Appendix I. Tests for normality of data distributions and equality of variances in the data

Precision

To determine whether all the collected data were normally distributed, a test of normality was conducted. To do so, we employed, apart from the Kolmogorov-Smirnov test, the Shapiro-Wilk test since this is the most powerful test for all types of distribution and sample size.

Table I.1. Test of normality for the precision data distributions

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Precision	treatment	0.200	20	0.035	0.892	20	0.030
	control	0.164	24	0.095	0.952	24	0.306

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the Shapiro-Wilk test results (Table I.1), the null hypothesis of normal distribution for the treatment group is rejected (p=0.030). Therefore, it is recommended to consider data analyses that do not rely on the normality assumption for this specific group.

Following this step, the homogeneity of variance was examined using Levene's test. Levene's test was selected due to its consistent performance across different distributions. The results in Table I.2 indicate a rejection of the null hypothesis of equal variances of the *precision* data for the treatment and control groups.

Table I.2. Test of homogeneity of variances for the precision data

		Levene Statistic	df1	df2	Sig.
Precision	Based on Mean	16.092	1	42	0.0002
	Based on Median	10.101	1	42	0.0028
	Based on Median and with adjusted df	10.101	1	27.082	0.0037
	Based on trimmed mean	14.766	1	42	0.0004

Recall

Similarly, the Shapiro-Wilk test was employed to examine the normality assumption for the *recall* data distribution for the treatment and control groups. The results in Table I.3 indicate that for both groups of participants, the data was normally distributed, as evidenced by p-values exceeding the predetermined alpha level (α=0.05, *treatment:* p=0.623; *control:* p=0.952).

Table I.3. Test of normality for the recall data distributions

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Recall	treatment	0.127	20	0.200*	0.964	20	0.623
	control	0.084	24	0.200*	0.984	24	0.952

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Following this step, the homogeneity of variance was tested by employing Levene's test. The results in Table I.4 indicate the acceptance of the null hypothesis concerning equal variances of the *recall* data.

Table I.4. Test of homogeneity of variances for the recall data

		Levene Statistic	df1	df2	Sig.
Recall	Based on Mean	1.339	1	42	0.254
	Based on Median	1.338	1	42	0.254
	Based on Median and with adjusted df	1.338	1	41.047	0.254
	Based on trimmed mean	1.339	1	42	0.254

Perceived usefulness

The normality test results using the Shapiro-Wilk test in Table I.5 revealed that both data distributions exhibited normality, as evidenced by p-values exceeding the predetermined alpha level (α=0.05, *treatment: p*=0.195; *control: p*=0.078).

Table I.5. Test of normality for the PU data distributions

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PU	treatment	0.157	20	0.200*	0.935	20	0.195
	control	0.151	24	0.169	0.926	24	0.078

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The examination of homogeneity of variance for the two sets of *PU* data was conducted via Levene's test (see Table I.6). The results support the acceptance of the null hypothesis, indicating equal variances (Levene's test, *p*=0.572). Therefore, the homogeneity of variances in *PU* across the treatment and control groups is confirmed.

Table I.6. Test of homogeneity of variances for the PU data

		Levene Statistic	df1	df2	Sig.
PU	Based on Mean	0.324	1	42	0.572
	Based on Median	0.434	1	42	0.513
	Based on Median and with adjusted df	0.434	1	39.653	0.514
	Based on trimmed mean	0.346	1	42	0.559

Perceived complexity

The Shapiro-Wilk test results displayed in Table I.7 demonstrated normality for both participant groups, with p-values exceeding the predetermined alpha level (α=0.05, *treatment*: *p*=0.140; *control: p*=0.169).

Table I.7. Test of normality for the PEOU data distributions

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
PEOU	treatment	0.147	20	0.200*	0.928	20	0.140
	control	0.171	24	0.067	0.941	24	0.169

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The examination of homogeneity of variance in Table I.8, performed using Levene's test, revealed a p-value of 0.249, exceeding the alpha level of 0.05 (Levene's test, *p*=0.249). This result supports the acceptance of the null hypothesis, indicating no significant difference in variances among *PEOU* across groups.

Table I.8. Test of homogeneity of variances for the PEOU data

		Levene Statistic	df1	df2	Sig.
PEOU	Based on Mean	1.365	1	42	0.249
	Based on Median	0.841	1	42	0.364
	Based on Median and with adjusted df	0.841	1	30.559	0.366
	Based on trimmed mean	1.282	1	42	0.264