

Jakienė, V. et al.: Q-single: Linking functional impairment to problematic internet use through a single-question approach

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Supplementary material

Supplementary Table S1. Block-wise multiple linear regression analyses with PHQ-9 and GAD-7 as the dependent variables and CIUS and Q-single as independent variables.

	B	SE	β	t	p	ΔR^2	F-change	p F-change	95% CI for B	
									Lower bound	Upper bound
Study 1, n=524										
CIUS										
Whole Model: $R^2 = 0.000$, adjusted $R^2 = -0.006$, $F(3,520)=0.025$, $p=0.995$										
Model 1A										
Gender	-0.088	1.139	-0.003	-0.077	0.938	0.000	0.025	0.995	-2.326	2.150
Age	0.001	0.155	0.000	0.006	0.995				-0.304	0.306
IUT	-0.045	0.183	-0.011	-0.248	0.804				-0.406	0.315
Model 1B										
Whole Model: $R^2 = 0.229$, adjusted $R^2 = 0.227$, $F(4,519)=38.87$, $p<0.001$										
Gender	0.670	1.00	0.026	0.669	0.504	0.002	0.348	0.791	-1.298	2.639
Age	0.069	0.136	0.020	0.504	0.614				-0.199	0.337
IUT	-0.087	0.161	0.050	-0.201	0.590				-0.403	0.230
Q-single	13.104	1.051	0.481	12.465	<0.001				11.038	15.084
PHQ-9										
Whole Model: $R^2 = 0.005$, adjusted $R^2 = 0.000$, $F(3,520)=0.926$, $p=0.428$										
Model 2 A										
Gender	0.821	0.618	0.059	1.329	0.185	0.005	0.926	0.428	-0.393	2.035
Age	0.053	0.084	0.029	0.633	0.527				-0.112	0.219
IUT	0.094	0.100	0.043	0.945	0.345				-0.101	0.290
Model 2 B										
Whole Model: $R^2 = 0.180$, adjusted $R^2 = 0.178$, $F(4,519)=29.59$, $p<0.001$										
Gender	0.841	0.560	0.060	1.503	0.133	0.180	114.42	<0.001	-0.258	1.941
Age	0.053	0.076	0.029	0.696	0.487				-0.097	0.203
IUT	0.105	0.090	0.048	1.160	0.246				-0.072	0.282
CIUS	0.231	0.022	0.425	10.722	<0.001				0.189	5.337
PHQ-9										
Whole Model: $R^2 = 0.005$, adjusted $R^2 = 0.000$, $F(3,520)=0.926$, $p=0.428$										
Model 3 A										
Gender	0.821	0.618	0.059	1.329	0.185	0.005	0.926	0.428	-0.393	2.035
Age	0.053	0.084	0.029	0.633	0.527				-0.112	0.219
IUT	0.094	0.100	0.043	0.945	0.345				-0.101	0.290
Model 3 B										
Whole Model: $R^2 = 0.145$, adjusted $R^2 = 0.143$, $F(4,519)=23.447$, $p<0.001$										
Gender	1.151	0.572	0.082	2.013	0.045	0.008	1.730	0.160	0.028	2.275
Age	0.083	0.078	0.045	1.064	0.288				-0.070	0.236
IUT	0.076	0.092	0.035	0.828	0.408				-0.105	0.257
Q-single	5.710	0.600	0.385	9.515	<0.001				4.531	6.888
GAD-7										
Whole Model: $R^2 = 0.012$, adjusted $R^2 = 0.007$, $F(3,520)=2.175$, $p=0.090$										
Model 4 A										
Gender	1.333	0.551	0.107	2.417	0.016	0.012	2.175	.090	0.250	2.416
Age	0.075	0.075	0.046	1.001	0.317				-0.072	0.223
IUT	0.049	0.089	0.025	0.554	0.580				-0.125	0.224
Model 4 B										
Whole Model: $R^2 = 0.069$, adjusted $R^2 = 0.062$, $F(4,519)=9.652$, $p<0.001$										
Gender	1.343	0.536	0.107	2.507	0.012	0.012	3.3188	0.035	0.290	2.396
Age	0.075	0.073	0.046	1.029	0.304				-0.068	0.219

IUT	0.055	0.086	0.028	0.632	0.528				-0.115	0.224
CIUS	0.116	0.021	0.238	5.630	<0.001				0.076	0.157
GAD-7										
Whole Model: $R^2 = 0.012$, adjusted $R^2 = 0.007$, $F(3,520)=2.175$, $p=0.090$										
Model 5 A										
Gender	1.333	0.551	0.107	2.417	0.016	0.012	2.175	.090	0.250	2.416
Age	0.075	0.075	0.046	1.001	0.317				-0.072	0.223
IUT	0.049	0.089	0.025	0.554	0.580				-0.125	0.224
Model 5 B										
Whole Model: $R^2 = 0.076$, adjusted $R^2 = 0.069$, $F(4,519)=10.640$, $p<0.001$										
Gender	1.527	0.535	0.122	2.854	0.004	0.016	4.473	0.012	0.476	2.578
Age	0.093	0.073	0.056	1.271	0.204				-0.050	0.236
IUT	0.039	0.086	0.020	0.450	0.653				-0.130	0.208
Q-single	3.349	0.561	0.252	5.967	<0.001				2.246	4.451

Notes: Q-single, a single question “Has the use of the Internet significantly impaired your normal daily activities and/or relationships with those around you?”; IUT, Internet use time (hours); CIUS, The Compulsive Internet Use Scale; PHQ-9, Patient Health Questionnaire 9-item, depression module; GAD-7, Generalized Anxiety Disorder Assessment 7-item. SE – standard error, CI – confidence interval

Supplementary Table S2. Block-wise multiple linear regression analyses with PHQ-9 and GAD-7 as the dependent variables and PIUQ-9 and Q-single as independent variables.

Study 2, n=272										
	B	SE	β	<i>t</i>	<i>p</i>	ΔR^2	F-change	<i>p</i>	95% CI for B	
									Lower bound	Upper bound
PIUQ-9										
Whole Model: $R^2 = 0.091$, adjusted $R^2 = 0.084$, $F(2,269)=13.464$, $p<0.001$										
Model 6 A										
Gender	1.723	1.084	0.092	1.590	0.113	0.091	13.464	<0.001	-0.411	3.856
Age	-0.215	0.043	-0.288	-4.954	<0.001				-0.301	-0.130
Model 6 B										
Whole Model: $R^2 = 0.321$, adjusted $R^2 = 0.313$, $F(3,268)=42.199$, $p<0.001$										
Gender	1.851	0.938	0.099	1.973	0.050	0.059	11.649	<0.001	0.003	3.699
Age	-0.168	0.038	-0.224	-4.419	<0.001				-0.242	-0.093
Q-single	9.558	1.004	0.484	9.523	<0.001				7.582	11.534
PHQ-9										
Whole Model: $R^2 = 0.044$, adjusted $R^2 = 0.037$, $F(2,269)=9.259$, $p=0.002$										
Model 7 A										
Gender	1.922	0.833	0.138	2.308	0.022	0.044	6.259	0.002	0.282	3.562
Age	-0.090	0.033	-0.161	-2.703	0.007				-0.156	-0.025
Model 7 B										
Whole Model: $R^2 = 0.181$, adjusted $R^2 = 0.172$, $F(3,268)=19.794$, $p<0.001$										
Gender	1.421	0.776	0.102	1.831	0.068	0.012	1.986	0.139	-0.107	2.949
Age	-0.028	0.032	-0.049	-0.854	0.394				-0.091	0.036
PIUQ9	0.291	0.043	0.388	6.695	<0.001				0.205	0.377
PHQ-9										
Whole Model: $R^2 = 0.044$, adjusted $R^2 = 0.037$, $F(2,269)=9.259$, $p=0.002$										
Model 8 A										
Gender	1.922	0.833	0.138	2.308	0.022	0.044	6.259	0.002	0.282	3.562
Age	-0.090	0.033	-0.161	-2.703	0.007				-0.156	-0.025
Model 8 B										
Whole Model: $R^2 = 0.158$, adjusted $R^2 = 0.149$, $F(3,268)=16.807$, $p<0.001$										
Gender	1.990	0.783	0.142	2.451	0.012	0.033	5.308	0.005	0.448	3.532
Age	-0.065	0.032	-0.116	-2.058	0.041				-0.128	-0.003
Q-single	5.045	0.838	0.340	6.022	<0.001				3.396	6.695
GAD-7										
Whole Model: $R^2 = 0.057$, adjusted $R^2 = 0.050$, $F(2,269)=8.101$, $p<0.001$										
Model 9 A										
Gender	1.911	0.557	0.203	3.430	<0.001	0.057	8.101	<0.001	0.814	3.008
Age	-0.048	0.022	-0.127	-2.138	0.033				-0.092	-0.004
Model 9 B										
Whole Model: $R^2 = 0.141$, adjusted $R^2 = 0.131$, $F(3,268)=14.612$, $p<0.001$										
Gender	1.647	0.535	0.175	3.077	0.002	0.031	4.885	0.008	0.593	2.701
Age	-0.015	0.022	-0.039	-0.662	0.509				-0.059	0.029
PIUQ9	0.153	0.030	0.304	5.111	<0.001				0.094	0.212
GAD-7										
Whole Model: $R^2 = 0.057$, adjusted $R^2 = 0.050$, $F(2,269)=8.101$, $p<0.001$										
Model 10 A										
Gender	1.911	0.557	0.203	3.430	<0.001	0.057	8.101	<0.001	0.814	3.008
Age	-0.048	0.022	-0.127	-2.138	0.033				-0.092	-0.004
Model 10 B										
Whole Model: $R^2 = 0.083$, adjusted $R^2 = 0.072$, $F(3,268)=8.057$, $p<0.001$										
Gender	1.945	0.539	0.207	3.606	<0.001	0.051	7.764	<0.001	0.883	3.007
Age	-0.035	0.022	-0.093	-1.615	0.107				-0.078	0.008
Q-single	2.518	0.577	0.252	4.365	<0.001				1.382	3.654

Notes: Q-single, a single question “Has the use of the Internet significantly impaired your normal daily activities and/or relationships with those around you?”; IUT, Internet use time (hours); PIUQ-9, Problematic Internet Use Questionnaire 9-item; PHQ-9, Patient Health Questionnaire 9-item, depression module; GAD-7, Generalized Anxiety Disorder Assessment 7-item. SE – standard error, CI – confidence interval