*PIL.* Measurement invariance was conducted on random vs. non-random groups to examine whether or not questionnaires indicated similar fit statistics. In conducting measurement invariance using the Purpose in Life Test (PIL), the first step was to conduct a CFA with participants for that dataset (*N* = 1898). As warranted by our adequate CFA fit from this model (.887 is acceptable I think?), groups were then separated into random/non-random data. Using Brown’s (cite Brown book) procedure by first nesting the models, all possible paths were examined. In examining Configural Invariance (factor structure), CFI remained adequate. Next, in order to examine weights or strengths of individual questions, the Metric Invariance model was examined by forcing equal factor loadings. This difference was not found to be significantly different by a .01 decrease in CFI using Brown’s method in comparing to the Configural Invariance model. Next, the Scalar Invariance model was conducted by forcing equal intercepts in order to examine item start points. Still, this model was not significantly different from the Metric Invariance model. The next model, the Strict Invariance model, forced equal error variances and was not found to be significantly different from the Scalar Invariance model.

*LPQ.* A similar sequential processes was conducted in order to examine measurement invariance on participants who completed the Life Purpose Questionnaire (LPQ). In adding restrictions to the model, the Scalar Invariance model caused the model CFI to be significantly lower than the Metric Invariance model. As such, this low CFI was further examined by looking at each question individually. After releasing Question 13 (“I am usually a reliable, responsible person”) for this model, all subsequent models were not significantly lower from the one above it.

Table 1

*Fit Statistics for PIL Measurement Invariance.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | *X2*(*df*) | RMSEA | SRMR | CFI | ∆CFI |
| All Groups (*n =* 1898) | (170) = 2232.95 | 0.080 | 0.047 | 0.887 | NA |
| Random (*n* = 1070) | (170) = 1365.83 | 0.081 | 0.049 | 0.884 | NA |
| Not random (*n* = 828) | (170) = 1185.43 | 0.085 | 0.051 | 0.875 | NA |
| Configural  Invariance | (340) = 2551.25 | 0.083 | 0.050 | 0.880 | NA |
| Metric Invariance | (359) = 2587.78 | 0.081 | 0.054 | 0.879 | 0.001 |
| Scalar Invariance | (378) = 2668.09 | 0.080 | 0.055 | 0.876 | 0.003 |
| Strict Invariance | (398) = 2743.39 | 0.079 | 0.057 | 0.873 | 0.003 |

Table 2.

*Fit Statistics for LPQ Measurement Invariance.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | *X2*(*df*) | RMSEA | SRMR | CFI | ∆CFI |
| All Groups (*n =* 1632) | (170) = 1629.45 | 0.073 | 0.059 | 0.781 | NA |
| Random (*n* = 883) | (170) = 902.00 | 0.070 | 0.057 | 0.785 | NA |
| Not random (*n* = 749) | (170) = 1002.98 | 0.081 | 0.067 | 0.754 | NA |
| Configural  Invariance | (340) = 1904.97 | 0.075 | 0.062 | 0.770 | NA |
| Metric Invariance | (359) = 1936.66 | 0.073 | 0.065 | 0.768 | 0.020 |
| Scalar Invariance | (378) = 2028.31 | 0.073 | 0.066 | 0.757 | 0.011\* |
| Scalar Q13 Free | (377) = 2007.65 | 0.073 | 0.066 | 0.760 | .008 |
| Strict Invariance | (396) = 2057.35 | 0.072 | 0.067 | 0.755 | 0.005 |