Results

Descriptive Statistics including Q-Q plots

Descriptive Statistics

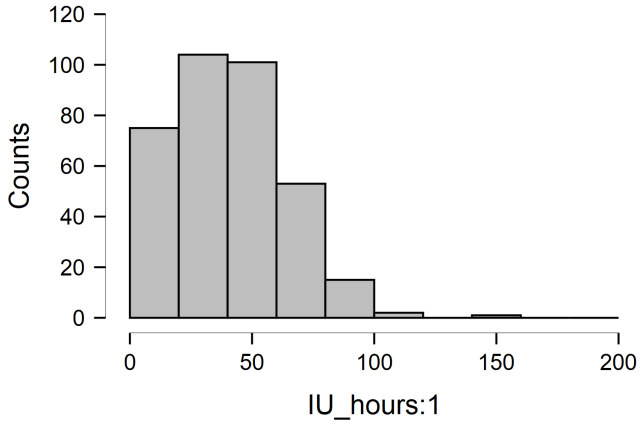
	IU_hours:1		ICQ_TOTAL		ICQ_Ctan		ICQ_Att		ICQ_Sens		ICQ_Demand		ICQ_SocAvoid		ICQ_CogAvoid		YD
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Valid	351	468	351	468	351	468	351	468	351	468	351	468	351	468	351	468	351
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	44.094	47.103	89.681	82.566	14.353	15.068	13.259	13.609	15.977	15.774	16.789	13.756	12.507	10.286	16.795	14.073	3.493
Std. Deviation	23.557	28.323	25.017	26.072	3.994	4.134	6.327	6.475	4.422	4.822	6.145	6.300	6.345	6.329	6.769	7.068	1.978
Minimum	4.000	3.000	25.000	14.000	5.000	5.000	0.000	0.000	2.000	4.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum	150.000	168.000	180.000	160.000	30.000	27.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000	29.000	30.000	30.000	8.000

Note. Excluded 2 rows from the analysis that correspond to the missing values of the split-by variable IU_W2R:1

Distribution Plots

IU_hours:1

1



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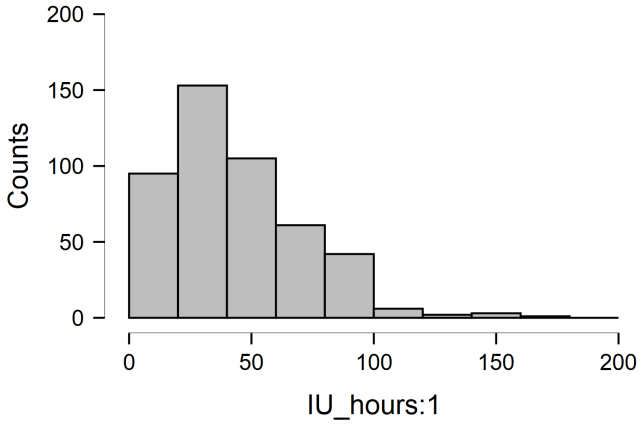

ICQ_TOTAL

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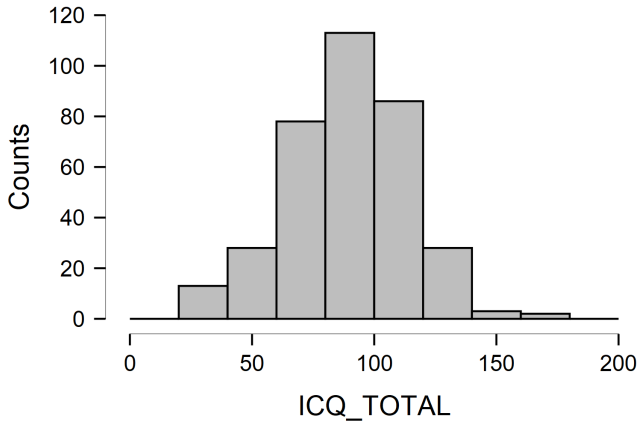

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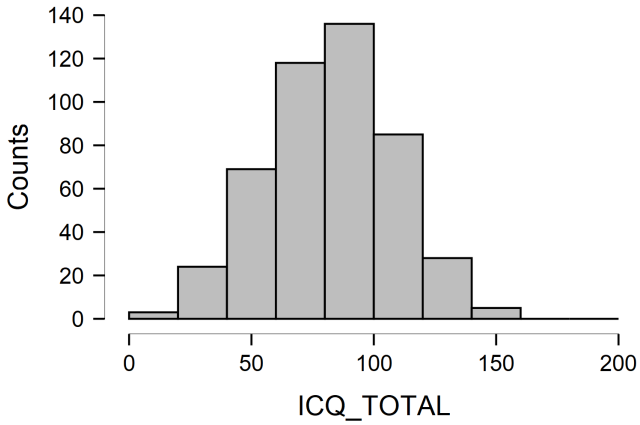

ICQ_Ctan

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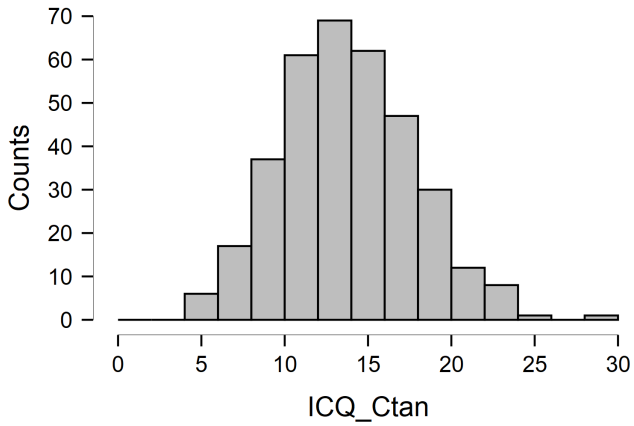

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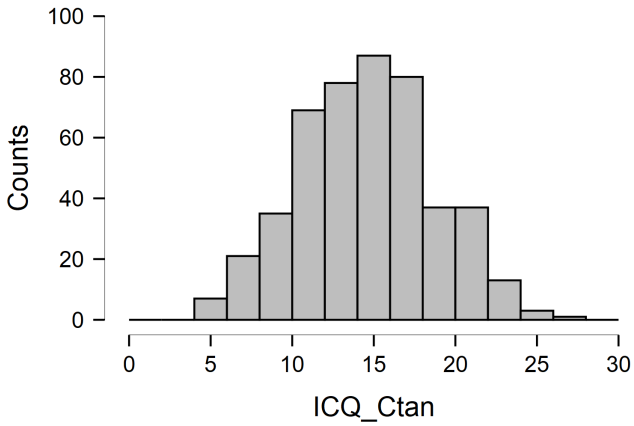

ICQ_Att

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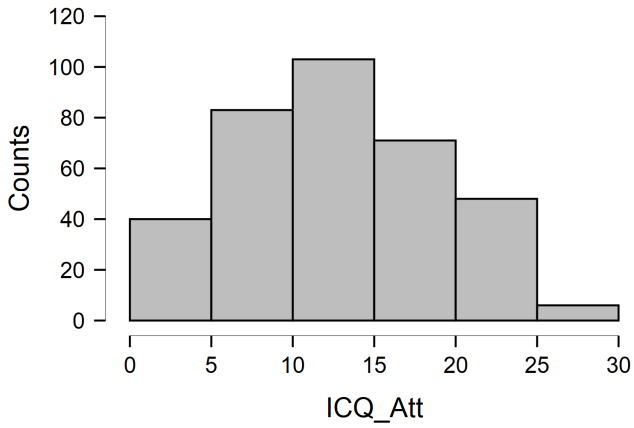

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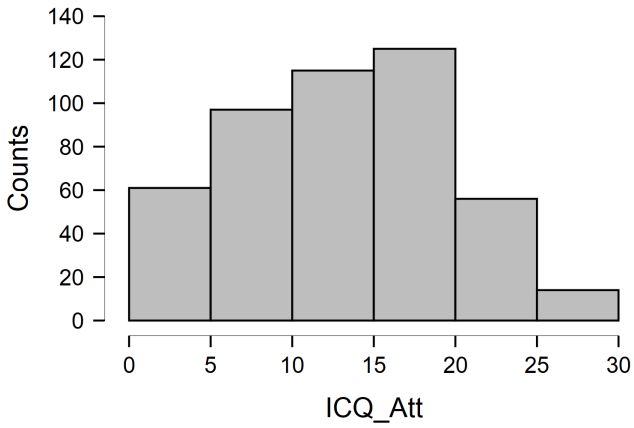
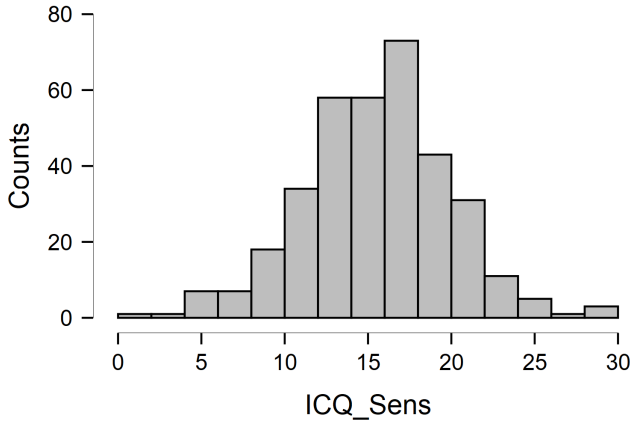


ICQ_Sens

1



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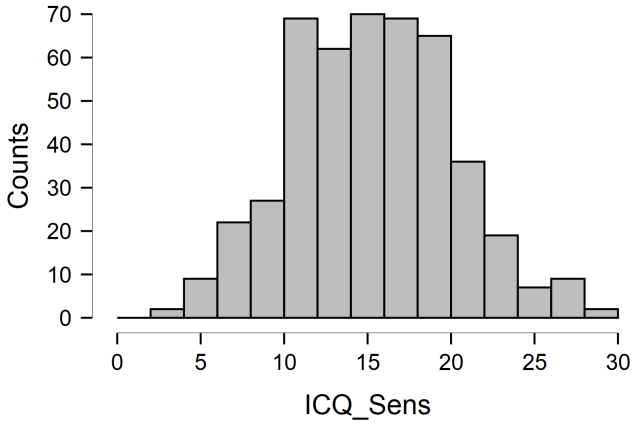

ICQ_Demand

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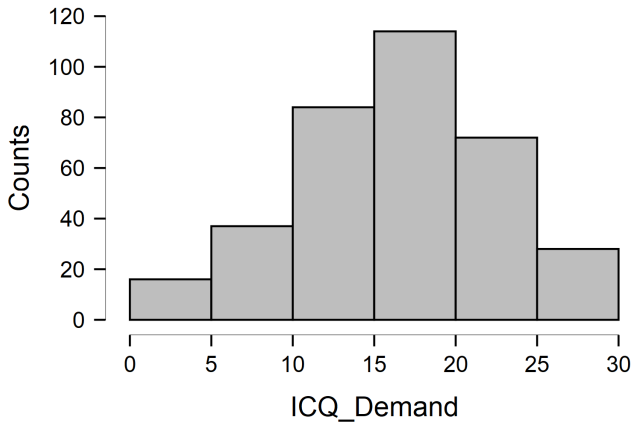

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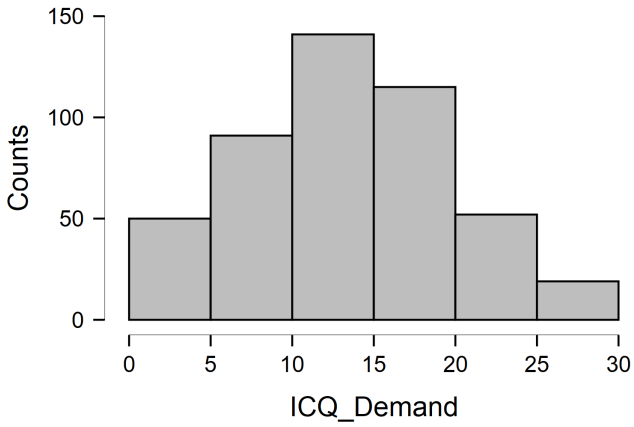

ICQ_SocAvoid

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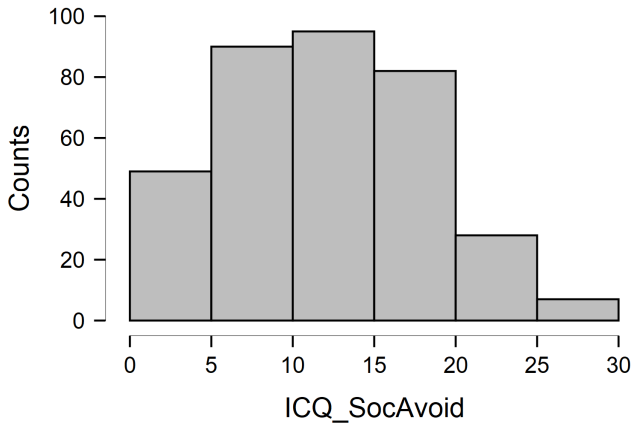

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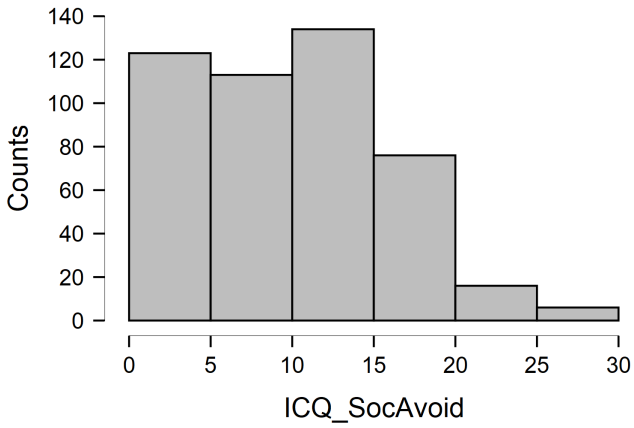

ICQ_CogAvoid

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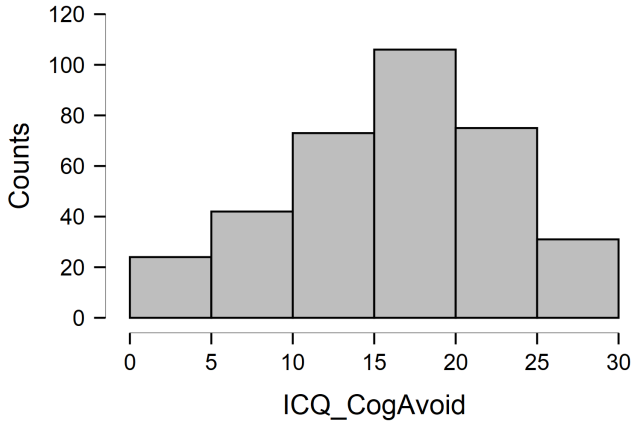

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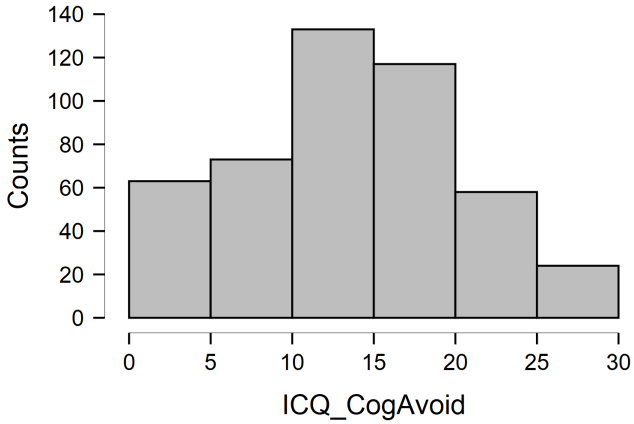
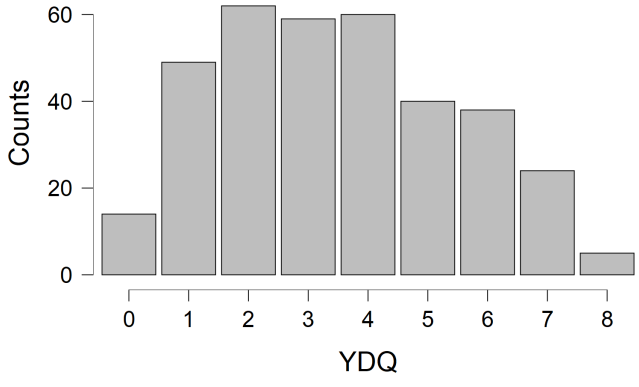


YDQ

1



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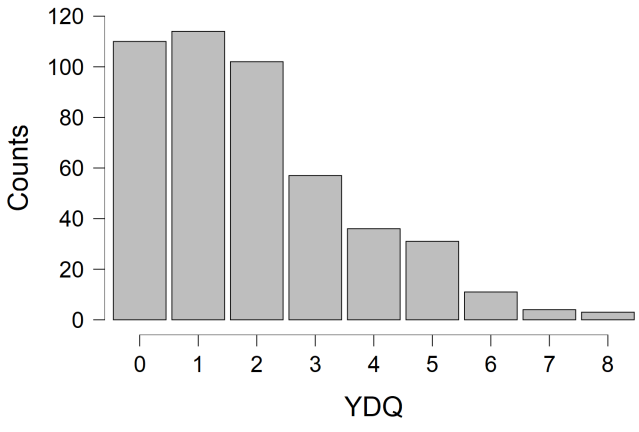
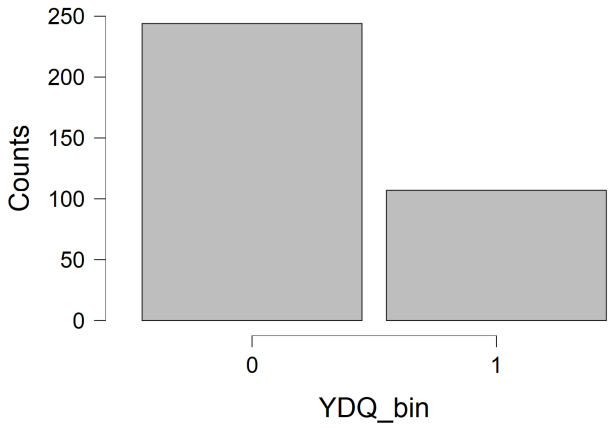


YDQ_bin

1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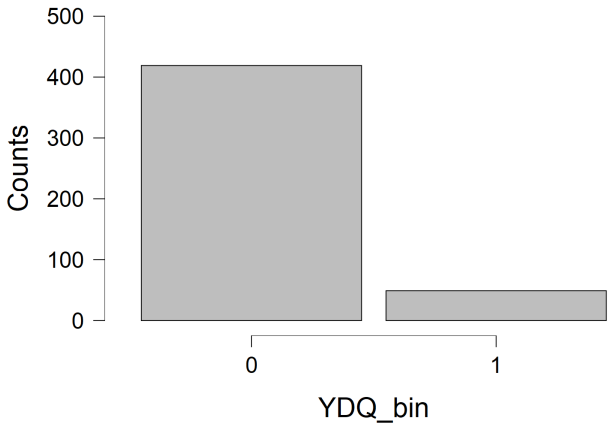
200
150
100
50
0
Counts
0
1
YDQ_bin

2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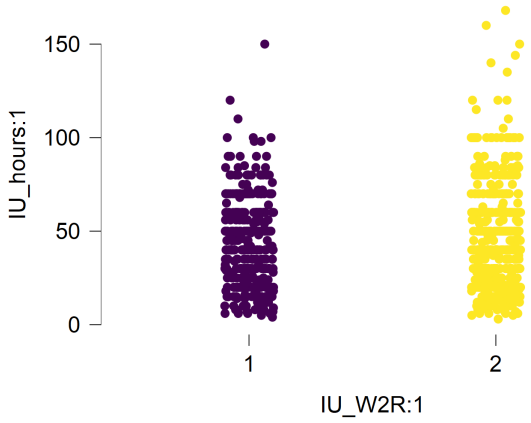
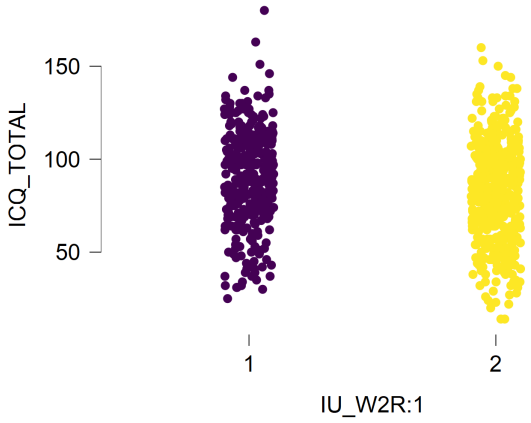
400
300
200
100
0
Counts
0
1
YDQ_bin

Boxplots

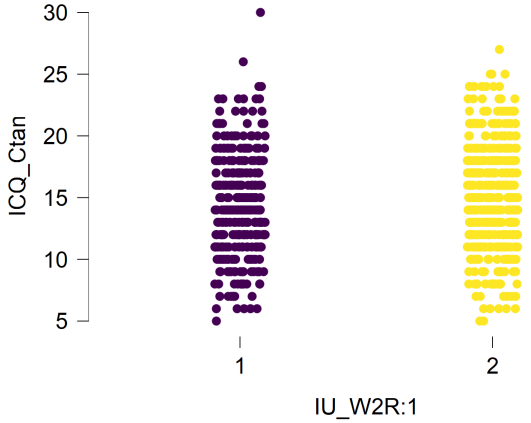
IU_hours:1



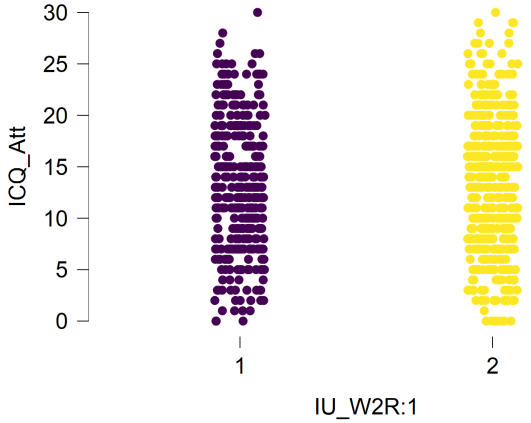
ICQ_TOTAL



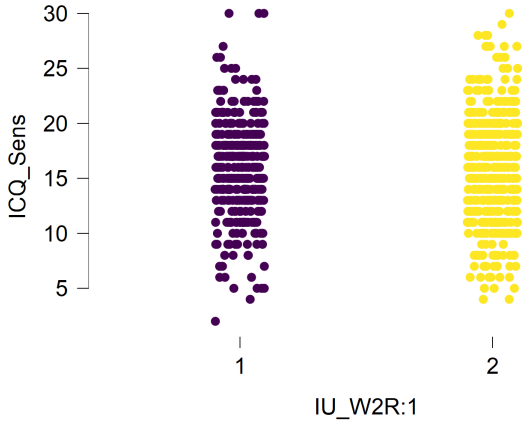
ICQ_Ctan



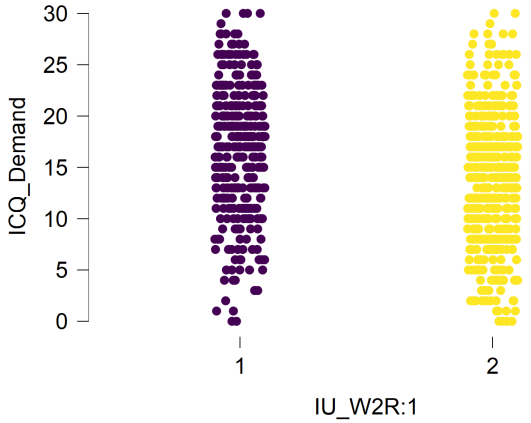
ICQ_Att



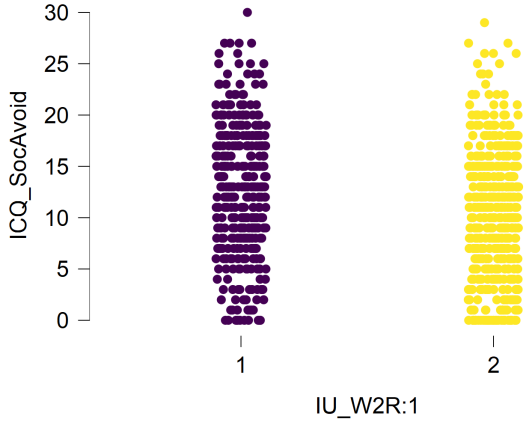
ICQ_Sens



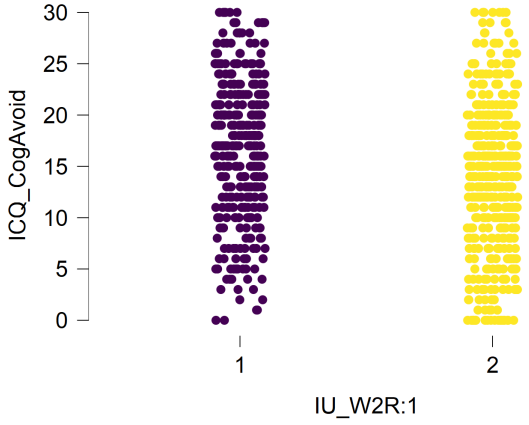
ICQ_Demand



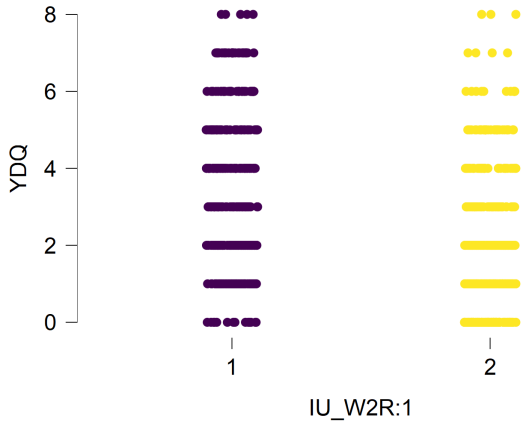
ICQ_SocAvoid



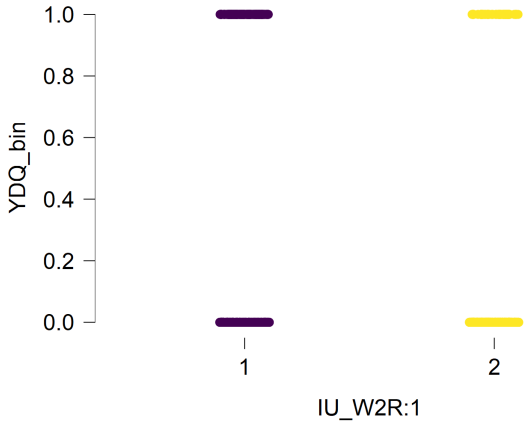
ICQ_CogAvoid



YDQ



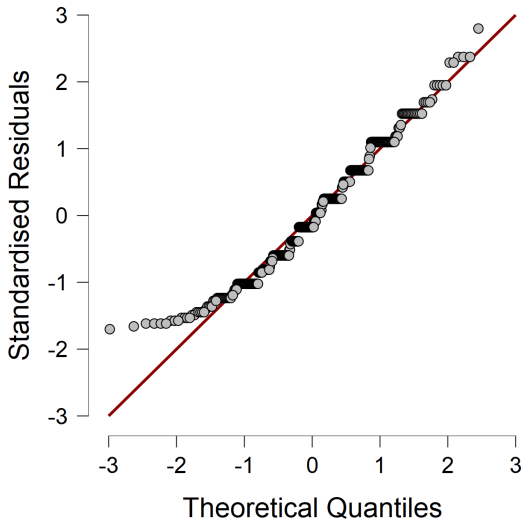
YDQ_bin



Q-Q Plots

IU_hours:1

1



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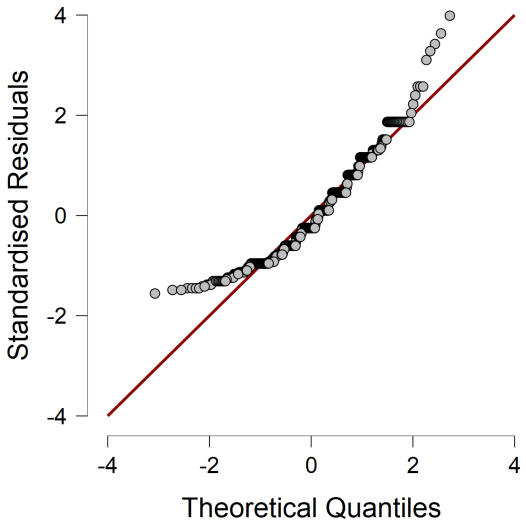

ICQ_TOTAL

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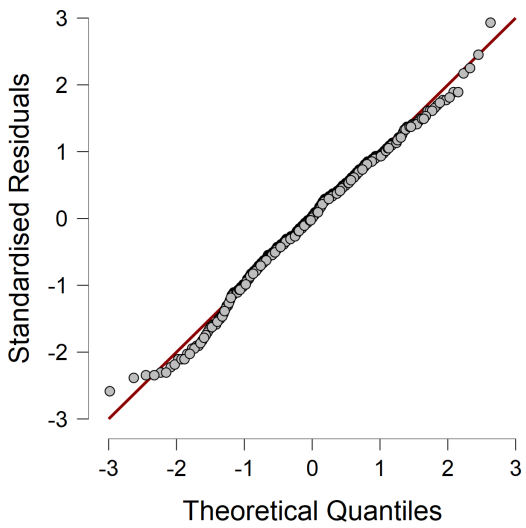

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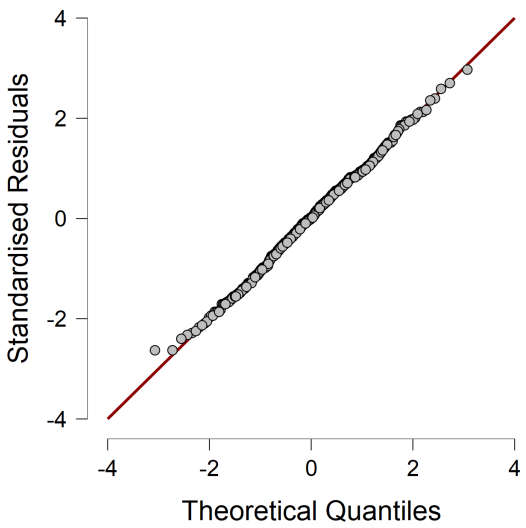

ICQ_Ctan

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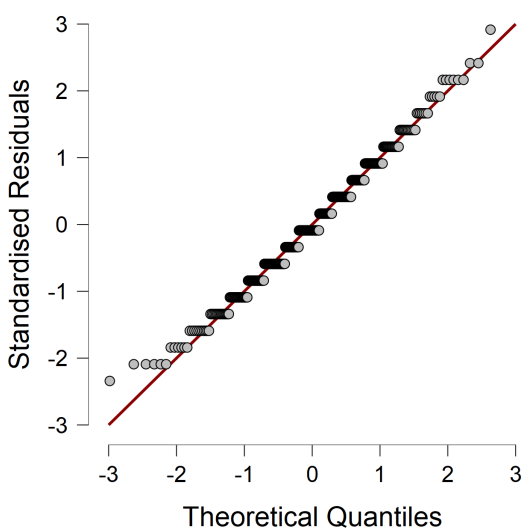

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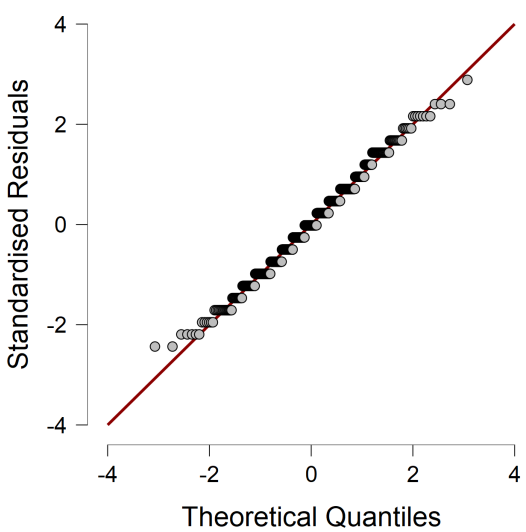

ICQ_Att

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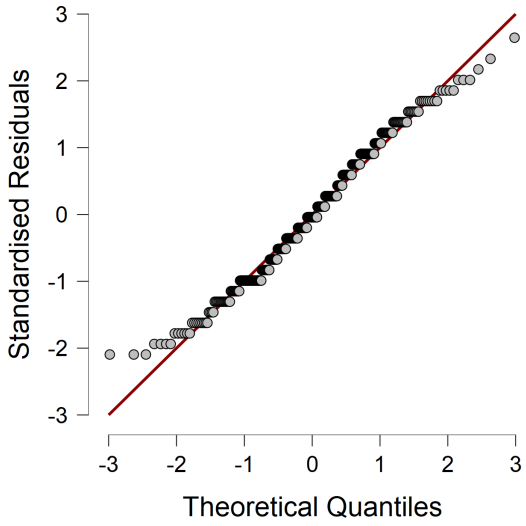

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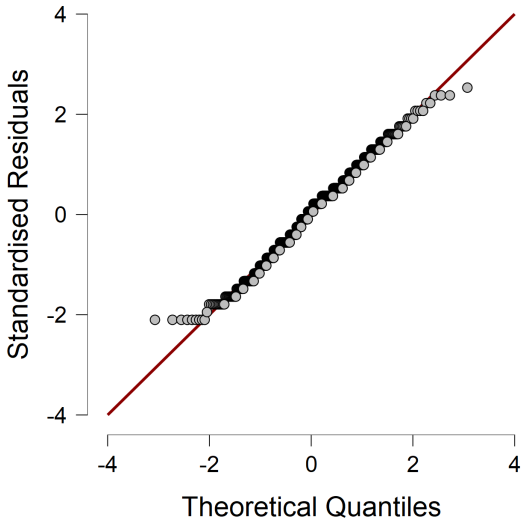

ICQ_Sens

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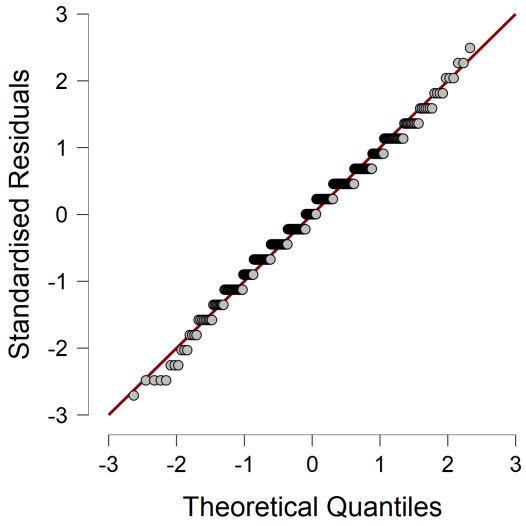

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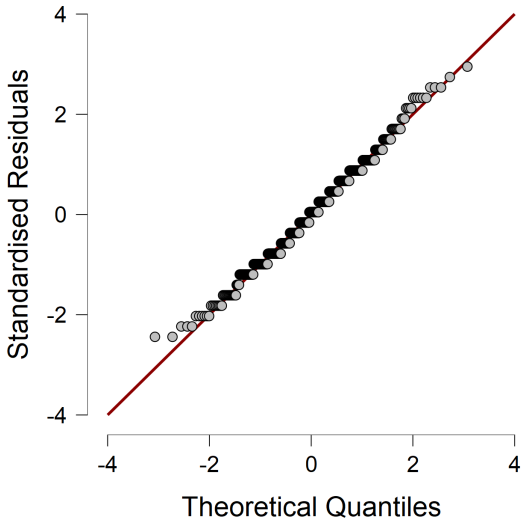

ICQ_Demand

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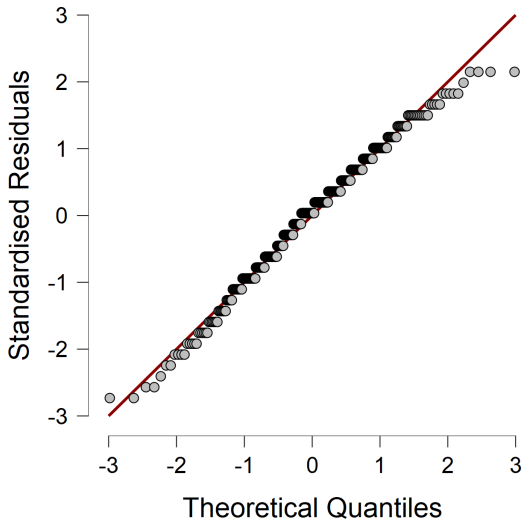

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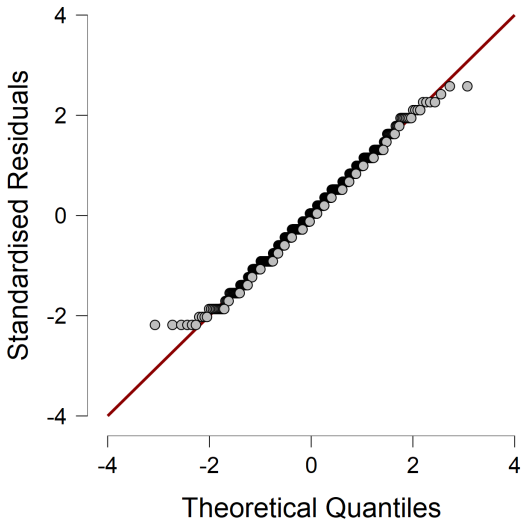

ICQ_SocAvoid

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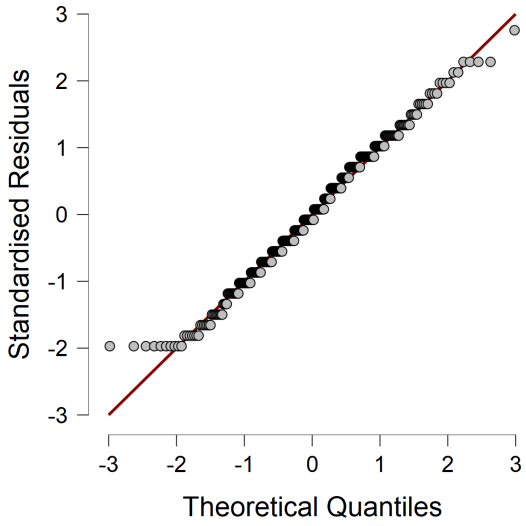

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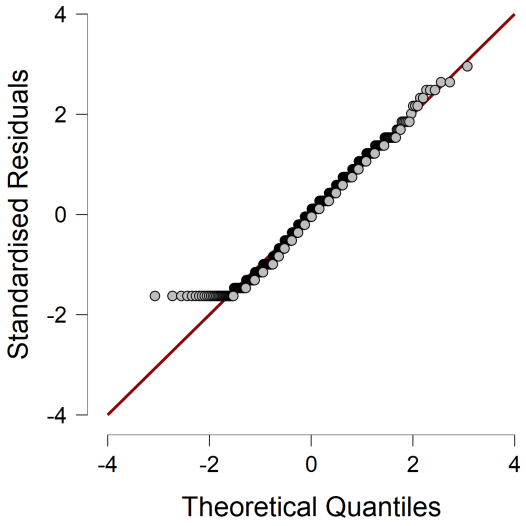

ICQ_CogAvoid

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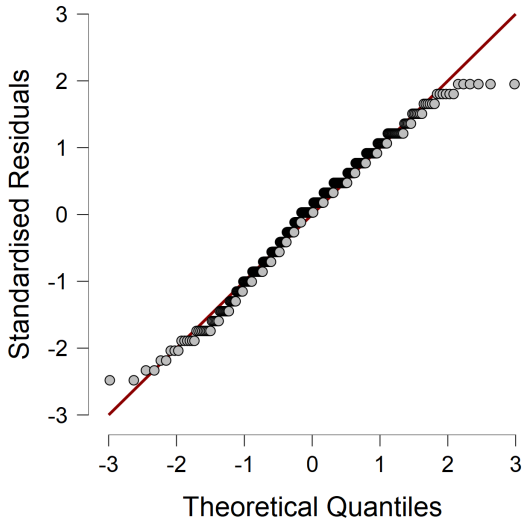

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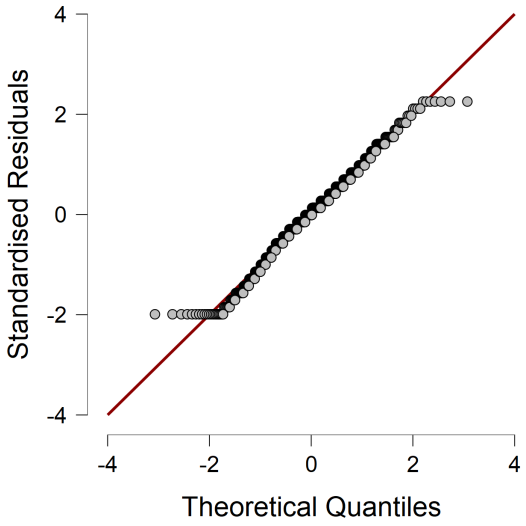
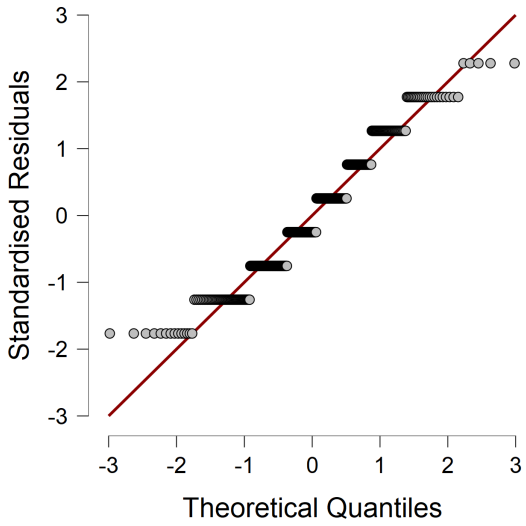
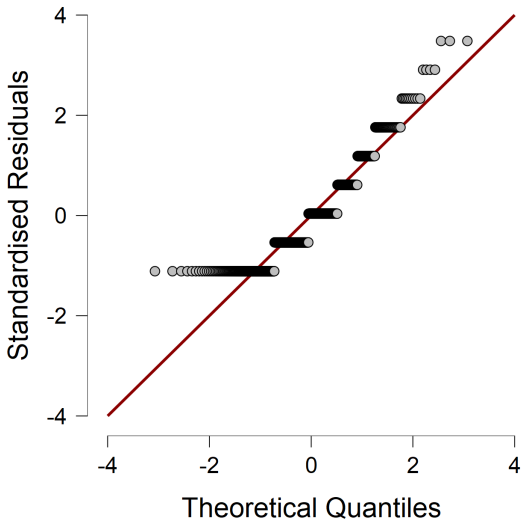


YDQ

1

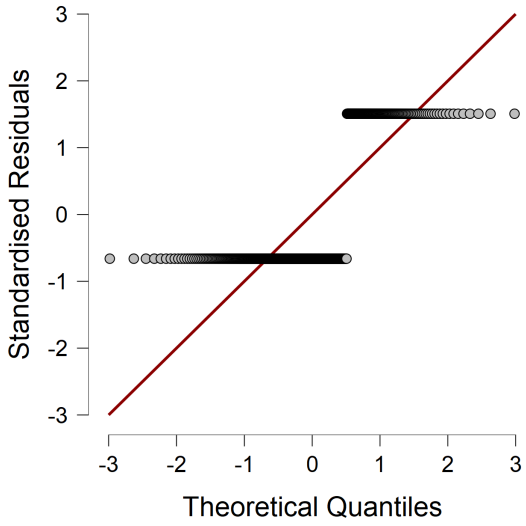


2

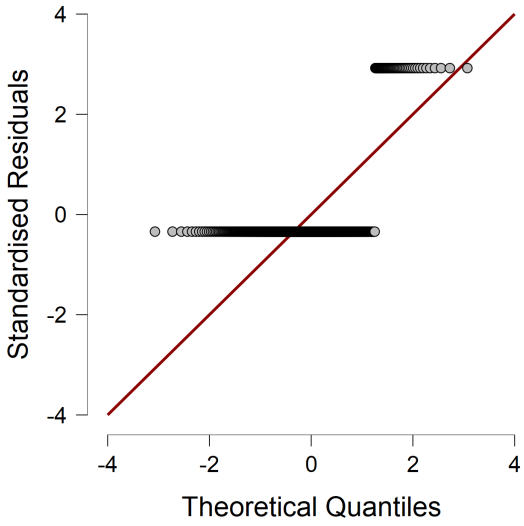


YDQ_bin

1


Standardised Residuals
Theoretical Quantiles
3
2
1
0
-1
-2
-3

2


Standardised Residuals
Theoretical Quantiles
4
2
0
-2
-4

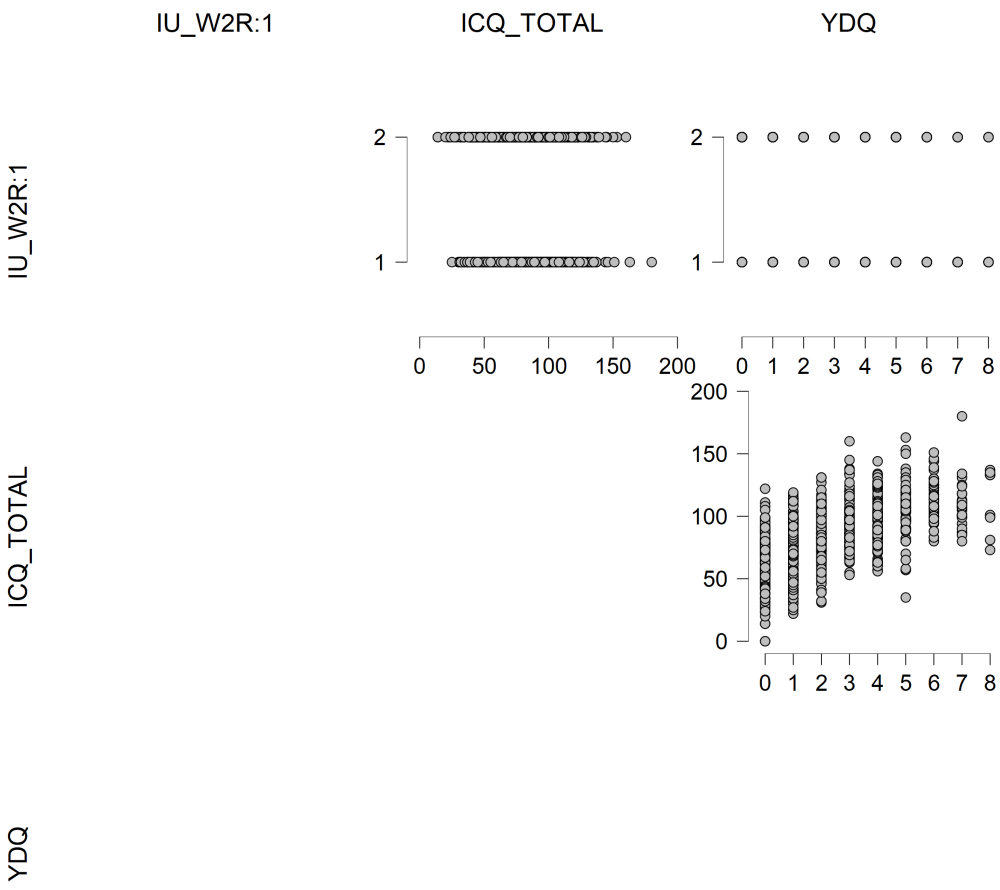
Validity coefficients for YDQ, ICQP, W2R

Correlation Table

Variable		IU_W2R:1	ICQ_TOTAL	YDQ
1. IU_W2R:1	n	—		
	Pearson's r	—		
	p-value	—		
	Upper 95% CI	—		
	Lower 95% CI	—		
	Spearman's rho	—		
	p-value	—		
	Upper 95% CI	—		
	Lower 95% CI	—		
2. ICQ_TOTAL	n	819	—	
	Pearson's r	−0.136***	—	
	p-value	9.135e −5	—	
	Upper 95% CI	−0.068	—	
	Lower 95% CI	−0.203	—	
	Spearman's rho	−0.138***	—	
	p-value	7.224e −5	—	
	Upper 95% CI		—	
	Lower 95% CI		—	
3. YDQ	n	819	821	—
	Pearson's r	−0.385***	0.573***	—
	p-value	2.072e −30	9.853e −73	—
	Upper 95% CI	−0.326	0.617	—
	Lower 95% CI	−0.442	0.525	—
	Spearman's rho	−0.391***	0.587***	—
	p-value	2.851e −31	4.093e −77	—
	Upper 95% CI			—
	Lower 95% CI			—

* p < .05, ** p < .01, *** p < .001

Correlation plot



Chi-Square Hypothesis 1

Contingency Tables

YDQ_bin		IU_W2R:1		Total
		1	2	
0	Count	244.000	419.000	663.000
	% within column	69.516 %	89.530 %	80.952 %
1	Count	107.000	49.000	156.000
	% within column	30.484 %	10.470 %	19.048 %
Total	Count	351.000	468.000	819.000
	% within column	100.000 %	100.000 %	100.000 %

Chi-Squared Tests

	Value	df	p	VS-MPR*
X^2	52.105	1	5.262e −13	2.473e +10
X^2 continuity correction	50.815	1	1.015e −12	1.312e +10
Likelihood ratio	52.062	1	5.377e −13	2.422e +10
N	819			

* Vovk-Sellke Maximum *p*-Ratio: Based the *p*-value, the maximum possible odds in favor of H_1 over H_0 equals $1/(-e\ p\ \log(p))$ for $p \leq .37$ (Sellke, Bayarri, & Berger, 2001).

Log Odds Ratio

		95% Confidence Intervals		
	Log Odds Ratio	Lower	Upper	p
Odds ratio	−1.322	−1.695	−0.949	
Fisher's exact test	−1.320	−1.716	−0.934	8.724e −13

Nominal

	Value
Contingency coefficient	0.245
Phi-coefficient	0.252
Cramer's V	0.252

Independent Samples T-Test Hypothesis 2

Independent Samples T-Test

							95% CI for Mean Difference			95% CI for Cohen's d	
	t	df	p	VS-MPR*	Mean Difference	SE Difference	Lower	Upper	Cohen's d	Lower	Upper
ICQ_TOTAL	3.932	817	9.135e −5	432.971	7.115	1.809	3.563	10.666	0.278	0.139	0.417

Note. Student's t-test.

* Vovk-Sellke Maximum *p*-Ratio: Based on a two-sided *p*-value,the maximum possible odds in favor of H_1 over H_0 equals 1/(-e *p* log(*p*)) for $p \leq .37$ (Sellke, Bayarri, & Berger, 2001).

Assumption Checks

Test of Normality (Shapiro-Wilk)

		W	p
ICQ_TOTAL	1	0.992	0.069
	2	0.997	0.587

Note. Significant results suggest a deviation from normality.

Test of Equality of Variances (Levene's)

	F	df	p
ICQ_TOTAL	1.015	1	0.314

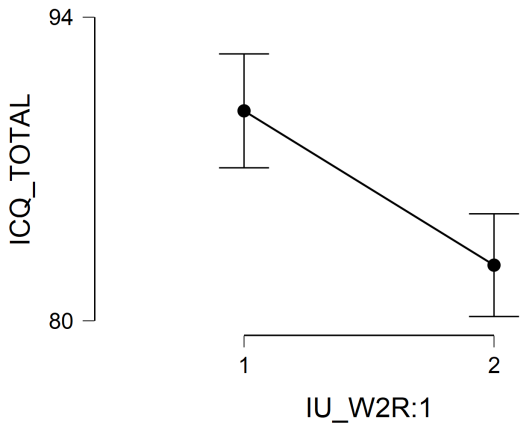
Descriptives

Group Descriptives

	Group	N	Mean	SD	SE
ICQ_TOTAL	1	351	89.681	25.017	1.335
	2	468	82.566	26.072	1.205

Descriptives Plots

ICQ_TOTAL



Repeated Measures ANOVA Hypothesis 2

Within Subjects Effects

Cases	Sphericity Correction	Sum of Squares	df	Mean Square	F	p	η^2	η_p^2	ω^2
ICQ-P Subscore	None	11266.963[a]	5.000[a]	2253.393[a]	116.001[a]	5.196e −115[a]	0.061	0.124	0.062
	Greenhouse-Geisser	11266.963	3.569	3156.949	116.001	5.534e −83	0.061	0.124	0.062
	Huynh-Feldt	11266.963	3.587	3141.468	116.001	2.235e −83	0.061	0.124	0.062
ICQ-P Subscore ✻ IU_W2R:1	None	2763.639[a]	5.000[a]	552.728[a]	28.453[a]	1.882e −28[a]	0.015	0.034	0.016
	Greenhouse-Geisser	2763.639	3.569	774.358	28.453	4.900e −21	0.015	0.034	0.016
	Huynh-Feldt	2763.639	3.587	770.561	28.453	3.971e −21	0.015	0.034	0.016
Residuals	None	79353.885	4085.000	19.426					
	Greenhouse-Geisser	79353.885	2915.825	27.215					
	Huynh-Feldt	79353.885	2930.194	27.081					

Note. Type III Sum of Squares

[a] Mauchly's test of sphericity indicates that the assumption of sphericity is violated (p < .05).

Between Subjects Effects

Cases	Sum of Squares	df	Mean Square	F	p	η^2	η_p^2	ω^2
IU_W2R:1	1692.106	1	1692.106	15.461	9.135e −5	0.009	0.019	0.009
Residuals	89413.535	817	109.441					

Note. Type III Sum of Squares

Descriptives

Descriptives

ICQ-P Subscore	IU_W2R:1	Mean	SD	N
Attention+	1	13.259	6.327	351
	2	13.609	6.475	468
C. Tangible+	1	14.353	3.994	351
	2	15.068	4.134	468
Cognitive-	1	16.795	6.769	351
	2	14.073	7.068	468
Demand-	1	16.789	6.145	351
	2	13.756	6.300	468
Sensory+	1	15.977	4.422	351
	2	15.774	4.822	468
Social-	1	12.507	6.345	351
	2	10.286	6.329	468

Assumption Checks

Test for Equality of Variances (Levene's)

	F	df1	df2	p
ICQ_Ctan	0.650	1	817	0.420
ICQ_Att	0.057	1	817	0.811
ICQ_Sens	4.961	1	817	0.026
ICQ_Demand	0.416	1	817	0.519
ICQ_SocAvoid	0.003	1	817	0.957
ICQ_CogAvoid	0.155	1	817	0.694

Test of Sphericity

	Mauchly's W	Approx. X^2	dfSphericity	p-value	Greenhouse-Geisser ε	Huynh-Feldt ε	Lower Bound ε
ICQ-P Subscore	0.420	706.205	14	1.242e −141	0.714	0.717	0.200

Simple Main Effects

Simple Main Effects - IU_W2R:1

Level of ICQ-P Subscore	Sum of Squares	df	Mean Square	F	p
C. Tangible+	102.566	1	102.566	0.937	0.333
Attention+	24.530	1	24.530	0.224	0.636
Sensory+	8.323	1	8.323	0.076	0.783
Demand-	1844.787	1	1844.787	16.856	4.437e −5
Social-	989.207	1	989.207	9.039	0.003
Cognitive-	1486.333	1	1486.333	13.581	2.435e −4

Note. Type III Sum of Squares