 0.09 | 0.85 | 1.18 |
| 1. In most ways my life is close to my ideal in the past week. | 1.00 (0.83) | 0.00 | 1.00 | 1.00 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 0.000 |  |  | .000 | 1.000 |
| Metric | 5.024 | 6 | 0.541 | .000 | 1.000 |
| Scalar | 11.197 | 12 | 0.404 | .000 | 1.00† |

*Note. No* significant changes in model fit from the configural model

## Table S13. CFA on Wellbeing Method 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | I am satisfied with my life in the past week. | 1.06 (0.88) | 0.08 | 0.89 | 1.22 |
| In most ways my life is close to my ideal in the past week. | 1.00 (0.84) | 0.00 | 1.00 | 1.00 |
| The conditions of my life are excellent in the past week. | 0.94 (0.77) | 0.09 | 0.76 | 1.12 |
| I felt happy. | 0.59 (0.74) | 0.06 | 0.47 | 0.71 |
| I felt cheerful. | 0.56 (0.70) | 0.06 | 0.44 | 0.67 |
| WB Negative | I felt depressed. | 1.13 (0.79) | 0.12 | 0.90 | 1.37 |
| I felt sad. | 1.00 (0.87) | 0.09 | 0.82 | 1.18 |
| I felt angry. | 1.00 (0.79) | 0.00 | 1.00 | 1.00 |
| I felt anxious. | 0.85 (0.67) | 0.10 | 0.65 | 1.05 |
| I felt irritated. | 0.78 (0.68) | 0.08 | 0.62 | 0.94 |
| I felt worried. | 0.71 (0.66) | 0.09 | 0.54 | 0.88 |
| **Covariances** |  |  |  |  |  |
|  | Anxious ~~ Worried | 0.54 (0.53) | 0.11 | 0.33 | 0.75 |
|  | Cheerful ~~ Happy | 0.25 (0.51) | 0.05 | 0.15 | 0.36 |
|  | Angry ~~ Irritated | 0.22 (0.24) | 0.10 | 0.03 | 0.41 |
|  | Sad ~~ Depressed | 0.08 (0.11) | 0.10 | -0.11 | 0.26 |
|   | Wellbeing Positive ~~ Wellbeing Negative | 1.22 (0.83) | 0.20 | 0.83 | 1.61 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 553.435 | 172 |  | 0.137 | 0.891 |
| Metric | 583.191 | 199 | .325 | 0.127 | 0.891 |
| Scalar | 612.232 | 226 | .359 | 0.120 | 0.890 |

*Note.* No significant changes in model fit from the configural model

## Table S14. CFA on Wellbeing Method 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Flourishing | Domain 1.1: Overall, how satisfied are you with life as a whole these days? | 1.00 (0.87) | 0.00 | 1.00 | 1.00 |
| Domain 2.2: How would you rate your overall mental health? | 0.93 (0.84) | 0.07 | 0.79 | 1.07 |
| Domain 3.2: I understand my purpose in life. | 0.90 (0.74) | 0.09 | 0.74 | 1.07 |
| Domain 3.1: Overall, to what extent do you feel the things you do in your life are worthwhile? | 0.85 (0.77) | 0.08 | 0.70 | 0.99 |
| Domain 4.1: I always act to promote good in all circumstances, even in difficult and challenging situations. | 0.82 (0.73) | 0.08 | 0.67 | 0.98 |
| Domain 1.2: In general, how happy or unhappy do you usually feel? | 0.77 (0.82) | 0.06 | 0.65 | 0.89 |
| Domain 5.1: I am content with my friendships and relationships. | 0.75 (0.64) | 0.09 | 0.58 | 0.93 |
| Domain 5.2: My relationships are as satisfying as I would want them to be. | 0.74 (0.62) | 0.09 | 0.56 | 0.91 |
| Domain 2.1: In general, how would you rate your physical health? | 0.67 (0.59) | 0.09 | 0.50 | 0.84 |
| Domain 4.2: I am always able to give up some happiness now for greater happiness later. | 0.43 (0.36) | 0.10 | 0.24 | 0.63 |
| **Covariances** |  |  |  |  |  |
|   | Domain 5.1: I am content with my friendships and relationships. ~~ Domain 5.2: My relationships are as satisfying as I would want them to be | 2.36 (0.71) | 0.36 | 1.65 | 3.07 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 658.783 | 140 |  | 0.176 | 0.847 |
| Metric | 681.984 | 167 | 0.674 | 0.161 | 0.848 |
| Scalar | 697.210 | 194 | 0.966 | 0.148 | 0.851 |

*Note.* No significant changes in model fit from the configural model

## Table S15. CFA on Wellbeing Method 4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Domain 2.2: How would you rate your overall mental health? | 1.61 (0.87) | 0.07 | 1.47 | 1.74 |
| Domain 1.1: Overall, how satisfied are you with life as a whole these days? | 1.59 (0.89) | 0.07 | 1.46 | 1.71 |
| Domain 3.2: I understand my purpose in life. | 1.44 (0.72) | 0.08 | 1.29 | 1.6 |
| Domain 1.2: In general, how happy or unhappy do you usually feel? | 1.41 (0.87) | 0.06 | 1.29 | 1.52 |
| Domain 3.1: Overall, to what extent do you feel the things you do in your life are worthwhile? | 1.37 (0.79) | 0.07 | 1.24 | 1.5 |
| Domain 5.2: My relationships are as satisfying as I would want them to be. | 1.22 (0.67) | 0.08 | 1.08 | 1.37 |
| Domain 5.1: I am content with my friendships and relationships. | 1.22 (0.65) | 0.08 | 1.07 | 1.38 |
| Domain 4.1: I always act to promote good in all circumstances, even in difficult and challenging situations. | 1.17 (0.68) | 0.07 | 1.03 | 1.31 |
| Domain 2.1: In general, how would you rate your physical health? | 1.14 (0.61) | 0.08 | 0.99 | 1.3 |
| I am satisfied with my life in the past week. | 1.07 (0.86) | 0.05 | 0.97 | 1.16 |
| In most ways my life is close to my ideal in the past week. | 1.00 (0.82) | 0.00 | 1.00 | 1.00 |
| The conditions of my life are excellent in the past week. | 0.84 (0.68) | 0.05 | 0.74 | 0.94 |
| Domain 4.2: I am always able to give up some happiness now for greater happiness later. | 0.72 (0.4) | 0.08 | 0.56 | 0.87 |
| I felt cheerful. | 0.65 (0.75) | 0.04 | 0.58 | 0.72 |
| I felt happy. | 0.64 (0.72) | 0.04 | 0.57 | 0.71 |
| WB Negative | I felt depressed. | 1.42 (0.84) | 0.08 | 1.26 | 1.58 |
| I felt angry. | 1.21 (0.87) | 0.07 | 1.08 | 1.35 |
| I felt sad. | 1.00 (0.70) | 0.00 | 1.00 | 1.00 |
| I felt anxious. | 0.96 (0.71) | 0.07 | 0.83 | 1.09 |
| I felt irritated. | 0.96 (0.71) | 0.07 | 0.83 | 1.09 |
| I felt worried. | 0.85 (0.69) | 0.06 | 0.73 | 0.97 |
| **Covariances** |  |  |  |  |  |
|  | Domain 5.1: I am content with my friendships and relationships. ~~ Domain 5.2: My relationships are as satisfying as I would want them to be | 1.96 (0.65) | 0.17 | 1.62 | 2.29 |
|   | WB Positive ~~ WB Negative | -1.03 (-0.82) | 0.1 | -1.22 | -0.84 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 1641.029 | 748 |  | 0.100 | 0.885 |
| Metric | 1692.749 | 805 | 0.673 | 0.096 | 0.886 |
| Scalar | 1741.534 | 862 | 0.772 | 0.093 | 0.887 |

*Note.* No significant changes in model fit from the configural model.

## Table S16. CFA on Decentering

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| Meta-Awareness | I can watch my thoughts and emotions drift by like leaves on a stream. | 0.98 (0.68) | 0.11 | 0.76 | 1.20 |
| I can watch my thoughts and emotions come and go like clouds.  | 0.81 (0.58) | 0.11 | 0.60 | 1.03 |
| I am able to step back and watch my mind work. | 1.09 (0.77) | 0.11 | 0.87 | 1.31 |
| I am able to watch my thoughts and feelings like someone watching a movie. | 1.05 (0.73) | 0.11 | 0.83 | 1.28 |
| I am able to watch myself thinking. | 1.00 (0.76) | 0.00 | 1.00 | 1.00 |
| Disidentification | I am separate from my changing thoughts and feelings. | 1.42 (0.82) | 0.19 | 1.04 | 1.80 |
| My thoughts and emotions are part of me, but they are not me. | 1.38 (0.69) | 0.21 | 0.98 | 1.79 |
| My sense of self is separate from my changing thoughts and feelings. | 1.25 (0.69) | 0.19 | 0.89 | 1.61 |
| I am more than my thoughts and feelings. | 1.12 (0.66) | 0.18 | 0.84 | 1.55 |
| My sense of self is larger than my thoughts and feelings. | 1.00 (0.56) | 0.00 | 1.00 | 1.00 |
| Nonreactivity | When I have distressing thoughts or emotions, I just notice them and let them go. | 3.59 (0.80) | 1.22 | 1.21 | 5.98 |
| I can step back and be aware of distressing thoughts and emotions without being taken over by them. | 3.34 (0.73) | 1.14 | 1.10 | 5.58 |
| When I have distressing thoughts or feelings I am able just to notice them without reacting. | 3.24 (0.79) | 1.10 | 1.08 | 5.39 |
| I can be aware of unpleasant thoughts or feelings without immediately reacting to them. | 3.00 (0.72) | 1.03 | 0.99 | 5.00 |
| I can observe unpleasant thoughts and feelings without trying to change them. | 1.00 (0.23) | 0.00 | 1.00 | 1.00 |
| **Covariances** |  |  |  |  |  |
| I can watch my thoughts and emotions drift by like leaves on a stream. ~~ I can watch my thoughts and emotions come and go like clouds.  | 0.39 (0.56) | 0.07 | 0.26 | 0.53 |
| Meta-Awareness ~~ Disidentification | 0.18 (0.44) | 0.05 | 0.09 | 0.27 |
| Meta-Awareness ~~ Nonreactivity | 0.06 (0.36) | 0.02 | 0.01 | 0.11 |
| Disidentification ~~ Nonreactivity | 0.04 (0.34) | 0.02 | 0.01 | 0.07 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 844.338 | 348 |  | 0.109 | 0.859 |
| Metric | 902.062 | 384 | .012 | 0.106 | 0.853 |
| Scalar | 922.276 | 420 | .984 | 0.100 | 0.858 |

*Note.* Introducing metric invariance led to significant changes in the χ2 but did not reduce the RMSEA.

## Table S17. CFA on Reappraisal

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **p-value** | **95% CI** |
| Change Efficacy | 6. When I want to feel less negative emotion, I change the way I’m thinking about the situation.  | 1.23 (0.86) | 0.13 | 0.00 | 0.97 | 1.48 |
| 5. I control my emotions by changing the way I think about the situation I’m in.  | 1.26 (0.85) | 0.14 | 0.00 | 1.00 | 1.53 |
| 4. When I want to feel more positive emotion, I change the way I’m thinking about the situation. | 1.22 (0.84) | 0.13 | 0.00 | 0.95 | 1.48 |
| 2. When I want to feel less negative emotion (such as sadness or anger), I change what I’m thinking about. | 1.08 (0.75) | 0.13 | 0.00 | 0.83 | 1.33 |
| 3. When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm.  | 1.06 (0.71) | 0.14 | 0.00 | 0.80 | 1.33 |
| 1. When I want to feel more positive emotion (such as joy or amusement), I change what I’m thinking about.  | 1.00 (0.68) | 0.00 | NA | 1.00 | 1.00 |
|  Perspective Taking | 8. I like to look at difficult situations from many different angles. | 1.31 (0.88) | 0.11 | 0.00 | 1.09 | 1.53 |
| 10. I often look at a situation from different viewpoints. | 1.03 (0.83) | 0.10 | 0.00 | 0.85 | 1.22 |
| 7. I consider multiple options before making a decision. | 1.00 (0.79) | 0.00 | NA | 1.00 | 1.00 |
| 9. When in difficult situations, I consider multiple options before deciding how to behave. | 0.93 (0.76) | 0.10 | 0.00 | 0.75 | 1.12 |
| 11. When I encounter difficult situations, I stop and try to think of several ways to resolve it. | 1.08 (0.70) | 0.12 | 0.00 | 0.84 | 1.32 |
|  Approach Positive | 13. I try to look for something positive in what happened this week. | 1.23 (0.94) | 0.08 | 0.00 | 1.07 | 1.38 |
| 14. I try to think of positive aspects of this week. | 1.20 (0.96) | 0.07 | 0.00 | 1.06 | 1.35 |
| 12. I try to think of positive consequences of this week. | 1.00 (0.84) | 0.00 | NA | 1.00 | 1.00 |
| Avoid Negative   | 16. This week has less effect on my life than I thought it would have. | 1.36 (0.91) | 0.17 | 0.00 | 1.02 | 1.69 |
| 17. This week is not as meaningful as I initially thought it was. | 1.09 (0.73) | 0.14 | 0.00 | 0.82 | 1.37 |
| 15. The consequences of this week are not as significant as I thought they would be. | 1.00 (0.70) | 0.00 | NA | 1.00 | 1.00 |
| **Covariances** |  |  |  |  |  |  |
|  | Change Efficacy ~~ Perspective Taking | 0.20 (0.34) | 0.06 | 0.00 | 0.08 | 0.32 |
|  | Change Efficacy ~~ Approach Positive | 0.55 (0.61) | 0.11 | 0.00 | 0.33 | 0.76 |
|  | Change Efficacy ~~ Avoid Negative   | -0.12 (-0.14) | 0.08 | 0.14 | -0.27 | 0.04 |
|  | Perspective Taking ~~ Approach Positive | 0.21 (0.32) | 0.07 | 0.00 | 0.07 | 0.36 |
|  | Perspective Taking ~~ Avoid Negative   | -0.09 (-0.14) | 0.07 | 0.16 | -0.22 | 0.04 |
|   |  Approach Positive ~~ Avoid Negative   | -0.01 (-0.01) | 0.10 | 0.90 | -0.20 | 0.18 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Fit** | **χ2** | **df** | ***p* value****(χ2 Change)** | **RMSEA** | **CFI** |
| Configural | 917.332 | 392 |  | 0.103 | 0.919 |
| Metric | 744.067 | 428 | .562 | 0.097 | 0.920 |
| Scalar | 788.264 | 464 | .224 | 0.094 | 0.920 |

*Note. No* significant changes in model fit from the configural model

# Study 2 Structural Equation Modelling of the MMT Pathway

## Table S18. MMT with Wellbeing as Life Satisfaction (Wellbeing Method 1)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Regression** |  |  | **est (est.std)** | **se** | **p-value** | **95% CI** |
| Life Satisfaction |  | Decentering |  |  |  |  |  |
| ~ | Nonreactivity | 0.70 (0.21) | 0.20 | **0.00** | 0.31 | 1.09 |
| ~ | Disidentification | 0.44 (0.21) | 0.12 | **0.00** | 0.21 | 0.67 |
| ~ | Meta-Awareness | -0.44 (-0.18) | 0.13 | **0.00** | -0.69 | -0.18 |
|  | Reappraisal |  |  |  |  |  |
| ~ | Approach Positive | 0.43 (0.38) | 0.06 | **0.00** | 0.32 | 0.54 |
| ~ | Change Efficacy | 0.12 (0.08) | 0.08 | 0.12 | -0.03 | 0.27 |
| ~ | Decrease Negative | 0.09 (0.05) | 0.08 | 0.25 | -0.06 | 0.25 |
| ~ | Perspective Taking | 0.04 (0.02) | 0.07 | 0.63 | -0.11 | 0.18 |

*Note*. WB is composed of the three items from the satisfaction with life scale (SWLS). Significant p-values have been highlighted in bold.

## Table S19. MMT with Wellbeing as SWLS and Discrete Emotions (Wellbeing Method 2)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Regression** |  |  | **est (est.std)** | **se** | **p-value** | **95% CI** |
| WB Positive |  | Decentering |  |  |  |  |  |
| ~ | Nonreactivity | 0.58 (0.18) | 0.19 | **0.00** | 0.21 | 0.95 |
| ~ | Meta-Awareness | -0.41 (-0.18) | 0.12 | **0.00** | -0.65 | -0.17 |
| ~ | Disidentification | 0.34 (0.17) | 0.11 | **0.00** | 0.12 | 0.55 |
|  | Reappraisal |  |  |  |  |  |
| ~ | Approach Positive | 0.42 (0.39) | 0.05 | **0.00** | 0.32 | 0.53 |
| ~ | Change Efficacy | 0.22 (0.16) | 0.07 | **0.00** | 0.07 | 0.36 |
| ~ | Avoid Negative | 0.11 (0.06) | 0.08 | 0.16 | -0.04 | 0.25 |
| ~ | Perspective Taking | 0.03 (0.02) | 0.07 | 0.66 | -0.11 | 0.17 |
| WB Negative |  | Decentering |  |  |  |  |  |
| ~ | Nonreactivity | -0.66 (-0.26) | 0.16 | **0.00** | -0.98 | -0.34 |
| ~ | Meta-Awareness | 0.51 (0.28) | 0.11 | **0.00** | 0.30 | 0.71 |
| ~ | Disidentification | 0.08 (0.05) | 0.09 | 0.37 | -0.10 | 0.26 |
|  | Reappraisal |  |  |  |  |  |
| ~ | Change Efficacy | -0.36 (-0.33) | 0.06 | **0.00** | -0.48 | -0.23 |
| ~ | Approach Positive | -0.24 (-0.27) | 0.04 | **0.00** | -0.32 | -0.15 |
| ~ | Perspective Taking | -0.06 (-0.05) | 0.06 | 0.32 | -0.17 | 0.06 |
| ~ | Avoid Negative | -0.03 (-0.02) | 0.06 | 0.66 | -0.15 | 0.09 |

*Note*. WB Positive is composed of positive affect and life satisfaction items. WB Negative is composed of negative affect items. Significant p-values have been highlighted in bold.

## Table S20. MMT with Wellbeing as Flourishing Domains (Wellbeing Method 3)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Regression** |  |  | **est (est.std)** | **se** | **p-value** | **95% CI** |
| Flourishing |  | Decentering |  |  |  |  |  |
| ~ | Nonreactivity | 0.90 (0.18) | 0.28 | **0.00** | 0.36 | 1.45 |
| ~ | Disidentification | 0.43 (0.14) | 0.16 | **0.01** | 0.11 | 0.75 |
| ~ | Meta-Awareness | -0.39 (-0.11) | 0.18 | **0.03** | -0.74 | -0.03 |
|  | Reappraisal |  |  |  |  |  |
| ~ | Approach Positive | 0.61 (0.36) | 0.08 | **0.00** | 0.46 | 0.77 |
| ~ | Change Efficacy | 0.38 (0.18) | 0.11 | **0.00** | 0.17 | 0.59 |
| ~ | Perspective Taking | 0.11 (0.05) | 0.10 | 0.29 | -0.09 | 0.31 |
| ~ | Decrease Negative | 0.10 (0.04) | 0.11 | 0.38 | -0.12 | 0.32 |

*Note*. Flourishing is composed of 10 items from the flourishing scale. Significant p-values have been highlighted in bold.

## Table S21. MMT with Wellbeing using all Indicators (Wellbeing Method 4)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Regression** |  |  | **est (est.std)** | **se** | **p-value** | **95% CI** |
| WB Positive |  | Decentering |  |  |  |  |  |
| ~ | Nonreactivity | 0.59 (0.19) | 0.17 | **0.00** | 0.25 | 0.93 |
| ~ | Meta-Awareness | -0.30 (-0.13) | 0.11 | **0.01** | -0.52 | -0.08 |
| ~ | Disidentification | 0.29 (0.15) | 0.10 | **0.00** | 0.09 | 0.49 |
|  | Reappraisal |  |  |  |  |  |
| ~ | Approach Positive | 0.40 (0.37) | 0.05 | **0.00** | 0.30 | 0.50 |
| ~ | Change Efficacy | 0.23 (0.17) | 0.07 | **0.00** | 0.10 | 0.37 |
| ~ | Avoid Negative | 0.08 (0.05) | 0.07 | 0.24 | -0.05 | 0.22 |
| ~ | Perspective Taking | 0.06 (0.04) | 0.06 | 0.38 | -0.07 | 0.18 |
| WB Negative |  | Decentering |  |  |  |  |  |
| ~ | Nonreactivity | -0.66 (-0.26) | 0.16 | **0.00** | -0.98 | -0.34 |
| ~ | Meta-Awareness | 0.51 (0.28) | 0.11 | **0.00** | 0.30 | 0.72 |
| ~ | Disidentification | 0.08 (0.05) | 0.09 | 0.37 | -0.10 | 0.26 |
|  | Reappraisal |  |  |  |  |  |
| ~ | Change Efficacy | -0.36 (-0.33) | 0.06 | **0.00** | -0.48 | -0.23 |
| ~ | Approach Positive | -0.23 (-0.27) | 0.04 | **0.00** | -0.32 | -0.15 |
| ~ | Perspective Taking | -0.06 (-0.05) | 0.06 | 0.32 | -0.17 | 0.06 |
| ~ | Avoid Negative | -0.03 (-0.02) | 0.06 | 0.66 | -0.15 | 0.09 |

**Table** S1. Significant p-values have been highlighted in bold.

# Study 3

## Table S22. Wellbeing Method 2 (All data)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | The conditions of my life are excellent in the past week. | 1.23 (0.82) | 0.08 | 1.08 | 1.38 |
| In most ways my life is close to my ideal in the past week. | 1.10 (0.80) | 0.07 | 0.96 | 1.24 |
| I am satisfied with my life in the past week. | 1.00 (0.71) | 0.00 | 1.00 | 1.00 |
| Joy | 0.67 (0.44) | 0.07 | 0.53 | 0.81 |
| WB Negative | Sadness | 1.62 (0.85) | 0.17 | 1.29 | 1.95 |
| Worry | 1.06 (0.60) | 0.10 | 0.85 | 1.26 |
| Anger | 1.00 (0.57) | 0.00 | 1.00 | 1.00 |
| **Covariances** |  |  |  |  |  |
|   | Wellbeing Positive ~~ Wellbeing Negative | -0.31 (-0.30) | 0.06 | -0.43 | -0.18 |

*Note.* All p-values are less than .001.

## Table S23. Wellbeing Two Factor Model (All Data)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Joy | 1.62 (0.77) | 0.14 | 1.34 | 1.89 |
| Contentment | 1.48 (0.70) | 0.14 | 1.21 | 1.74 |
| Love | 1.43 (0.56) | 0.15 | 1.14 | 1.72 |
| Amusement | 1.42 (0.66) | 0.14 | 1.16 | 1.69 |
| Compassion | 1.28 (0.59) | 0.13 | 1.03 | 1.54 |
| Awe | 1.23 (0.53) | 0.13 | 0.97 | 1.49 |
| Pride | 1.21 (0.55) | 0.13 | 0.96 | 1.47 |
| The conditions of my life are excellent in the past week. | 1.17 (0.56) | 0.12 | 0.93 | 1.40 |
| I am satisfied with my life in the past week. | 1.00 (0.51) | 0.00 | 1.00 | 1.00 |
| In most ways my life is close to my ideal in the past week. | 0.97 (0.51) | 0.11 | 0.76 | 1.18 |
| WB Negative | Guilty | 1.59 (0.77) | 0.13 | 1.34 | 1.85 |
| Shame | 1.40 (0.72) | 0.12 | 1.16 | 1.63 |
| Sad | 1.25 (0.65) | 0.11 | 1.03 | 1.48 |
| Jealous | 1.05 (0.56) | 0.10 | 0.84 | 1.25 |
| Selfish | 1.04 (0.57) | 0.10 | 0.84 | 1.24 |
| Anger | 1.00 (0.56) | 0.00 | 1.00 | 1.00 |
| Worry | 0.94 (0.53) | 0.10 | 0.75 | 1.13 |
| **Covariances** |  |  |  |  |  |
|   | WB Positive ~~ WB Negative | -0.11 (-0.15) | 0.04 | -0.18 | -0.03 |

*Note.* All p-values are less than .001.

## Table S24. Wellbeing Three Factor Model (All Data)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Joy | 1.00 (0.78) | 0.00 | 1.00 | 1.00 |
| Contentment | 0.93 (0.72) | 0.06 | 0.82 | 1.04 |
| Love | 0.89 (0.58) | 0.07 | 0.75 | 1.02 |
| Amusement | 0.88 (0.66) | 0.06 | 0.76 | 0.99 |
| Compassion | 0.82 (0.62) | 0.06 | 0.71 | 0.94 |
| Awe | 0.79 (0.56) | 0.06 | 0.66 | 0.91 |
| Pride | 0.75 (0.56) | 0.06 | 0.63 | 0.87 |
| WB Negative | Guilty | 1.60 (0.77) | 0.13 | 1.34 | 1.85 |
| Shame | 1.41 (0.72) | 0.12 | 1.17 | 1.64 |
| Sad | 1.27 (0.65) | 0.12 | 1.04 | 1.49 |
| Jealous | 1.04 (0.56) | 0.10 | 0.84 | 1.25 |
| Selfish | 1.04 (0.57) | 0.10 | 0.84 | 1.24 |
| Anger | 1.00 (0.56) | 0.00 | 1.00 | 1.00 |
| Worry | 0.94 (0.53) | 0.10 | 0.75 | 1.13 |
| Appraisal | The conditions of my life are excellent in the past week. | 1.23 (0.82) | 0.08 | 1.08 | 1.38 |
| In most ways my life is close to my ideal in the past week. | 1.09 (0.79) | 0.07 | 0.95 | 1.22 |
| I am satisfied with my life in the past week. | 1.00 (0.71) | 0.00 | 1.00 | 1.00 |
| **Covariances** |  |  |  |  |  |
|  | WB Positive ~~ WB Negative | -0.10 (-0.08) | 0.06 | -0.21 | 0.02 |
|  | WB Positive ~~ Appraisal | 0.67 (0.53) | 0.08 | 0.52 | 0.83 |
|   | WB Negative ~~ Appraisal | -0.29 (-0.30) | 0.06 | -0.40 | -0.18 |

*Note*. All p-values are less than .001.

## Table S25. Wellbeing Two Factor Model (Subgroup 1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | I am satisfied with my life in the past week. | 1.00 (0.65) | 0.00 | 1.00 | 1.00 |
| In most ways my life is close to my ideal in the past week. | 0.86 (0.58) | 0.13 | 0.61 | 1.11 |
| The conditions of my life are excellent in the past week. | 0.95 (0.57) | 0.14 | 0.67 | 1.23 |
| Joy | 1.26 (0.73) | 0.15 | 0.96 | 1.56 |
| Pride | 0.88 (0.50) | 0.15 | 0.59 | 1.17 |
| Contentment | 1.29 (0.71) | 0.16 | 0.97 | 1.60 |
| Compassion | 0.98 (0.56) | 0.15 | 0.69 | 1.28 |
| Love | 1.03 (0.51) | 0.17 | 0.70 | 1.37 |
| Amusement | 1.20 (0.69) | 0.15 | 0.90 | 1.50 |
| Awe | 1.16 (0.66) | 0.15 | 0.86 | 1.46 |
| WB Negative | Anger | 1.00 (0.64) | 0.00 | 1.00 | 1.00 |
| Sad | 1.31 (0.74) | 0.16 | 0.99 | 1.63 |
| Worry | 0.85 (0.52) | 0.14 | 0.57 | 1.12 |
| Jealous | 1.00 (0.60) | 0.15 | 0.71 | 1.30 |
| Guilty | 1.46 (0.76) | 0.18 | 1.11 | 1.81 |
| Selfish | 0.93 (0.61) | 0.14 | 0.66 | 1.20 |
| Shame | 1.26 (0.71) | 0.16 | 0.94 | 1.58 |
| **Covariances** |  |  |  |  |  |
|   | WB Positive ~~ WB Negative | -0.09 (-0.09) | 0.09 | 0.26 | 0.08 |

*Note.* All p-values are less than .001. RMSEA=.12 [0.11, 0.14], CFI=0.74.

## Table S26. Wellbeing Three Factor Model (Subgroup 1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Joy | 1.00 (0.76) | 0.00 | 1.00 | 1.00 |
| Pride | 0.70 (0.52) | 0.11 | 0.50 | 0.91 |
| Contentment | 1.03 (0.75) | 0.11 | 0.82 | 1.25 |
| Compassion | 0.81 (0.60) | 0.11 | 0.60 | 1.01 |
| Love | 0.82 (0.53) | 0.12 | 0.58 | 1.06 |
| Amusement | 0.93 (0.69) | 0.11 | 0.72 | 1.13 |
| Awe | 0.91 (0.68) | 0.11 | 0.70 | 1.11 |
| WB Negative | Anger | 1.00 (0.65) | 0.00 | 1.00 | 1.00 |
| Sad | 1.32 (0.75) | 0.16 | 1.00 | 1.64 |
| Worry | 0.85 (0.53) | 0.14 | 0.58 | 1.13 |
| Jealous | 0.98 (0.59) | 0.15 | 0.70 | 1.27 |
| Guilty | 1.43 (0.75) | 0.18 | 1.09 | 1.78 |
| Selfish | 0.92 (0.60) | 0.13 | 0.66 | 1.18 |
| Shame | 1.26 (0.71) | 0.16 | 0.94 | 1.57 |
| Appraisal | I am satisfied with my life in the past week. | 1.00 (0.75) | 0.00 | 1.00 | 1.00 |
| In most ways my life is close to my ideal in the past week. | 1.01 (0.79) | 0.10 | 0.81 | 1.22 |
| The conditions of my life are excellent in the past week. | 1.17 (0.82) | 0.12 | 0.94 | 1.41 |
| **Covariances** |  |  |  |  |  |
|  | WB Positive ~~ WB Negative | -0.03 (-0.02) | 0.11 | -0.25 | 0.19 |
|  | WB Positive ~~ Appraisal | 0.77 (0.61) | 0.15 | 0.49 | 1.06 |
|   | WB Negative ~~ Appraisal | -0.32 (-0.28) | 0.11 | -0.54 | -0.10 |

*Note.* All p-values are less than .001. RMSEA=0.099[0.09, 0.11], CFI=0.83.

## Table S27. Wellbeing Two Factor Model (Subgroup 2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | I am satisfied with my life in the past week. | 1.00 (0.36) | 0.00 | 1.00 | 1.00 |
| In most ways my life is close to my ideal in the past week. | 1.19 (0.43) | 0.31 | 0.59 | 1.79 |
| The conditions of my life are excellent in the past week. | 1.47 (0.50) | 0.35 | 0.78 | 2.16 |
| Joy | 2.69 (0.83) | 0.56 | 1.60 | 3.78 |
| Pride | 1.94 (0.58) | 0.44 | 1.08 | 2.80 |
| Contentment | 2.20 (0.77) | 0.46 | 1.29 | 3.10 |
| Compassion | 2.10 (0.67) | 0.46 | 1.21 | 3.00 |
| Love | 2.45 (0.63) | 0.54 | 1.39 | 3.51 |
| Amusement | 2.33 (0.73) | 0.50 | 1.36 | 3.30 |
| Awe | 1.61 (0.49) | 0.39 | 0.84 | 2.37 |
| WB Negative | Anger | 1.00 (0.62) | 0.00 | 1.00 | 1.00 |
| Sad | 0.98 (0.59) | 0.15 | 0.68 | 1.28 |
| Worry | 0.86 (0.55) | 0.14 | 0.58 | 1.14 |
| Jealous | 0.78 (0.49) | 0.14 | 0.50 | 1.06 |
| Guilty | 1.12 (0.68) | 0.16 | 0.81 | 1.43 |
| Selfish | 0.83 (0.50) | 0.15 | 0.54 | 1.12 |
| Shame | 1.04 (0.66) | 0.15 | 0.74 | 1.33 |
| **Covariances** |  |  |  |  |  |
|   | WB Positive ~~ WB Negative | -0.12 (-0.21) | 0.06 | -0.23 | -0.01 |

*Note.* All p-values are less than .001. RMSEA=0.12 [0.10, 0.13], CFI=0.74.

## Table S28. Wellbeing Three Factor Model (Subgroup 2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Joy | 1.00 (0.83) | 0.00 | 1.00 | 1.00 |
| Pride | 0.73 (0.59) | 0.09 | 0.56 | 0.91 |
| Contentment | 0.83 (0.78) | 0.07 | 0.69 | 0.97 |
| Compassion | 0.81 (0.69) | 0.08 | 0.65 | 0.97 |
| Love | 0.92 (0.63) | 0.10 | 0.72 | 1.12 |
| Amusement | 0.88 (0.73) | 0.08 | 0.72 | 1.04 |
| Awe | 0.63 (0.51) | 0.09 | 0.46 | 0.81 |
| WB Negative | Anger | 1.00 (0.62) | 0.00 | 1.00 | 1.00 |
| Sad | 0.98 (0.59) | 0.15 | 0.68 | 1.28 |
| Worry | 0.85 (0.55) | 0.14 | 0.58 | 1.13 |
| Jealous | 0.78 (0.49) | 0.14 | 0.50 | 1.06 |
| Guilty | 1.11 (0.68) | 0.16 | 0.80 | 1.42 |
| Selfish | 0.83 (0.50) | 0.15 | 0.54 | 1.12 |
| Shame | 1.04 (0.66) | 0.15 | 0.75 | 1.33 |
| Appraisal | I am satisfied with my life in the past week. | 1.00 (0.71) | 0.00 | 1.00 | 1.00 |
| In most ways my life is close to my ideal in the past week. | 1.17 (0.82) | 0.12 | 0.92 | 1.41 |
| The conditions of my life are excellent in the past week. | 1.20 (0.80) | 0.13 | 0.95 | 1.45 |
| **Covariances** |  |  |  |  |  |
|  | WB Positive ~~ WB Negative | -0.28 (-0.19) | 0.14 | -0.55 | -0.02 |
|  | WB Positive ~~ Appraisal | 0.65 (0.46) | 0.14 | 0.37 | 0.92 |
|   | WB Negative ~~ Appraisal | -0.24 (-0.22) | 0.11 | -0.45 | -0.04 |

*Note.* All p-values are less than .001. RMSEA=0.08[0.07, 0.09], CFI=0.88.

## Table S29. Wellbeing Two Factor Model (Subgroup 3)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | I am satisfied with my life in the past week. | 1.00 (0.59) | 0.00 | 1.00 | 1.00 |
| In most ways my life is close to my ideal in the past week. | 0.95 (0.59) | 0.15 | 0.65 | 1.25 |
| The conditions of my life are excellent in the past week. | 1.20 (0.66) | 0.18 | 0.85 | 1.55 |
| Joy | 1.08 (0.67) | 0.16 | 0.76 | 1.39 |
| Pride | 1.00 (0.55) | 0.17 | 0.67 | 1.34 |
| Contentment | 1.01 (0.57) | 0.17 | 0.69 | 1.34 |
| Compassion | 0.89 (0.47) | 0.17 | 0.56 | 1.22 |
| Love | 1.08 (0.54) | 0.19 | 0.71 | 1.44 |
| Amusement | 0.95 (0.53) | 0.16 | 0.63 | 1.27 |
| Awe | 0.98 (0.48) | 0.18 | 0.62 | 1.34 |
| WB Negative | Anger | 1.00 (0.45) | 0.00 | 1.00 | 1.00 |
| Sad | 1.49 (0.61) | 0.29 | 0.93 | 2.06 |
| Worry | 1.13 (0.51) | 0.24 | 0.67 | 1.60 |
| Jealous | 1.34 (0.59) | 0.26 | 0.82 | 1.85 |
| Guilty | 2.28 (0.85) | 0.39 | 1.52 | 3.05 |
| Selfish | 1.35 (0.58) | 0.27 | 0.83 | 1.87 |
| Shame | 1.97 (0.77) | 0.34 | 1.29 | 2.64 |
| **Covariances** |  |  |  |  |  |
|   | WB Positive ~~ WB Negative | -0.14 (-0.21) | 0.07 | -0.27 | -0.01 |

*Note.* All p-values are less than .001. RMSEA=0.11[0.097, 0.12], CFI=0.75.

## Table S30. Wellbeing Three Factor Model (Subgroup 3)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Item** | **est (est.std)** | **se** | **95% CI** |
| WB Positive | Joy | 1.00 (0.72) | 0.00 | 1.00 | 1.00 |
| Pride | 0.89 (0.57) | 0.13 | 0.63 | 1.15 |
| Contentment | 0.96 (0.63) | 0.13 | 0.71 | 1.22 |
| Compassion | 0.86 (0.54) | 0.14 | 0.60 | 1.13 |
| Love | 0.99 (0.57) | 0.15 | 0.70 | 1.28 |
| Amusement | 0.86 (0.56) | 0.13 | 0.61 | 1.11 |
| Awe | 0.98 (0.56) | 0.15 | 0.69 | 1.27 |
| WB Negative | Anger | 1.00 (0.44) | 0.00 | 1.00 | 1.00 |
| Sad | 1.53 (0.61) | 0.30 | 0.94 | 2.12 |
| Worry | 1.17 (0.52) | 0.25 | 0.69 | 1.66 |
| Jealous | 1.35 (0.58) | 0.27 | 0.82 | 1.88 |
| Guilty | 2.35 (0.85) | 0.41 | 1.54 | 3.15 |
| Selfish | 1.38 (0.58) | 0.28 | 0.84 | 1.92 |
| Shame | 2.01 (0.77) | 0.36 | 1.31 | 2.72 |
| Appraisal | I am satisfied with my life in the past week. | 1.00 (0.69) | 0.00 | 1.00 | 1.00 |
| In most ways my life is close to my ideal in the past week. | 1.06 (0.77) | 0.12 | 0.82 | 1.30 |
| The conditions of my life are excellent in the past week. | 1.29 (0.83) | 0.14 | 1.01 | 1.57 |
| **Covariances** |  |  |  |  |  |
|  | WB Positive ~~ WB Negative | -0.03 (-0.04) | 0.07 | -0.17 | 0.10 |
|  | WB Positive ~~ Appraisal | 0.61 (0.56) | 0.13 | 0.36 | 0.86 |
|   | WB Negative ~~ Appraisal | -0.31 (-0.39) | 0.09 | -0.49 | -0.13 |

*Note.* All p-values are less than .001. RMSEA=0.08[0.07, 0.09], CFI=0.86.