CFA

lavaan 0.6-7 ended normally after 44 iterations

Estimator DWLS

Optimization method NLMINB

Number of free parameters 128

Number of observations 394

Model Test User Model:

Test statistic 810.610

Degrees of freedom 272

P-value (Chi-square) 0.000

Model Test Baseline Model:

Test statistic 41328.175

Degrees of freedom 300

P-value 0.000

User Model versus Baseline Model:

Comparative Fit Index (CFI) 0.987

Tucker-Lewis Index (TLI) 0.986

Root Mean Square Error of Approximation:

RMSEA 0.071

90 Percent confidence interval - lower 0.065

90 Percent confidence interval - upper 0.077

P-value RMSEA <= 0.05 0.000

Standardized Root Mean Square Residual:

SRMR 0.065

Parameter Estimates:

Standard errors Standard

Information Expected

Information saturated (h1) model Unstructured

Latent Variables:

Estimate Std.Err z-value P(>|z|)

SelfEfficacy =~

Q08 1.000

Q07 1.096 0.031 35.040 0.000

Q09 1.085 0.031 34.953 0.000

Q10 1.074 0.031 34.687 0.000

Q11 0.898 0.028 31.763 0.000

Q12 1.121 0.031 35.839 0.000

Q13 0.937 0.030 31.743 0.000

Q14 0.973 0.029 33.688 0.000

TaskValue =~

Q18 1.000

Q15 0.790 0.022 35.372 0.000

Q16 0.870 0.023 37.245 0.000

Q17 0.949 0.024 39.788 0.000

Q19 0.810 0.023 34.922 0.000

Q20 0.797 0.022 36.126 0.000

Q21 0.770 0.022 34.313 0.000

Q22 0.905 0.023 38.499 0.000

MasteryGoals =~

Q24 1.000

Q23 0.948 0.021 45.501 0.000

Q25 0.939 0.020 46.675 0.000

Q26 0.885 0.020 43.813 0.000

Q27 1.005 0.021 48.587 0.000

Q28 0.935 0.020 45.633 0.000

Q29 0.990 0.021 47.363 0.000

Q31 0.974 0.020 48.188 0.000

Q32 0.982 0.021 47.755 0.000

Covariances:

Estimate Std.Err z-value P(>|z|)

SelfEfficacy ~~

TaskValue 0.375 0.012 32.218 0.000

MasteryGoals 0.462 0.012 37.303 0.000

TaskValue ~~

MasteryGoals 0.584 0.013 44.030 0.000

Intercepts:

Estimate Std.Err z-value P(>|z|)

.Q08 0.000

.Q07 0.000

.Q09 0.000

.Q10 0.000

.Q11 0.000

.Q12 0.000

.Q13 0.000

.Q14 0.000

.Q18 0.000

.Q15 0.000

.Q16 0.000

.Q17 0.000

.Q19 0.000

.Q20 0.000

.Q21 0.000

.Q22 0.000

.Q24 0.000

.Q23 0.000

.Q25 0.000

.Q26 0.000

.Q27 0.000

.Q28 0.000

.Q29 0.000

.Q31 0.000

.Q32 0.000

SelfEfficacy 0.000

TaskValue 0.000

MasteryGoals 0.000

Thresholds:

Estimate Std.Err z-value P(>|z|)

Q08|t1 -2.236 0.172 -12.980 0.000

Q08|t2 -1.744 0.114 -15.278 0.000

Q08|t3 -0.703 0.069 -10.150 0.000

Q08|t4 0.585 0.067 8.694 0.000

Q07|t1 -2.236 0.172 -12.980 0.000

Q07|t2 -1.805 0.119 -15.122 0.000

Q07|t3 -0.761 0.070 -10.817 0.000

Q07|t4 0.593 0.067 8.792 0.000

Q09|t1 -2.321 0.187 -12.394 0.000

Q09|t2 -1.953 0.134 -14.574 0.000

Q09|t3 -1.191 0.083 -14.430 0.000

Q09|t4 0.199 0.064 3.118 0.002

Q10|t1 -2.236 0.172 -12.980 0.000

Q10|t2 -2.047 0.145 -14.114 0.000

Q10|t3 -1.204 0.083 -14.500 0.000

Q10|t4 0.212 0.064 3.318 0.001

Q11|t1 -2.321 0.187 -12.394 0.000

Q11|t2 -1.912 0.130 -14.750 0.000

Q11|t3 -0.744 0.070 -10.627 0.000

Q11|t4 0.490 0.066 7.413 0.000

Q12|t1 -2.321 0.187 -12.394 0.000

Q12|t2 -2.164 0.161 -13.441 0.000

Q12|t3 -1.591 0.103 -15.461 0.000

Q12|t4 0.140 0.063 2.213 0.027

Q13|t1 -2.427 0.209 -11.616 0.000

Q13|t2 -2.164 0.161 -13.441 0.000

Q13|t3 -1.060 0.078 -13.589 0.000

Q13|t4 0.483 0.066 7.314 0.000

Q14|t1 -2.236 0.172 -12.980 0.000

Q14|t2 -1.662 0.108 -15.413 0.000

Q14|t3 -0.608 0.068 -8.987 0.000

Q14|t4 0.655 0.068 9.571 0.000

Q18|t1 -2.236 0.172 -12.980 0.000

Q18|t2 -1.662 0.108 -15.413 0.000

Q18|t3 -1.005 0.076 -13.173 0.000

Q18|t4 0.192 0.064 3.017 0.003

Q15|t1 -1.805 0.119 -15.122 0.000

Q15|t2 -1.332 0.089 -15.054 0.000

Q15|t3 -0.412 0.065 -6.321 0.000

Q15|t4 0.639 0.068 9.377 0.000

Q16|t1 -2.236 0.172 -12.980 0.000

Q16|t2 -1.591 0.103 -15.461 0.000

Q16|t3 -0.695 0.069 -10.054 0.000

Q16|t4 0.405 0.065 6.221 0.000

Q17|t1 -2.102 0.152 -13.811 0.000

Q17|t2 -1.838 0.122 -15.020 0.000

Q17|t3 -0.974 0.075 -12.915 0.000

Q17|t4 0.238 0.064 3.720 0.000

Q19|t1 -2.164 0.161 -13.441 0.000

Q19|t2 -1.591 0.103 -15.461 0.000

Q19|t3 -0.511 0.066 -7.710 0.000

Q19|t4 0.787 0.071 11.100 0.000

Q20|t1 -2.236 0.172 -12.980 0.000

Q20|t2 -1.715 0.112 -15.334 0.000

Q20|t3 -0.647 0.068 -9.474 0.000

Q20|t4 0.678 0.069 9.861 0.000

Q21|t1 -1.912 0.130 -14.750 0.000

Q21|t2 -1.380 0.091 -15.201 0.000

Q21|t3 -0.490 0.066 -7.413 0.000

Q21|t4 0.555 0.067 8.301 0.000

Q22|t1 -2.321 0.187 -12.394 0.000

Q22|t2 -1.912 0.130 -14.750 0.000

Q22|t3 -1.038 0.077 -13.425 0.000

Q22|t4 0.238 0.064 3.720 0.000

Q24|t1 -2.321 0.187 -12.394 0.000

Q24|t2 -1.638 0.106 -15.437 0.000

Q24|t3 -0.858 0.072 -11.843 0.000

Q24|t4 0.238 0.064 3.720 0.000

Q23|t1 -2.164 0.161 -13.441 0.000

Q23|t2 -1.953 0.134 -14.574 0.000

Q23|t3 -1.317 0.088 -15.000 0.000

Q23|t4 -0.115 0.063 -1.811 0.070

Q25|t1 -2.164 0.161 -13.441 0.000

Q25|t2 -1.638 0.106 -15.437 0.000

Q25|t3 -0.840 0.072 -11.659 0.000

Q25|t4 0.199 0.064 3.118 0.002

Q26|t1 -2.571 0.245 -10.509 0.000

Q26|t2 -2.236 0.172 -12.980 0.000

Q26|t3 -1.774 0.117 -15.208 0.000

Q26|t4 -0.364 0.065 -5.623 0.000

Q27|t1 -2.427 0.209 -11.616 0.000

Q27|t2 -2.321 0.187 -12.394 0.000

Q27|t3 -1.715 0.112 -15.334 0.000

Q27|t4 -0.405 0.065 -6.221 0.000

Q28|t1 -2.236 0.172 -12.980 0.000

Q28|t2 -1.953 0.134 -14.574 0.000

Q28|t3 -1.302 0.087 -14.944 0.000

Q28|t4 0.038 0.063 0.604 0.546

Q29|t1 -2.164 0.161 -13.441 0.000

Q29|t2 -1.805 0.119 -15.122 0.000

Q29|t3 -1.005 0.076 -13.173 0.000

Q29|t4 0.199 0.064 3.118 0.002

Q31|t1 -2.321 0.187 -12.394 0.000

Q31|t2 -2.236 0.172 -12.980 0.000

Q31|t3 -1.715 0.112 -15.334 0.000

Q31|t4 -0.398 0.065 -6.121 0.000

Q32|t1 -2.427 0.209 -11.616 0.000

Q32|t2 -2.164 0.161 -13.441 0.000

Q32|t3 -1.805 0.119 -15.122 0.000

Q32|t4 -0.412 0.065 -6.321 0.000

Variances:

Estimate Std.Err z-value P(>|z|)

.Q08 0.487

.Q07 0.383

.Q09 0.396

.Q10 0.408

.Q11 0.586

.Q12 0.355

.Q13 0.550

.Q14 0.514

.Q18 0.332

.Q15 0.583

.Q16 0.494

.Q17 0.398

.Q19 0.562

.Q20 0.576

.Q21 0.604

.Q22 0.453

.Q24 0.291

.Q23 0.363

.Q25 0.375

.Q26 0.445

.Q27 0.284

.Q28 0.381

.Q29 0.305

.Q31 0.327

.Q32 0.316

SelfEfficacy 0.513 0.021 24.150 0.000

TaskValue 0.668 0.023 29.085 0.000

MasteryGoals 0.709 0.020 36.093 0.000

Scales y\*:

Estimate Std.Err z-value P(>|z|)

Q08 1.000

Q07 1.000

Q09 1.000

Q10 1.000

Q11 1.000

Q12 1.000

Q13 1.000

Q14 1.000

Q18 1.000

Q15 1.000

Q16 1.000

Q17 1.000

Q19 1.000

Q20 1.000

Q21 1.000

Q22 1.000

Q24 1.000

Q23 1.000

Q25 1.000

Q26 1.000

Q27 1.000

Q28 1.000

Q29 1.000

Q31 1.000

Q32 1.000

$FIT

npar fmin chisq df

128.000 1.029 810.610 272.000

pvalue baseline.chisq baseline.df baseline.pvalue

0.000 41328.175 300.000 0.000

cfi tli rmsea rmsea.ci.lower

0.987 0.986 0.071 0.065

rmsea.ci.upper rmsea.pvalue srmr

0.077 0.000 0.065

$PE

lhs op rhs exo est se z

1 SelfEfficacy =~ Q08 0 1.00000000 0.00000000 NA

2 SelfEfficacy =~ Q07 0 1.09602706 0.03127925 35.0400697

3 SelfEfficacy =~ Q09 0 1.08477812 0.03103543 34.9528960

4 SelfEfficacy =~ Q10 0 1.07370048 0.03095398 34.6869983

5 SelfEfficacy =~ Q11 0 0.89813536 0.02827638 31.7627405

6 SelfEfficacy =~ Q12 0 1.12115617 0.03128328 35.8388359

7 SelfEfficacy =~ Q13 0 0.93664036 0.02950690 31.7430965

8 SelfEfficacy =~ Q14 0 0.97255637 0.02886967 33.6878214

9 TaskValue =~ Q18 0 1.00000000 0.00000000 NA

10 TaskValue =~ Q15 0 0.79017946 0.02233936 35.3716280

11 TaskValue =~ Q16 0 0.87037260 0.02336907 37.2446463

12 TaskValue =~ Q17 0 0.94867737 0.02384357 39.7875628

13 TaskValue =~ Q19 0 0.80961087 0.02318355 34.9217831

14 TaskValue =~ Q20 0 0.79687534 0.02205832 36.1258450

15 TaskValue =~ Q21 0 0.77012576 0.02244396 34.3132748

16 TaskValue =~ Q22 0 0.90456938 0.02349618 38.4985739

17 MasteryGoals =~ Q24 0 1.00000000 0.00000000 NA

18 MasteryGoals =~ Q23 0 0.94804928 0.02083569 45.5012126

19 MasteryGoals =~ Q25 0 0.93879778 0.02011347 46.6750767

20 MasteryGoals =~ Q26 0 0.88498343 0.02019908 43.8130479

21 MasteryGoals =~ Q27 0 1.00518614 0.02068822 48.5873641

22 MasteryGoals =~ Q28 0 0.93468200 0.02048258 45.6330282

23 MasteryGoals =~ Q29 0 0.99019127 0.02090642 47.3630265

24 MasteryGoals =~ Q31 0 0.97426876 0.02021794 48.1883210

25 MasteryGoals =~ Q32 0 0.98208730 0.02056531 47.7545547

26 Q08 | t1 0 -2.23555842 0.17222598 -12.9803785

27 Q08 | t2 0 -1.74366069 0.11413202 -15.2775766

28 Q08 | t3 0 -0.70271480 0.06923471 -10.1497467

29 Q08 | t4 0 0.58525594 0.06731800 8.6938998

30 Q07 | t1 0 -2.23555842 0.17222598 -12.9803785

31 Q07 | t2 0 -1.80505555 0.11936251 -15.1224665

32 Q07 | t3 0 -0.76092727 0.07034447 -10.8171580

33 Q07 | t4 0 0.59282318 0.06742907 8.7918037

34 Q09 | t1 0 -2.32067171 0.18724487 -12.3937797

35 Q09 | t2 0 -1.95349118 0.13403699 -14.5742691

36 Q09 | t3 0 -1.19138485 0.08256278 -14.4300478

37 Q09 | t4 0 0.19851827 0.06367612 3.1176252

38 Q10 | t1 0 -2.23555842 0.17222598 -12.9803785

39 Q10 | t2 0 -2.04749877 0.14506808 -14.1140541

40 Q10 | t3 0 -1.20442230 0.08306487 -14.4997799

41 Q10 | t4 0 0.21151259 0.06373792 3.3184731

42 Q11 | t1 0 -2.32067171 0.18724487 -12.3937797

43 Q11 | t2 0 -1.91230127 0.12965166 -14.7495320

44 Q11 | t3 0 -0.74403915 0.07001111 -10.6274443

45 Q11 | t4 0 0.48967276 0.06605445 7.4131684

46 Q12 | t1 0 -2.32067171 0.18724487 -12.3937797

47 Q12 | t2 0 -2.16409769 0.16101216 -13.4405852

48 Q12 | t3 0 -1.59070879 0.10288208 -15.4614757

49 Q12 | t4 0 0.14042416 0.06344836 2.2132037

50 Q13 | t1 0 -2.42690063 0.20893461 -11.6155987

51 Q13 | t2 0 -2.16409769 0.16101216 -13.4405852

52 Q13 | t3 0 -1.05957037 0.07797201 -13.5891124

53 Q13 | t4 0 0.48251292 0.06596994 7.3141328

54 Q14 | t1 0 -2.23555842 0.17222598 -12.9803785

55 Q14 | t2 0 -1.66232963 0.10785530 -15.4125913

56 Q14 | t3 0 -0.60806071 0.06765779 -8.9872975

57 Q14 | t4 0 0.65465430 0.06839986 9.5709888

58 Q18 | t1 0 -2.23555842 0.17222598 -12.9803785

59 Q18 | t2 0 -1.66232963 0.10785530 -15.4125913

60 Q18 | t3 0 -1.00536565 0.07632136 -13.1727956

61 Q18 | t4 0 0.19203379 0.06364677 3.0171807

62 Q15 | t1 0 -1.80505555 0.11936251 -15.1224665

63 Q15 | t2 0 -1.33236244 0.08850499 -15.0540946

64 Q15 | t3 0 -0.41218607 0.06521226 -6.3206837

65 Q15 | t4 0 0.63896971 0.06814279 9.3769231

66 Q16 | t1 0 -2.23555842 0.17222598 -12.9803785

67 Q16 | t2 0 -1.59070879 0.10288208 -15.4614757

68 Q16 | t3 0 -0.69459421 0.06908858 -10.0536757

69 Q16 | t4 0 0.40526982 0.06514472 6.2210689

70 Q17 | t1 0 -2.10223158 0.15221505 -13.8109312

71 Q17 | t2 0 -1.83849262 0.12240559 -15.0196788

72 Q17 | t3 0 -0.97421613 0.07543031 -12.9154470

73 Q17 | t4 0 0.23761110 0.06387417 3.7199872

74 Q19 | t1 0 -2.16409769 0.16101216 -13.4405852

75 Q19 | t2 0 -1.59070879 0.10288208 -15.4614757

76 Q19 | t3 0 -0.51130564 0.06631823 -7.7098812

77 Q19 | t4 0 0.78667510 0.07087113 11.1000777

78 Q20 | t1 0 -2.23555842 0.17222598 -12.9803785

79 Q20 | t2 0 -1.71527720 0.11186081 -15.3340321

80 Q20 | t3 0 -0.64679211 0.06827007 -9.4740218

81 Q20 | t4 0 0.67848863 0.06880490 9.8610509

82 Q21 | t1 0 -1.91230127 0.12965166 -14.7495320

83 Q21 | t2 0 -1.38024023 0.09080028 -15.2008362

84 Q21 | t3 0 -0.48967276 0.06605445 -7.4131684

85 Q21 | t4 0 0.55531356 0.06689463 8.3013175

86 Q22 | t1 0 -2.32067171 0.18724487 -12.3937797

87 Q22 | t2 0 -1.91230127 0.12965166 -14.7495320

88 Q22 | t3 0 -1.03752256 0.07728490 -13.4246475

89 Q22 | t4 0 0.23761110 0.06387417 3.7199872

90 Q24 | t1 0 -2.32067171 0.18724487 -12.3937797

91 Q24 | t2 0 -1.63751531 0.10607648 -15.4371199

92 Q24 | t3 0 -0.85805346 0.07245166 -11.8431168

93 Q24 | t4 0 0.23761110 0.06387417 3.7199872

94 Q23 | t1 0 -2.16409769 0.16101216 -13.4405852

95 Q23 | t2 0 -1.95349118 0.13403699 -14.5742691

96 Q23 | t3 0 -1.31706374 0.08780280 -15.0002476

97 Q23 | t4 0 -0.11476746 0.06337287 -1.8109874

98 Q25 | t1 0 -2.16409769 0.16101216 -13.4405852

99 Q25 | t2 0 -1.63751531 0.10607648 -15.4371199

100 Q25 | t3 0 -0.83980946 0.07203040 -11.6590969

101 Q25 | t4 0 0.19851827 0.06367612 3.1176252

102 Q26 | t1 0 -2.57059887 0.24460187 -10.5093180

103 Q26 | t2 0 -2.23555842 0.17222598 -12.9803785

104 Q26 | t3 0 -1.77352271 0.11662022 -15.2076772

105 Q26 | t4 0 -0.36416334 0.06476856 -5.6225329

106 Q27 | t1 0 -2.42690063 0.20893461 -11.6155987

107 Q27 | t2 0 -2.32067171 0.18724487 -12.3937797

108 Q27 | t3 0 -1.71527720 0.11186081 -15.3340321

109 Q27 | t4 0 -0.40526982 0.06514472 -6.2210689

110 Q28 | t1 0 -2.23555842 0.17222598 -12.9803785

111 Q28 | t2 0 -1.95349118 0.13403699 -14.5742691

112 Q28 | t3 0 -1.30206724 0.08712868 -14.9441867

113 Q28 | t4 0 0.03818128 0.06323808 0.6037703

114 Q29 | t1 0 -2.16409769 0.16101216 -13.4405852

115 Q29 | t2 0 -1.80505555 0.11936251 -15.1224665

116 Q29 | t3 0 -1.00536565 0.07632136 -13.1727956

117 Q29 | t4 0 0.19851827 0.06367612 3.1176252

118 Q31 | t1 0 -2.32067171 0.18724487 -12.3937797

119 Q31 | t2 0 -2.23555842 0.17222598 -12.9803785

120 Q31 | t3 0 -1.71527720 0.11186081 -15.3340321

121 Q31 | t4 0 -0.39837290 0.06507860 -6.1214114

122 Q32 | t1 0 -2.42690063 0.20893461 -11.6155987

123 Q32 | t2 0 -2.16409769 0.16101216 -13.4405852

124 Q32 | t3 0 -1.80505555 0.11936251 -15.1224665

125 Q32 | t4 0 -0.41218607 0.06521226 -6.3206837

pvalue

1 NA

2 0.00000000000000000000

3 0.00000000000000000000

4 0.00000000000000000000

5 0.00000000000000000000

6 0.00000000000000000000

7 0.00000000000000000000

8 0.00000000000000000000

9 NA

10 0.00000000000000000000

11 0.00000000000000000000

12 0.00000000000000000000

13 0.00000000000000000000

14 0.00000000000000000000

15 0.00000000000000000000

16 0.00000000000000000000

17 NA

18 0.00000000000000000000

19 0.00000000000000000000

20 0.00000000000000000000

21 0.00000000000000000000

22 0.00000000000000000000

23 0.00000000000000000000

24 0.00000000000000000000

25 0.00000000000000000000

26 0.00000000000000000000

27 0.00000000000000000000

28 0.00000000000000000000

29 0.00000000000000000000

30 0.00000000000000000000

31 0.00000000000000000000

32 0.00000000000000000000

33 0.00000000000000000000

34 0.00000000000000000000

35 0.00000000000000000000

36 0.00000000000000000000

37 0.00182314477280742793

38 0.00000000000000000000

39 0.00000000000000000000

40 0.00000000000000000000

41 0.00090511040293428380

42 0.00000000000000000000

43 0.00000000000000000000

44 0.00000000000000000000

45 0.00000000000012323476

46 0.00000000000000000000

47 0.00000000000000000000

48 0.00000000000000000000

49 0.02688360441938142387

50 0.00000000000000000000

51 0.00000000000000000000

52 0.00000000000000000000

53 0.00000000000025912605

54 0.00000000000000000000

55 0.00000000000000000000

56 0.00000000000000000000

57 0.00000000000000000000

58 0.00000000000000000000

59 0.00000000000000000000

60 0.00000000000000000000

61 0.00255137666459459567

62 0.00000000000000000000

63 0.00000000000000000000

64 0.00000000026040858359

65 0.00000000000000000000

66 0.00000000000000000000

67 0.00000000000000000000

68 0.00000000000000000000

69 0.00000000049377923972

70 0.00000000000000000000

71 0.00000000000000000000

72 0.00000000000000000000

73 0.00019923289444268022

74 0.00000000000000000000

75 0.00000000000000000000

76 0.00000000000001265654

77 0.00000000000000000000

78 0.00000000000000000000

79 0.00000000000000000000

80 0.00000000000000000000

81 0.00000000000000000000

82 0.00000000000000000000

83 0.00000000000000000000

84 0.00000000000012323476

85 0.00000000000000000000

86 0.00000000000000000000

87 0.00000000000000000000

88 0.00000000000000000000

89 0.00019923289444268022

90 0.00000000000000000000

91 0.00000000000000000000

92 0.00000000000000000000

93 0.00019923289444268022

94 0.00000000000000000000

95 0.00000000000000000000

96 0.00000000000000000000

97 0.07014280904006153783

98 0.00000000000000000000

99 0.00000000000000000000

100 0.00000000000000000000

101 0.00182314477280720588

102 0.00000000000000000000

103 0.00000000000000000000

104 0.00000000000000000000

105 0.00000001881777667023

106 0.00000000000000000000

107 0.00000000000000000000

108 0.00000000000000000000

109 0.00000000049377923972

110 0.00000000000000000000

111 0.00000000000000000000

112 0.00000000000000000000

113 0.54599634278963926626

114 0.00000000000000000000

115 0.00000000000000000000

116 0.00000000000000000000

117 0.00182314477280742793

118 0.00000000000000000000

119 0.00000000000000000000

120 0.00000000000000000000

121 0.00000000092750096492

122 0.00000000000000000000

123 0.00000000000000000000

124 0.00000000000000000000

125 0.00000000026040858359

[ reached 'max' / getOption("max.print") -- omitted 84 rows ]