

Confirmatory Factor Analysis Work Motivation

Model fit

Chi-square test

Model	X ²	df	p
Baseline model	478.585	36	
Factor model	24.520	24	0.432

Additional fit measures

Fit indices

Index	Value
Comparative Fit Index (CFI)	0.999
Tucker-Lewis Index (TLI)	0.998
Bentler-Bonett Non-normed Fit Index (NNFI)	0.998
Bentler-Bonett Normed Fit Index (NFI)	0.949
Parsimony Normed Fit Index (PNFI)	0.633
Bollen's Relative Fit Index (RFI)	0.923
Bollen's Incremental Fit Index (IFI)	0.999
Relative Noncentrality Index (RNI)	0.999

Information criteria

	Value
Log-likelihood	-893.977
Number of free parameters	21.000
Akaike (AIC)	1829.954
Bayesian (BIC)	1886.083
Sample-size adjusted Bayesian (SSABIC)	1819.733

Other fit measures

Metric	Value
Root mean square error of approximation (RMSEA)	0.014
RMSEA 90% CI lower bound	0.000
RMSEA 90% CI upper bound	0.080
RMSEA p-value	0.740
Standardized root mean square residual (SRMR)	0.041
Hoelter's critical N ($\alpha = .05$)	159.907
Hoelter's critical N ($\alpha = .01$)	188.554
Goodness of fit index (GFI)	0.954
McDonald fit index (MFI)	0.998
Expected cross validation index (ECVI)	0.622

Parameter estimates

Factor loadings

Factor	Indicator	Symbol	Estimate	Std. Error	z-value	p	95% Confidence Interval		Std. Est. (all)
							Lower	Upper	
Expectancy	Exp-1	λ_{11}	0.718	0.061	11.712	< .001	0.598	0.839	0.911
	Exp-2	λ_{12}	0.720	0.064	11.245	< .001	0.595	0.846	0.887
	Exp-3	λ_{13}	0.638	0.065	9.767	< .001	0.510	0.766	0.805
Instrumentality	Ins-1	λ_{21}	0.585	0.071	8.250	< .001	0.446	0.724	0.750
	Ins-2	λ_{22}	0.598	0.062	9.694	< .001	0.477	0.719	0.859
	Ins-3	λ_{23}	0.526	0.066	8.002	< .001	0.397	0.655	0.730
Valence	Val-1	λ_{31}	0.528	0.070	7.518	< .001	0.391	0.666	0.695
	Val-2	λ_{32}	0.747	0.073	10.272	< .001	0.605	0.890	0.914
	Val-3	λ_{33}	0.589	0.075	7.811	< .001	0.441	0.736	0.720

Factor variances

Factor	Estimate	Std. Error	z-value	p	95% Confidence Interval		Std. Est. (all)
					Lower	Upper	
Expectancy	1.000	0.000			1.000	1.000	1.000
Instrumentality	1.000	0.000			1.000	1.000	1.000
Valence	1.000	0.000			1.000	1.000	1.000

Factor Covariances

		Estimate	Std. Error	z-value	p	95% Confidence Interval		Std. Est. (all)
						Lower	Upper	
Expectancy	↔ Instrumentality	0.229	0.120	1.915	0.055	-0.005	0.464	0.229
Expectancy	↔ Valence	0.577	0.087	6.664	< .001	0.407	0.747	0.577
Instrumentality	↔ Valence	0.110	0.122	0.906	0.365	-0.129	0.349	0.110

Residual variances

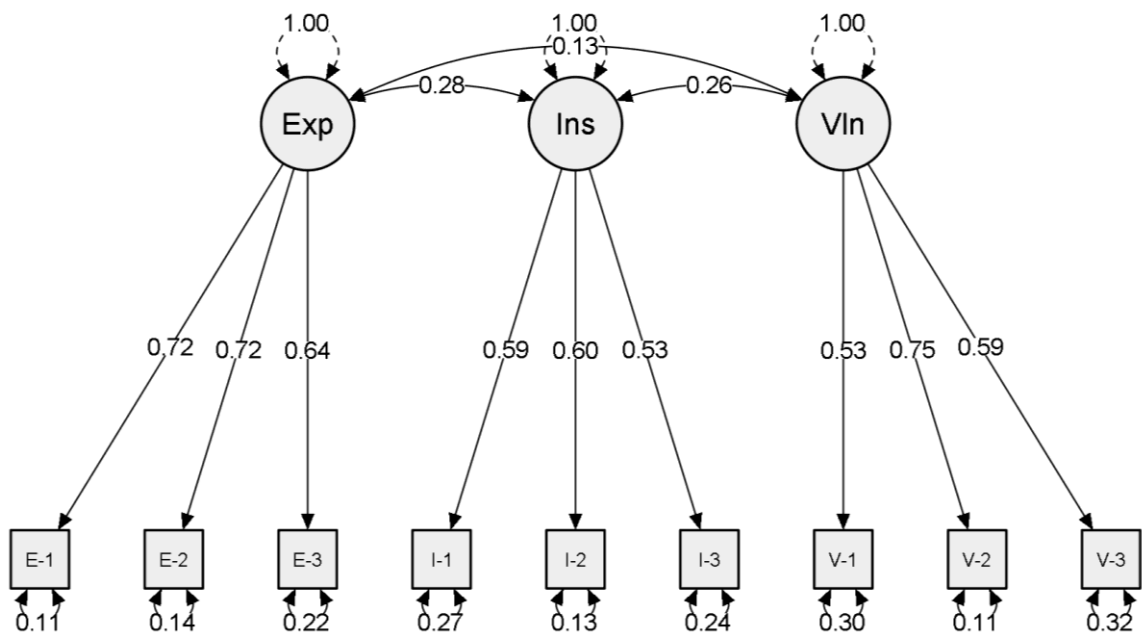
Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval		Std. Est. (all)
					Lower	Upper	
Exp-1	0.105	0.031	3.403	< .001	0.045	0.166	0.170
Exp-2	0.140	0.034	4.170	< .001	0.074	0.206	0.213
Exp-3	0.221	0.037	5.928	< .001	0.148	0.294	0.352
Ins-1	0.267	0.051	5.224	< .001	0.167	0.367	0.438
Ins-2	0.128	0.041	3.140	0.002	0.048	0.207	0.263
Ins-3	0.242	0.044	5.496	< .001	0.156	0.329	0.467

Residual variances

Indicator	Estimate	Std. Error	z-value	p	95% Confidence Interval		Std. Est. (all)
					Lower	Upper	
Val-1	0.298	0.051	5.834	< .001	0.198	0.398	0.516
Val-2	0.110	0.063	1.763	0.078	-0.012	0.233	0.165
Val-3	0.322	0.058	5.533	< .001	0.208	0.437	0.482

Plots

Model plot



Expectancy-Test Reliability Analysis

Frequentist Scale Reliability Statistics

Estimate	McDonald's ω	Cronbach's α
Point estimate	0.902	0.900
95% CI lower bound	0.837	0.866
95% CI upper bound	0.947	0.927

Instrumentality-Test Reliability Analysis

Frequentist Scale Reliability Statistics

Estimate	McDonald's ω	Cronbach's α
Point estimate	0.822	0.821
95% CI lower bound	0.729	0.760
95% CI upper bound	0.894	0.869

Valence-Test Reliability Analysis

Frequentist Scale Reliability Statistics

Estimate	McDonald's ω
Point estimate	0.825
95% CI lower bound	0.729
95% CI upper bound	0.896

