Bijlage 13: Inferentiële statistische analyses uitgevoerd in Jamovi

13.1. Betrouwbaarheidsanalyse van de TAM-componenten (n = 65)

Pre- en post-PEU	Pre- en post-PU

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.500

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
PEU_pre_1	0.183	0.494
PEU_pre_2	0.347	0.415
PEU_pre_3	0.277	0.442
PEU_pre_4	0.243	0.460
PEU_pre_5	0.320	0.422
PEU_pre_6	0.194	0.492

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.697

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
PEU_post_1	0.506	0.629
PEU_post_2	0.367	0.675
PEU_post_3	0.297	0.698
PEU_post_4	0.430	0.658
PEU_post_5	0.516	0.626
PEU_post_6	0.458	0.647

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.462

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
PU_pre_1	0.0901	0.510
PU_pre_2	0.4562	0.187
PU_pre_3	0.3357	0.328
PU_pre_4	0.2161	0.485

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.526

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
PU_post_1	0.309	0.462
PU_post_2	0.399	0.421
PU_post_3	0.414	0.353
PU_post_4	0.215	0.573

Pre- en post-ATU	Pre- en post-BIU

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.809

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
ATU_post_1	0.469	0.808
ATU_post_2	0.596	0.772
ATU_post_3	0.756	0.716
ATU_post_4	0.528	0.791
ATU_post_5	0.637	0.758

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.810

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
BIU_pre_1	0.572	0.782
BIU_pre_2	0.764	0.717
BIU_pre_3	0.745	0.726
BIU_pre_4	0.484	0.806
BIU_pre_5	0.436	0.818

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.809

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
ATU_post_1	0.469	0.808
ATU_post_2	0.596	0.772
ATU_post_3	0.756	0.716
ATU_post_4	0.528	0.791
ATU_post_5	0.637	0.758

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.820

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
BIU_post_1	0.553	0.801
BIU_post_2	0.723	0.751
BIU_post_3	0.651	0.773
BIU_post_4	0.640	0.776
BIU_post_5	0.501	0.817

13.2. Betrouwbaarheidsanalyse van de betrokkenheidsschaal van Fuller (2018; n = 65)

Reliability Analysis

Scale Reliability Statistics

	Cronbach's α
scale	0.556

[3]

Item Reliability Statistics

		If item dropped
	Item-rest correlation	Cronbach's α
item1_aandacht	0.5500	0.394
item2_deedalsof [a]	0.4597	0.451
item3_plezier	0.4157	0.452
item4_ontmoedigd [a]	0.1721	0.562
item5_bijdrage	0.2486	0.538
item6_nieuweaanpak	0.0591	0.625

13.3. Gepaarde t-toetsen en Wilcoxon signed-rank toetsen op de TAM-dimensies (pretest vs. posttest, n = 65)

Paired Samples T-Test

Paired Samples T-Test

			Statistic	df	p	Mean difference	SE difference		Effect Size
PEU_pre	PEU_post	Student's t	−1.791	64.0	.078	−0.1718	0.0959	Cohen's d	−0.2221
		Wilcoxon W	569 [a]		.093	−0.1667	0.0959	Rank biserial correlation	−0.2610
PU_pre	PU_post	Student's t	1.260	64.0	.212	0.0962	0.0763	Cohen's d	0.1563
		Wilcoxon W	630 [b]		.203	0.1250	0.0763	Rank biserial correlation	0.2174
ATU_pre	ATU_post	Student's t	0.198	64.0	.844	0.0185	0.0933	Cohen's d	0.0245
		Wilcoxon W	700 [c]		.549	0.1000	0.0933	Rank biserial correlation	0.0980
BIU_pre	BIU_post	Student's t	−0.731	64.0	.467	−0.0769	0.1052	Cohen's d	−0.0907
		Wilcoxon W	686 [e]		.629	−3.88e−5	0.1052	Rank biserial correlation	−0.0761

Note. H_a $\mu_{\text{Measure 1 - Measure 2}} \neq 0$

[a] 10 pair(s) of values were tied

[b] 20 pair(s) of values were tied

[c] 15 pair(s) of values were tied

[e] 11 pair(s) of values were tied

[3]

13.4. Toetsing van de normaliteitsveronderstelling (Shapiro-Wilktoets) voor de TAM-verschilscores (n = 65)

Normality Test (Shapiro-Wilk)

			W	p
PEU_pre	-	PEU_post	0.973	.158
PU_pre	-	PU_post	0.965	.060
ATU_pre	-	ATU_post	0.932	.001
BIU_pre	-	BIU_post	0.957	.023

Note. A low p-value suggests a violation of the assumption of normality

13.5. Onafhankelijke t-toetsen en Mann-Whitney U-toetsen: LM1 vs. LM2 (n = 65)

Independent Samples T-Test

		Statistic	df	p		Effect Size
PEU_pre	Student's t	1.5476	63.0	.127	Cohen's d	0.41047
	Welch's t	1.7044	50.6	.094	Cohen's d	0.43009
	Mann-Whitney U	328		.060	Rank biserial correlation	−0.29004
PEU_post	Student's t	0.0486	63.0	.961	Cohen's d	0.01289
	Welch's t	0.0542	52.3	.957	Cohen's d	0.01358
	Mann-Whitney U	460		.978	Rank biserial correlation	−0.00541
PEU_diff	Student's t	−1.1082	63.0	.272	Cohen's d	−0.29394
	Welch's t	−1.2440	53.1	.219	Cohen's d	−0.31067
	Mann-Whitney U	368		.186	Rank biserial correlation	0.20455
PU_pre	Student's t	1.6998	63.0	.094	Cohen's d	0.45084
	Welch's t	1.5767	33.0	.124	Cohen's d	0.43334
	Mann-Whitney U	350		.113	Rank biserial correlation	−0.24242
PU_post	Student's t	0.0239	63.0	.981	Cohen's d	0.00634
	Welch's t	0.0271	54.2	.979	Cohen's d	0.00673
	Mann-Whitney U	421		.562	Rank biserial correlation	−0.08874
PU_diff	Student's t	−1.3092	63.0	.195	Cohen's d	−0.34724
	Welch's t	−1.2826	37.5	.207	Cohen's d	−0.34360
	Mann-Whitney U	356		.132	Rank biserial correlation	0.22944
ATU_pre	Student's t	−1.9514 [a]	63.0	.055	Cohen's d	−0.51757
	Welch's t	−2.2827	58.1	.026	Cohen's d	−0.55704
	Mann-Whitney U	350		.114	Rank biserial correlation	0.24351
ATU_post	Student's t	−0.5413 [a]	63.0	.590	Cohen's d	−0.14357
	Welch's t	−0.6221	56.0	.536	Cohen's d	−0.15333
	Mann-Whitney U	437		.724	Rank biserial correlation	0.05519
ATU_diff	Student's t	1.2799 [a]	63.0	.205	Cohen's d	0.33948
	Welch's t	1.6135	63.0	.112	Cohen's d	0.37679
	Mann-Whitney U	385		.277	Rank biserial correlation	−0.16775
BIU_pre	Student's t	0.1123	63.0	.911	Cohen's d	0.02977
	Welch's t	0.1195	46.4	.905	Cohen's d	0.03071
	Mann-Whitney U	453		.899	Rank biserial correlation	−0.02056
BIU_post	Student's t	−1.2035	63.0	.233	Cohen's d	−0.31920
	Welch's t	−1.2452	43.1	.220	Cohen's d	−0.32468
	Mann-Whitney U	374		.216	Rank biserial correlation	0.19156
BIU_diff	Student's t	−1.3806	63.0	.172	Cohen's d	−0.36616
	Welch's t	−1.3154	35.1	.197	Cohen's d	−0.35708
	Mann-Whitney U	311		.034	Rank biserial correlation	0.32684

Note. H_a $\mu_{\text{LM1 (eerste moderne taal)}} \neq \mu_{\text{LM2 (tweede moderne taal)}}$

[a] Levene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

13.6. Onafhankelijke t-toetsen en Mann-Whitney U-toetsen: CLIL vs. Niet-CLIL (n = 65)

Independent Samples T-Test

		Statistic	df	p		Effect Size
PEU_pre	Student's t	2.5812	63.0	.012	Cohen's d	0.7432
	Welch's t	2.4291	23.2	.023	Cohen's d	0.7200
	Mann-Whitney U	227		.012	Rank biserial correlation	−0.4209
PEU_post	Student's t	1.4258	63.0	.159	Cohen's d	0.4105
	Welch's t	1.2504	21.2	.225	Cohen's d	0.3824
	Mann-Whitney U	308		.202	Rank biserial correlation	−0.2143
PEU_diff	Student's t	−0.5860	63.0	.560	Cohen's d	−0.1687
	Welch's t	−0.5875	25.6	.562	Cohen's d	−0.1689
	Mann-Whitney U	369		.726	Rank biserial correlation	0.0599
PU_pre	Student's t	2.0730	63.0	.042	Cohen's d	0.5969
	Welch's t	2.0468	25.0	.051	Cohen's d	0.5930
	Mann-Whitney U	258		.039	Rank biserial correlation	−0.3418
PU_post	Student's t	1.0201	63.0	.312	Cohen's d	0.2937
	Welch's t	0.8202	19.2	.422	Cohen's d	0.2599
	Mann-Whitney U	286		.099	Rank biserial correlation	−0.2717
PU_diff	Student's t	−0.6813	63.0	.498	Cohen's d	−0.1962
	Welch's t	−0.6680	24.7	.510	Cohen's d	−0.1942
	Mann-Whitney U	371		.751	Rank biserial correlation	0.0536
ATU_pre	Student's t	0.1854	63.0	.854	Cohen's d	0.0534
	Welch's t	0.1742	23.2	.863	Cohen's d	0.0517
	Mann-Whitney U	377		.824	Rank biserial correlation	−0.0383
ATU_post	Student's t	0.2199 [a]	63.0	.827	Cohen's d	0.0633
	Welch's t	0.1701	18.5	.867	Cohen's d	0.0547
	Mann-Whitney U	358		.602	Rank biserial correlation	−0.0880
ATU_diff	Student's t	0.0362	63.0	.971	Cohen's d	0.0104
	Welch's t	0.0341	23.2	.973	Cohen's d	0.0101
	Mann-Whitney U	353		.555	Rank biserial correlation	−0.0995
BIU_pre	Student's t	0.5359	63.0	.594	Cohen's d	0.1543
	Welch's t	0.5197	24.3	.608	Cohen's d	0.1519
	Mann-Whitney U	362		.647	Rank biserial correlation	−0.0778
BIU_post	Student's t	−0.2775	63.0	.782	Cohen's d	−0.0799
	Welch's t	−0.2732	24.9	.787	Cohen's d	−0.0793
	Mann-Whitney U	378		.837	Rank biserial correlation	0.0357
BIU_diff	Student's t	−0.8230	63.0	.414	Cohen's d	−0.2370
	Welch's t	−0.8550	27.3	.400	Cohen's d	−0.2415
	Mann-Whitney U	294		.136	Rank biserial correlation	0.2500

Note. H_a $\mu_{Immersion} \neq \mu_{Non\text{-}immersion}$

[a] Levene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

13.7. Onafhankelijke t-toetsen en Mann-Whitney U-toetsen: nooit-gebruikers vs. gebruikers (n = 65)

Independent Samples T-Test

		Statistic	df	p		Effect Size
PEU_pre	Student's t	0.477	63.0	.635	Cohen's d	0.148
	Welch's t	0.515	20.4	.612	Cohen's d	0.154
	Mann-Whitney U	308		.621	Rank biserial correlation	−0.0902
PEU_post	Student's t	2.142	63.0	.036	Cohen's d	0.664
	Welch's t	1.912	16.4	.074	Cohen's d	0.625
	Mann-Whitney U	212		.038	Rank biserial correlation	−0.3743
PEU_diff	Student's t	1.526	63.0	.132	Cohen's d	0.473
	Welch's t	1.591	19.5	.128	Cohen's d	0.483
	Mann-Whitney U	243		.118	Rank biserial correlation	−0.2825
PU_pre	Student's t	1.184	63.0	.241	Cohen's d	0.367
	Welch's t	1.124	17.4	.276	Cohen's d	0.357
	Mann-Whitney U	261		.200	Rank biserial correlation	−0.2293
PU_post	Student's t	2.883	63.0	.005	Cohen's d	0.894
	Welch's t	3.271	22.1	.003	Cohen's d	0.949
	Mann-Whitney U	181		.009	Rank biserial correlation	−0.4660
PU_diff	Student's t	1.528	63.0	.131	Cohen's d	0.474
	Welch's t	1.975	28.4	.058	Cohen's d	0.531
	Mann-Whitney U	244		.117	Rank biserial correlation	−0.2796
ATU_pre	Student's t	0.418	63.0	.677	Cohen's d	0.130
	Welch's t	0.413	18.2	.684	Cohen's d	0.129
	Mann-Whitney U	315		.704	Rank biserial correlation	−0.0695
ATU_post	Student's t	0.860	63.0	.393	Cohen's d	0.267
	Welch's t	0.942	20.9	.357	Cohen's d	0.279
	Mann-Whitney U	281		.346	Rank biserial correlation	−0.1701
ATU_diff	Student's t	0.426	63.0	.672	Cohen's d	0.132
	Welch's t	0.458	20.4	.652	Cohen's d	0.137
	Mann-Whitney U	298		.514	Rank biserial correlation	−0.1183
BIU_pre	Student's t	−0.679	63.0	.500	Cohen's d	−0.211
	Welch's t	−0.623	16.8	.542	Cohen's d	−0.201
	Mann-Whitney U	303		.570	Rank biserial correlation	0.1036
BIU_post	Student's t	−1.345	63.0	.183	Cohen's d	−0.417
	Welch's t	−1.240	16.9	.232	Cohen's d	−0.400
	Mann-Whitney U	264		.224	Rank biserial correlation	0.2204
BIU_diff	Student's t	−0.728	63.0	.469	Cohen's d	−0.226
	Welch's t	−0.654	16.5	.522	Cohen's d	−0.213
	Mann-Whitney U	263		.220	Rank biserial correlation	0.2219

Note. H_a $\mu_{Nooit} \neq \mu_{Gebruikers}$

Bronnenlijst

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