Table 1: Factor Loadings for Confirmatory Factor Analysis of MLQ, Two Fac- tors MLQ-P and MLQ-S

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | MR2 | MR1 | h2 | u2 | com |
| MLQ 1 | 0.01 | **0.81** | 0.66 | 0.34 | 1.00 |
| MLQ 4 | 0.05 | **0.78** | 0.62 | 0.38 | 1.01 |
| MLQ 5 | 0.05 | **0.77** | 0.61 | 0.39 | 1.01 |
| MLQ 6 | 0.02 | **0.79** | 0.62 | 0.38 | 1.00 |
| MLQ 9 | -0.24 | **0.45** | 0.23 | 0.77 | 1.53 |
| MLQ 2 | **0.81** | -0.08 | 0.64 | 0.36 | 1.02 |
| MLQ 3 | **0.74** | 0.08 | 0.57 | 0.43 | 1.02 |
| MLQ 7 | **0.72** | 0.07 | 0.54 | 0.46 | 1.02 |
| MLQ 8 | **0.72** | 0.09 | 0.55 | 0.45 | 1.03 |
| MLQ 10 | **0.83** | -0.12 | 0.68 | 0.32 | 1.04 |
| SS loadings | 3 | 2.72 |  |  |  |
| MR2 | 1.00 | 0.14 |  |  |  |
| MR1 | 0.14 | 1.00 |  |  |  |

Table 2: Two Factor Loadings for Exploratory Factor Analysis with Oblimin Rotation of MLQ

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | ML1 | ML2 | h2 | u2 | com |
| MLQ 1 | -0.01 | **0.81** | 0.66 | 0.34 | 1.00 |
| MLQ 2 | **0.81** | -0.06 | 0.64 | 0.36 | 1.01 |
| MLQ 3 | **0.74** | 0.09 | 0.57 | 0.43 | 1.03 |
| MLQ 4 | 0.03 | **0.78** | 0.62 | 0.38 | 1.00 |
| MLQ 5 | 0.03 | **0.78** | 0.61 | 0.39 | 1.00 |
| MLQ 6 | 0.00 | **0.79** | 0.62 | 0.38 | 1.00 |
| MLQ 7 | **0.72** | 0.09 | 0.54 | 0.46 | 1.03 |
| MLQ 8 | **0.72** | 0.11 | 0.55 | 0.45 | 1.04 |
| MLQ 9 | -0.25 | **0.44** | 0.23 | 0.77 | 1.58 |
| MLQ 10 | **0.83** | -0.11 | 0.68 | 0.32 | 1.03 |
| SS loadings | 2.98 | 2.74 |  |  |  |
| ML1 | 1.00 | 0.15 |  |  |  |
| ML2 | 0.15 | 1.00 |  |  |  |

Table 3: Factor Loadings for Confirmatory Factor Analysis of MLQ, Two Fac- tors Meaning and Purpose

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | MR2 | MR1 | h2 | u2 | com |
| MLQ1 MP | **0.78** | -0.24 | 0.65 | 0.35 | 1.19 |
| MLQ2 MS | 0.25 | **0.74** | 0.62 | 0.38 | 1.23 |
| MLQ5 MP | **0.76** | -0.19 | 0.61 | 0.39 | 1.12 |
| MLQ10 MS | 0.22 | **0.80** | 0.70 | 0.30 | 1.16 |
| MLQ3 PS | **0.38** | **0.65** | 0.58 | 0.42 | 1.61 |
| MLQ4 PP | **0.77** | -0.19 | 0.62 | 0.38 | 1.12 |
| MLQ6 PP | **0.77** | -0.22 | 0.62 | 0.38 | 1.16 |
| MLQ8 PS | **0.38** | **0.61** | 0.54 | 0.46 | 1.67 |
| MLQ9 PP | **0.33** | **-0.35** | 0.23 | 0.77 | 1.99 |
| SS loadings | 2.89 | 2.28 |  |  |  |
| MR2 | 1.00 | 0.03 |  |  |  |
| MR1 | 0.03 | 1.00 |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | Purpose | =˜ | MLQ 1 | 0.69 |
| 2 | Purpose | =˜ | MLQ 2 | 0.08 |
| 3 | Purpose | =˜ | MLQ 5 | 0.95 |
| 4 | Purpose | =˜ | MLQ 10 | 0.06 |
| 5 | Meaning | =˜ | MLQ 3 | 0.25 |
| 6 | Meaning | =˜ | MLQ 4 | 0.88 |
| 7 | Meaning | =˜ | MLQ 6 | 0.75 |
| 8 | Meaning | =˜ | MLQ 8 | 0.24 |
| 9 | Meaning | =˜ | MLQ 9 | 0.33 |

Table 4: Factor Loadings for Confirmatory Factor Analysis with Lavaan of MLQ, Two Factors: Meaning and Purpose

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | Purpose | =˜ | MLQ 1 | 0.81 |
| 2 | Purpose | =˜ | MLQ 5 | 0.78 |
| 3 | Purpose | =˜ | MLQ 4 | 0.79 |
| 4 | Purpose | =˜ | MLQ 6 | 0.79 |
| 5 | Purpose | =˜ | MLQ 9 | 0.40 |
| 6 | MLQ 1 | ˜˜ | MLQ 1 | 0.34 |
| 7 | MLQ 5 | ˜˜ | MLQ 5 | 0.39 |
| 8 | MLQ 4 | ˜˜ | MLQ 4 | 0.38 |
| 16 | MLQ 9 | ˜1 |  | 2.44 |
| 17 | Purpose | ˜1 |  | 0.00 |

Table 5: Factor Loadings for Confirmatory Factor Analysis with Lavaan of MLQ-P, One Purpose Factor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | Purpose | =˜ | MLQ 1 | 0.83 |
| 2 | Purpose | =˜ | MLQ 5 | 0.79 |
| 3 | Meaning | =˜ | MLQ 4 | 0.80 |
| 4 | Meaning | =˜ | MLQ 6 | 0.80 |
| 5 | Meaning | =˜ | MLQ 9 | 0.39 |
| 6 | MLQ 1 | ˜˜ | MLQ 1 | 0.32 |
| 7 | MLQ 5 | ˜˜ | MLQ 5 | 0.37 |
| 8 | MLQ 4 | ˜˜ | MLQ 4 | 0.36 |
| 16 | MLQ 4 | ˜1 |  | 3.08 |
| 17 | MLQ 6 | ˜1 |  | 2.83 |

Table 6: Factor Loadings for Confirmatory Factor Analysis with Lavaan of MLQ-P, Two Factors of meaning and purpose factors

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | Purpose | =˜ | MLQ 1 | 0.83 |
| 2 | Purpose | =˜ | MLQ 5 | 0.79 |
| 3 | Meaning | =˜ | MLQ 4 | 0.80 |
| 4 | Meaning | =˜ | MLQ 6 | 0.80 |
| 5 | Meaning | =˜ | MLQ 9 | 0.39 |
| 6 | Global | =˜ | Meaning | 0.98 |
| 7 | Global | =˜ | Purpose | 0.97 |
| 8 | MLQ 1 | ˜˜ | MLQ 1 | 0.32 |
| 16 | MLQ 1 | ˜1 |  | 2.71 |
| 17 | MLQ 5 | ˜1 |  | 3.52 |

Table 7: Factor Loadings for Confirmatory Factor Analysis with Lavaan of MLQ-P Second Prder Purpose and Meanign Factors

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Fit Measure | MLQpurpose fit | meaningpurpose fit | purpose fit secon order |
| 1 | Chisq | 33.94 | 25.68 | 25.68 |
| 2 | DF | 5.00 | 4.00 | 3.00 |
| 3 | P-value | 0.00 | 0.00 | 0.00 |
| 4 | CFI | 0.99 | 0.99 | 0.99 |
| 5 | TLI | 0.97 | 0.97 | 0.96 |
| 6 | RMSEA | 0.08 | 0.07 | 0.09 |
| 7 | RMSEA ci lower | 0.05 | 0.05 | 0.06 |
| 8 | RMSEA ci upper | 0.10 | 0.10 | 0.12 |
| 9 | SRMR | 0.02 | 0.02 | 0.02 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | MLQP | =˜ | MLQ 1 | 0.79 |
| 2 | MLQP | =˜ | MLQ 4 | 0.80 |
| 3 | MLQP | =˜ | MLQ 5 | 0.77 |
| 4 | MLQP | =˜ | MLQ 6 | 0.81 |
| 5 | MLQP | =˜ | MLQ 9 | 0.38 |
| 6 | MLQS | =˜ | MLQ 2 | 0.80 |
| 7 | MLQS | =˜ | MLQ 3 | 0.75 |
| 8 | MLQS | =˜ | MLQ 7 | 0.74 |
| 9 | MLQS | =˜ | MLQ 8 | 0.74 |
| 10 | MLQS | =˜ | MLQ 10 | 0.80 |
| 11 | FeelingPurposeNow | =˜ | APSI 1 | 0.87 |
| 12 | FeelingPurposeNow | =˜ | APSI 2 | 0.80 |
| 13 | FeelingPurposeNow | =˜ | APSI 5 | 0.69 |
| 14 | Futuregoals | =˜ | APSI 4 | 0.84 |
| 15 | Futuregoals | =˜ | APSI 7 | 0.79 |
| 16 | Futuregoals | =˜ | APSI 8 | 0.82 |
| 17 | Purpose | =˜ | FeelingPurposeNow | 0.99 |
| 18 | Purpose | =˜ | Futuregoals | 0.92 |
| 19 | English | =˜ | ASDQII 1 | 0.88 |
| 20 | English | =˜ | ASDQII 2 | 0.86 |
| 21 | English | =˜ | ASDQII 3 | 0.87 |
| 22 | English | =˜ | ASDQII 4 | 0.83 |
| 23 | English | =˜ | ASDQII 5 | 0.85 |
| 24 | Math | =˜ | ASDQII 6 | 0.90 |
| 25 | Math | =˜ | ASDQII 7 | 0.91 |
| 26 | Math | =˜ | ASDQII 8 | 0.92 |
| 27 | Math | =˜ | ASDQII 9 | 0.90 |
| 28 | Math | =˜ | ASDQII 10 | 0.91 |
| 29 | Science | =˜ | ASDQII 11 | 0.91 |
| 30 | Science | =˜ | ASDQII 12 | 0.90 |
| 31 | Science | =˜ | ASDQII 13 | 0.90 |
| 32 | Science | =˜ | ASDQII 14 | 0.90 |
| 33 | Science | =˜ | ASDQII 15 | 0.89 |
| 34 | Subjects | =˜ | ASDQII 16 | 0.83 |
| 35 | Subjects | =˜ | ASDQII 17 | 0.86 |
| 36 | Subjects | =˜ | ASDQII 18 | 0.85 |
| 37 | Subjects | =˜ | ASDQII 19 | 0.83 |
| 38 | Subjects | =˜ | ASDQII 20 | 0.84 |
| 75 | MLQP | ˜˜ | MLQP | 1.00 |
| 76 | MLQS | ˜˜ | MLQS | 1.00 |
| 77 | FeelingPurposeNow | ˜˜ | FeelingPurposeNow | 0.02 |
| 78 | Futuregoals | ˜˜ | Futuregoals | 0.16 |
| 79 | Purpose | ˜˜ | Purpose | 1.00 |
| 80 | English | ˜˜ | English | 1.00 |
| 81 | Math | ˜˜ | Math | 1.00 |
| 82 | Science | ˜˜ | Science | 1.00 |
| 83 | Subjects | ˜˜ | Subjects | 1.00 |
| 84 | MLQP | ˜˜ | MLQS | 0.16 |
| 85 | MLQP | ˜˜ | Purpose | 0.69 |
| 86 | MLQP | ˜˜ | English | 0.29 |
| 87 | MLQP | ˜˜ | Math | 0.17 |
| 88 | MLQP | ˜˜ | Science | 0.16 |
| 89 | MLQP | ˜˜ | Subjects | 0.26 |
| 90 | MLQS | ˜˜ | Purpose | 0.15 |
| 91 | MLQS | ˜˜ | English | 0.11 |
| 92 | MLQS | ˜˜ | Math | 0.00 |
| 93 | MLQS | ˜˜ | Science | 0.08 |
| 94 | MLQS | ˜˜ | Subjects | 0.05 |
| 95 | Purpose | ˜˜ | English | 0.17 |
| 96 | Purpose | ˜˜ | Math | 0.15 |
| 97 | Purpose | ˜˜ | Science | 0.12 |
| 98 | Purpose | ˜˜ | Subjects | 0.16 |
| 99 | English | ˜˜ | Math | 0.24 |
| 100 | English | ˜˜ | Science | 0.40 |
| 101 | English | ˜˜ | Subjects | 0.68 |
| 102 | Math | ˜˜ | Science | 0.52 |
| 103 | Math | ˜˜ | Subjects | 0.69 |
| 104 | Science | ˜˜ | Subjects | 0.70 |

Table 8: Factor Loadings for Convergant Analysis of APSI with MLQ-Present and MLQ Searching using Lavaan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | Purpose | =˜ | MLQ 1 1 | 0.94 |
| 2 | Purpose | =˜ | MLQ 5 1 | 0.93 |
| 3 | Purpose | =˜ | MLQ 4 1 | 0.96 |
| 4 | Purpose | =˜ | MLQ 6 1 | 0.95 |
| 5 | Purpose | =˜ | MLQ 11 1 | 0.89 |

Table 9: Factor Loadings for Confirmatory Factor Analysis with Lavaan of MLQ-P, One Purpose Factor

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Factor | op | Veriable | Loadings |
| 1 | Purpose | =˜ | MLQ 1 1 | 0.94 |
| 2 | Purpose | =˜ | MLQ 5 1 | 0.94 |
| 3 | Meaning | =˜ | MLQ 4 1 | 0.96 |
| 4 | Meaning | =˜ | MLQ 6 1 | 0.95 |
| 5 | Meaning | =˜ | MLQ 11 1 | 0.89 |
| 11 | Purpose | ˜˜ | Purpose | 1.00 |
| 12 | Meaning | ˜˜ | Meaning | 1.00 |
| 13 | Purpose | ˜˜ | Meaning | 1.00 |

Table 10: Factor Loadings for Confirmatory Factor Analysis with Lavaan of MLQ-P, One Purpose Factor

|  |  |  |  |
| --- | --- | --- | --- |
|  | Fit Measure | One Factor Fit | Meaning/Purpose Fit |
| 1 | Chisq | 16.30 | 15.56 |
| 2 | DF | 5.00 | 4.00 |
| 3 | P-Value | 0.01 | 0.00 |
| 4 | CFI | 1.00 | 1.00 |
| 5 | TLI | 1.00 | 0.99 |
| 6 | RMSEA | 0.05 | 0.06 |
| 7 | RMSEA ci upper | 0.03 | 0.03 |
| 8 | RMSEA ci lower | 0.09 | 0.10 |
| 9 | SRMR | 0.00 | 0.00 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Fit Measure | One Factor Model | Meaning Purpose Model |
| 1 | Chisq | 7.95 | 56.67 |
| 2 | DF | 2.00 | 2.00 |
| 3 | P-Value | 0.02 | 0.00 |
| 4 | CFI | 1.00 | 0.97 |
| 5 | TLI | 0.99 | 0.90 |
| 6 | RMSEA | 0.06 | 0.17 |
| 7 | RMSEA ci upper | 0.02 | 0.13 |
| 8 | RMSEA ci lower | 0.10 | 0.21 |
| 9 | SRMR | 0.01 | 0.13 |