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1. Supplementary Descriptive Tables

1.1 UWES Items Descriptive Tables

Table S1

UWES Descriptive Tables with Frequencies

Item	M	SD	Min	Med	Max	Skew	Kurt	Frequencies
Uwes_1	3.02	1.39	0	3	6	-0.12	-0.11	0: 29 (5.5%) 1: 41 (7.7%) 2: 98 (18.4%) 3: 180 (33.8%) 4: 113 (21.2%) 5: 49 (9.2%) 6: 22 (4.1%)
Uwes_2	3.11	1.45	0	3	6	-0.04	-0.39	0: 25 (4.7%) 1: 42 (7.9%) 2: 105 (19.7%) 3: 168 (31.6%) 4: 90 (16.9%) 5: 76 (14.3%) 6: 26 (4.9%)
Uwes_3	3.31	1.53	0	3	6	-0.13	-0.46	0: 25 (4.7%) 1: 34 (6.4%) 2: 97 (18.2%) 3: 134 (25.2%) 4: 125 (23.5%) 5: 69 (13.0%) 6: 48 (9.0%)
Uwes_4	3.25	1.59	0	3	6	-0.17	-0.58	0: 33 (6.2%) 1: 38 (7.1%) 2: 94 (17.7%) 3: 135 (25.4%) 4: 106 (19.9%) 5: 82 (15.4%) 6: 44 (8.3%)
Uwes_5	2.82	1.56	0	3	6	0.01	-0.64	0: 43 (8.1%) 1: 70 (13.2%)

Item	M	SD	Min	Med	Max	Skew	Kurt	Frequencies
								2: 105 (19.7%) 3: 136 (25.6%) 4: 99 (18.6%) 5: 56 (10.5%) 6: 23 (4.3%)
Uwes ₆ –	3.64	1.5	0	4	6	-0.33	-0.32	0: 18 (3.4%) 1: 26 (4.9%) 2: 64 (12.0%) 3: 135 (25.4%) 4: 131 (24.6%) 5: 94 (17.7%) 6: 64 (12.0%)
Uwes ₇ –	3.78	1.6	0	4	6	-0.4	-0.46	0: 20 (3.8%) 1: 29 (5.5%) 2: 56 (10.5%) 3: 118 (22.2%) 4: 123 (23.1%) 5: 94 (17.7%) 6: 92 (17.3%)
Uwes ₈ –	3.43	1.43	0	3	6	-0.23	-0.33	0: 16 (3.0%) 1: 32 (6.0%) 2: 84 (15.8%) 3: 137 (25.8%) 4: 140 (26.3%) 5: 84 (15.8%) 6: 39 (7.3%)
Uwes ₉ –	3.2	1.54	0	3	6	-0.12	-0.45	0: 29 (5.5%) 1: 46 (8.6%) 2: 83 (15.6%) 3: 153 (28.8%) 4: 115 (21.6%) 5: 63 (11.8%) 6: 43 (8.1%)

Note. Skew = Skewness; Kurt = Kurtosis.

1.2 BAT, Subscales and Work Performance Descriptive Tables

Table S2

BAT, its Indicators and Work Performance Descriptive Table

Scale / Item	M	SD	Skew	Kurtosis	α	ω
BAT (total)	2.47	0.75	0.31	-0.15	0.91	0.91
Exhaustion	3.02	0.97	0.05	-0.53	0.80	0.80
Mental Distance	2.35	0.93	0.50	-0.12	0.81	0.82
Cognitive Impairment	2.27	0.88	0.55	-0.04	0.85	0.85
Emotional Impairment	2.24	0.86	0.53	-0.25	0.82	0.82
Work performance 0-100	75.18	20.46	-1.33	1.97	-	-

Note. Skew = Skewness; α = Cronbach's alpha; ω = McDonald's omega

2. Supplementary Factor Analysis Tables

2.1 Factor Loadings for Unidimensional Model

Table S3

Factor Loadings for Unidimensional Model

Factor	Item	SE	Z	p	b	95% CI (b)	b*	95% CI (b*)
W-E	Uwes_1	0.05	21.55	< .001	1.13	[1.03, 1.24]	0.82	[0.78, 0.85]
W-E	Uwes_2	0.05	25.94	< .001	1.24	[1.15, 1.34]	0.86	[0.83, 0.89]
W-E	Uwes_3	0.05	29.78	< .001	1.37	[1.28, 1.47]	0.90	[0.88, 0.92]
W-E	Uwes_4	0.05	28.08	< .001	1.39	[1.29, 1.49]	0.88	[0.85, 0.90]
W-E	Uwes_5	0.05	26.99	< .001	1.29	[1.20, 1.39]	0.83	[0.80, 0.86]
W-E	Uwes_6	0.05	21.31	< .001	1.19	[1.08, 1.30]	0.80	[0.75, 0.84]
W-E	Uwes_7	0.06	24.65	< .001	1.31	[1.21, 1.42]	0.82	[0.79, 0.86]
W-E	Uwes_8	0.06	19.84	< .001	1.10	[0.99, 1.20]	0.77	[0.72, 0.82]
W-E	Uwes_9	0.07	15.96	< .001	1.06	[0.93, 1.19]	0.69	[0.62, 0.76]

Note. W-E = Work Engagement. *b* = Unstandardized Factor Loading; *b** = Standardized Factor Loading.

2.2 Factor Loadings for Three-Factor Model

Table S4

Factor Loadings for Three-Factor model

Factor	Item	SE	Z	p	b	95% CI (b)	b*	95% CI (b*)
Vigor	Uwes_1	0.05	22.54	< .001	1.18	[1.07, 1.28]	0.85	[0.81, 0.88]
Vigor	Uwes_2	0.05	27.58	< .001	1.29	[1.20, 1.39]	0.89	[0.86, 0.92]
Vigor	Uwes_5	0.05	26.98	< .001	1.31	[1.22, 1.41]	0.84	[0.81, 0.88]
Dedication	Uwes_3	0.05	30.18	< .001	1.39	[1.30, 1.48]	0.91	[0.89, 0.93]
Dedication	Uwes_4	0.05	28.59	< .001	1.41	[1.31, 1.50]	0.89	[0.86, 0.91]
Dedication	Uwes_7	0.05	25.14	< .001	1.33	[1.23, 1.44]	0.83	[0.80, 0.87]

Absorption	Uwes_6	0.06	21.21	<.001	1.23	[1.11, 1.34]	0.82	[0.77, 0.87]
Absorption	Uwes_8	0.05	21.72	<.001	1.18	[1.07, 1.28]	0.82	[0.78, 0.87]
Absorption	Uwes_9	0.07	17.58	<.001	1.16	[1.03, 1.29]	0.75	[0.68, 0.82]

Note. *b* = Unstandardized Factor Loading; *b** = Standardized Factor Loading.

2.3 Factor Loadings for Bifactor Model

Table S5

Factor Loadings for Bifactor model

Factor	Item	SE	Z	<i>p</i>	<i>b</i>	95% CI (<i>b</i>)	<i>b</i> *	95% CI (<i>b</i> *)
General	Uwes_1	0.05	20.34	<.001	1.10	[0.99, 1.21]	0.79	[0.75, 0.83]
General	Uwes_2	0.05	24.51	<.001	1.22	[1.12, 1.32]	0.84	[0.80, 0.87]
General	Uwes_3	0.05	30.07	<.001	1.39	[1.30, 1.48]	0.91	[0.89, 0.93]
General	Uwes_4	0.05	27.86	<.001	1.39	[1.30, 1.49]	0.88	[0.85, 0.91]
General	Uwes_6	0.05	26.42	<.001	1.29	[1.20, 1.39]	0.83	[0.80, 0.86]
General	Uwes_6	0.06	20.89	<.001	1.18	[1.07, 1.30]	0.79	[0.75, 0.83]
General	Uwes_7	0.05	23.75	<.001	1.30	[1.20, 1.41]	0.82	[0.78, 0.85]
General	Uwes_8	0.06	18.83	<.001	1.07	[0.96, 1.18]	0.75	[0.70, 0.81]
General	Uwes_9	0.07	14.91	<.001	1.03	[0.89, 1.16]	0.67	[0.59, 0.74]
Vigor	Uwes_1	0.13	3.26	<.001	0.42	[0.17, 0.67]	0.30	[0.12, 0.48]
Vigor	Uwes_2	0.18	3.30	.01	0.59	[0.24, 0.94]	0.41	[0.17, 0.65]
Vigor	Uwes_5	0.08	1.88	.060	0.15	[-0.01, 0.32]	0.10	[-0.00, 0.20]
Dedication	Uwes_3	0.00	0.68	.498	0.00	[-0.00, 0.01]	0.00	[-0.00, 0.01]
Dedication	Uwes_4	0.00	1.82	.068	0.01	[-0.00, 0.01]	0.00	[-0.00, 0.01]
Dedication	Uwes_7	0.02	778.18	<.001	14.87	[14.84, 14.91]	9.31	[8.81, 9.80]
Absorption	Uwes_6	0.07	2.59	.010	0.18	[0.04, 0.31]	0.12	[0.03, 0.21]
Absorption	Uwes_8	0.13	4.26	<.001	0.57	[0.31, 0.83]	0.40	[0.22, 0.58]
Absorption	Uwes_9	0.17	4.56	<.001	0.76	[0.43, 1.09]	0.49	[0.28, 0.70]

Factor	Item	SE	Z	p	b	95% CI (b)	b*	95% CI (b*)
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Note. *b* = Unstandardized Factor Loading; *b** = Standardized Factor Loading. Yellow highlight = Heywood case.

2.4 Local Fit and Modification Indices for Unidimensional Model

Table S6

Standardized Residual Covariances for the Unidimensional Model

	Uwes_1	Uwes_2	Uwes_3	Uwes_4	Uwes_5	Uwes_6	Uwes_7	Uwes_8	Uwes_9
Uwes_1	-								
Uwes_2	4.798	-							
Uwes_3	-3.263	-0.237	-						
Uwes_4	-1.908	-1.646	1.206	-					
Uwes_5	0.553	1.851	2.299	0.091	-				
Uwes_6	-0.877	-1.034	-0.299	-0.683	-0.864	-			
Uwes_7	-0.940	-2.098	1.265	2.360	-3.396	1.123	-		
Uwes_8	-0.067	-2.849	-2.267	0.872	-2.413	1.619	-0.423	-	
Uwes_9	-0.242	-1.290	-1.865	-1.514	-3.110	1.722	0.156	4.514	-

Table S7

Residual Correlations (Bentler-Type) for the Unidimensional Model

	Uwes_1	Uwes_2	Uwes_3	Uwes_4	Uwes_5	Uwes_6	Uwes_7	Uwes_8	Uwes_9
Uwes_1	-								
Uwes_2	0.086	-							
Uwes_3	-0.030	-0.002	-						
Uwes_4	-0.023	-0.019	0.011	-					
Uwes_5	0.008	0.025	0.030	0.001	-				
Uwes_6	-0.013	-0.015	-0.003	-0.008	-0.012	-			
Uwes_7	-0.014	-0.027	0.016	0.032	-0.041	0.021	-		
Uwes_8	-0.001	-0.037	-0.024	0.013	-0.030	0.031	-0.007	-	
Uwes_9	-0.004	-0.021	-0.023	-0.021	-0.048	0.036	0.003	0.167	-

Note. Values ± 0.10 highlighted in bold.

Table S8

Modification Indices (MI > 10) for the Unidimensional Model

lhs	op	rhs	MI	EPC	sepc.lv	sepc.all	sepc.nox
Uwes_1	~~	uwes_2	60.40	0.235	0.235	0.392	0.392
Uwes_1	~~	uwes_3	11.94	-0.099	-0.099	-0.186	-0.186
Uwes_3	~~	uwes_5	13.48	0.114	0.114	0.200	0.200
Uwes_4	~~	uwes_7	10.42	0.116	0.116	0.167	0.167

Uwes_5	~~	uwes_7	11.68	-0.133	-0.133	-0.169	-0.169
Uwes_8	~~	uwes_9	78.79	0.418	0.418	0.410	0.410

Note. MI = Modification Index; EPC = Expected Parameter Change; sepc.lv = standardized EPC on latent variable scale; sepc.all = completely standardized EPC; sepc.nox = standardized EPC without exogenous covariates.

2.5 Local Fit and Modification Indices for Three-Factor Model

Table S9

Standardized Residual Covariances for the Three-Factor Model

	Uwes_1	Uwes_2	Uwes_3	Uwes_4	Uwes_5	Uwes_6	Uwes_7	Uwes_8	Uwes_9
Uwes_1	-								
Uwes_2	2.939	-							
Uwes_3	-2.658	-2.128	-						
Uwes_4	-2.037	0.442	3.670	-					
Uwes_5	-1.149	-1.174	1.925	-1.118	-				
Uwes_6	-0.506	-1.661	-1.440	-0.178	1.282	-			
Uwes_7	1.337	1.247	2.217	1.955	1.464	2.370	-		
Uwes_8	0.527	-2.192	-0.418	-2.233	0.819	-0.532	-4.417	-	
Uwes_9	-0.190	-1.235	-1.882	-2.489	-2.114	-0.362	-2.669	3.266	-

Note. Values ± 2.58 highlighted in bold.

Table S10

Residual Correlations (Bentler-Type) for the Three-Factor Model

	Uwes_1	Uwes_2	Uwes_3	Uwes_4	Uwes_5	Uwes_6	Uwes_7	Uwes_8	Uwes_9
Uwes_1	-								
Uwes_2	0.031	-							
Uwes_3	-0.026	-0.014	-						
Uwes_4	-0.022	0.005	0.057	-					
Uwes_5	-0.015	-0.014	0.025	-0.006	-				
Uwes_6	-0.009	-0.023	-0.019	-0.002	0.014	-			
Uwes_7	0.023	0.020	0.038	0.025	0.018	0.045	-		
Uwes_8	0.008	-0.029	-0.006	-0.024	0.011	-0.010	-0.034	-	
Uwes_9	-0.004	-0.022	-0.034	-0.032	-0.031	-0.007	-0.030	0.078	-

Note. Values ± 0.10 highlighted in bold.

Table S11*Modification Indices (MI > 10) for the Three-Factor Model*

lhs	op	rhs	MI	EPC	sepc.lv	sepc.all	sepc.nox
Vigor	=~	uwes_6	24.231	0.927	0.927	0.619	0.619
Dedication	=~	uwes_5	26.677	1.368	1.368	0.880	0.880
Dedication	=~	uwes_6	43.890	1.895	1.895	1.265	1.265
Dedication	=~	uwes_9	16.406	-1.058	-1.058	-0.688	-0.688
uwes_1	~~	uwes_2	24.180	0.172	0.172	0.355	0.355
uwes_5	~~	uwes_3	25.576	0.157	0.157	0.296	0.296
uwes_6	~~	uwes_8	16.353	-0.206	-0.206	-0.296	-0.296
uwes_8	~~	uwes_9	45.274	0.334	0.334	0.407	0.407

Note. MI = Modification Index; EPC = Expected Parameter Change; sepc.lv = standardized EPC on latent variable scale; sepc.all = completely standardized EPC; sepc.nox = standardized EPC without exogenous covariates.

3. Supplementary Item-Statistics Tables

3.1 Item-Statistics Table for UWES-3

Table S12

Item-Statistics for UWES-3

Item	M	SD	Item–Total r	Corrected Item–Total r
Uwes_1	3.02	1.39	0.88	0.79
Uwes_3	3.31	1.53	0.90	0.82
Uwes_8	3.43	1.43	0.87	0.75

Note. Mean Inter-Item Correlation (MIC): 0.67

3.2 Item-Statistics Table for UWES-9

Table S13

Item-Statistics for UWES-9

Item	M	SD	Item–Total r	Corrected Item–Total r
Uwes_1	3.02	1.39	0.84	0.82
Uwes_2	3.11	1.45	0.87	0.86
Uwes_3	3.31	1.53	0.90	0.89
Uwes_4	3.25	1.59	0.88	0.87
Uwes_5	2.82	1.56	0.84	0.82
Uwes_6	3.64	1.50	0.83	0.80
Uwes_7	3.78	1.60	0.84	0.82
Uwes_8	3.43	1.43	0.81	0.79
Uwes_9	3.20	1.54	0.75	0.71

Note. Mean Inter-Item Correlation (MIC): 0.67

3.3 Item-Statistics Table for Subscales of UWES-9

Table S14

Item-Statistics for Subscales of UWES-9

Factor	Item	M	SD	Item–Total r	Corrected Item–Total r
Vigor	Uwes_1	3.02	1.39	0.90	0.84
Vigor	Uwes_2	3.11	1.45	0.92	0.88
Vigor	Uwes_5	2.82	1.56	0.90	0.80
Dedication	Uwes_3	3.31	1.53	0.92	0.87
Dedication	Uwes_4	3.25	1.59	0.93	0.87
Dedication	Uwes_7	3.78	1.60	0.91	0.83
Absorption	Uwes_6	3.64	1.50	0.85	0.72
Absorption	Uwes_8	3.43	1.43	0.89	0.82

Factor	Item	M	SD	Item–Total r	Corrected Item–Total r
Absorption	Uwes_9	3.20	1.54	0.88	0.78

Note. Mean Inter-Item Correlation (MIC): Vigor = 0.74, Dedication = 0.77, Absorption = 0.64