**5 factors model**

Factor Analysis using method = minres

Call: fa(r = SALES2, nfactors = 5, rotate = "none", fm = "ULS", cor = "poly")

Standardized loadings (pattern matrix) based upon correlation matrix

MR1 MR2 MR3 MR4 MR5

SS loadings 11.81 1.87 0.97 0.62 0.54

Proportion Var 0.47 0.07 0.04 0.02 0.02

Cumulative Var 0.47 0.55 0.59 0.61 0.63

Proportion Explained 0.75 0.12 0.06 0.04 0.03

Cumulative Proportion 0.75 0.87 0.93 0.97 1.00

Notes: it appears that factor 1 explains 47% of the variance, while factor explains 12%.

Mean item complexity = 1.7

Test of the hypothesis that 5 factors are sufficient.

The degrees of freedom for the null model are 300 and the objective function was 19.36 with Chi Square of 7432.57

The degrees of freedom for the model are 185 and the objective function was 2

The root mean square of the residuals (RMSR) is 0.03

The df corrected root mean square of the residuals is 0.04

The harmonic number of observations is 394 with the empirical chi square 184.43 with prob < 0.5

The total number of observations was 394 with Likelihood Chi Square = 760.62 with prob < 0.000000000000000000000000000000000000000000000000000000000000000000000084

Tucker Lewis Index of factoring reliability = 0.868

RMSEA index = 0.089 and the 90 % confidence intervals are 0.082 0.096

BIC = -345

Fit based upon off diagonal values = 1

Measures of factor score adequacy

MR1 MR2 MR3 MR4

Correlation of (regression) scores with factors 0.99 0.93 0.90 0.81

Multiple R square of scores with factors 0.97 0.86 0.81 0.66

Minimum correlation of possible factor scores 0.95 0.71 0.62 0.32

MR5

Correlation of (regression) scores with factors 0.84

Multiple R square of scores with factors 0.71

Minimum correlation of possible factor scores 0.43

**ML model**

ML1 ML2 ML3 ML4 ML5

SS loadings 8.763 3.660 1.646 1.117 0.655

Proportion Var 0.351 0.146 0.066 0.045 0.026

Cumulative Var 0.351 0.497 0.563 0.607 0.634

3 Factors Model

Factor Analysis using method = minres

Call: fa(r = SALES2, nfactors = 3, rotate = "none", fm = "ULS", cor = "poly")

Standardized loadings (pattern matrix) based upon correlation matrix

MR1 MR2 MR3

SS loadings 11.76 1.82 0.92

Proportion Var 0.47 0.07 0.04

Cumulative Var 0.47 0.54 0.58

Proportion Explained 0.81 0.13 0.06

Cumulative Proportion 0.81 0.94 1.00

Mean item complexity = 1.5

Test of the hypothesis that 3 factors are sufficient.

The degrees of freedom for the null model are 300 and the objective function was 19.36 with Chi Square of 7432.57

The degrees of freedom for the model are 228 and the objective function was 3.04

The root mean square of the residuals (RMSR) is 0.04

The df corrected root mean square of the residuals is 0.05

The harmonic number of observations is 394 with the empirical chi square 393.32 with prob < 0.000000000063

The total number of observations was 394 with Likelihood Chi Square = 1159.2 with prob < 1.8e-124

Tucker Lewis Index of factoring reliability = 0.827

RMSEA index = 0.102 and the 90 % confidence intervals are 0.096 0.108

BIC = -203.41

Fit based upon off diagonal values = 0.99

Measures of factor score adequacy

MR1 MR2 MR3

Correlation of (regression) scores with factors 0.98 0.91 0.88

Multiple R square of scores with factors 0.97 0.83 0.78

Minimum correlation of possible factor scores 0.94 0.67 0.56