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SUPPLEMENTAL MATERIALS

1. THE ORIGINAL AND POLISH VERSIONS OF THE GENERALIZED PROBLEMATIC INTERNET USE SCALE 2 (GPIUS2)

Item	Wording
1	I prefer online social interaction over face-to-face communication. [Wolę kontakt z ludźmi przez Internet niż twarzą w twarz.]
2	I have used the Internet to talk with others when I was feeling isolated. [Korzystałem(-am) z Internetu, żeby porozmawiać z innymi, gdy czułem(-am) się osamotniony(-a).]
3	When I haven't been online for some time, I become preoccupied with the thought of going online. [Kiedy nie korzystam z Internetu przez jakiś czas, zaczynam być pochłonięty(-a) myślami o tym, by z niego skorzystać.]
4	I have difficulty controlling the amount of time I spend online. [Mam trudności z kontrolowaniem ilości czasu spędzanego w Internecie.]
5	My Internet use has made it difficult for me to manage my life. [Korzystanie z Internetu utrudniło mi zarządzanie własnym życiem.]
6	Online social interaction is more comfortable for me than face-to-face interaction. [Kontakt z ludźmi przez Internet jest dla mnie bardziej komfortowy niż kontakt twarzą w twarz.]
7	I have used the Internet to make myself feel better when I was down. [Korzystałem(-am) z Internetu, żeby poczuć się lepiej, kiedy byłem przygnębiony(-a).]
8	I would feel lost if I was unable to go online. [Czułbym(-abym) się zagubiony(-a), gdybym nie mógł(-a) korzystać z Internetu.]
9	I find it difficult to control my Internet use. [Jest mi trudno kontrolować korzystanie z Internetu.]
10	I have missed social engagements or activities because of my Internet use. [Zaniedbywałem(-am) obowiązki lub spotkania towarzyskie z powodu korzystania z Internetu.]
11	I prefer communicating with people online rather than face-to-face. [Wolę komunikować się z ludźmi przez Internet niż twarzą w twarz.]
12	I have used the Internet to make myself feel better when I've felt upset. [Korzystałem(-am) z Internetu, żeby poczuć się lepiej, gdy byłem(-am) zaniepokojony(-a) lub zdenerwowany(-a).]
13	I think obsessively about going online when I am offline. [Obsesyjnie myślę o korzystaniu z Internetu, kiedy z niego nie korzystam.]
14	When offline, I have a hard time trying to resist the urge to go online. [Gdy jestem poza siecią, mam trudności, aby oprzeć się pragnieniu korzystania z Internetu.]
15	My Internet use has created problems for me in my life. [Korzystanie z Internetu przysporzyło mi problemów w życiu.]

Note. Response options were: (1) *definitely disagree*, (2) *disagree*, (3) *slightly disagree*, (4) *neutral*, (5) *slightly agree*, (6) *agree*, (5) *definitely agree*.

Scoring: Item for each subscale (either sum or average the items listed to obtain a score for the subscale).

Preference for online social interaction: 1, 6, 11; Mood regulation: 2, 7, 12; Cognitive preoccupation: 3, 8, 13; Compulsive Internet use: 4, 9, 14; Negative outcomes: 5, 10, 15.

2. THE THREE CANDIDATE MODELS FOR THE CONFIGURAL MODEL

The original five-factor model of the GPIUS2 (Caplan, 2010) showed poor fit to the data based on RMSEA (offline group: χ^2 = 643.12, df = 82, p < .001, CFI = .963, TLI = .952, RMSEA = .103, 90% CI [.096, .111], SRMR = .051; online group χ^2 = 533.57, df = 82, p < .001, CFI = .957, TLI = .944, RMSEA = .104, 90% CI [.095, .112], SRMR = .055). As the results indicated that cognitive preoccupation and compulsive Internet use were empirically indistinguishable ($r_{offline}$ = .93 and r_{online} = .95) we decided to use the four-factor model of the GPIUS2 in future analyses. The four-factor model of the GPIUS2 in which cognitive preoccupation and compulsive Internet use were combined into a single factor of deficient self-regulation showed equally poor fit to the data (the offline group: χ^2 = 653.28, df = 84, p < .001, CFI = .962, TLI = .953, RMSEA = .103, 90% CI [.096, .110], SRMR = .052; the online group: χ^2 = 533.16, df = 84, p < .001, CFI = .957, TLI = .946, RMSEA = .102, 90% CI [.094, .111], SRMR = .055). Inspection of modification indices indicated that there were substantial covariances between residuals of the fourth item and the ninth item and between residuals of the thirteenth item and the fourteenth item, which were also reported in previous studies (Casale et al., 2015; Pontes et al., 2016). The four-factor model of the GPIUS2 in which cognitive preoccupation and compulsive Internet use were combined into a single factor of deficient self-regulation and covariances between these two pairs of items were allowed showed adequate fit to the data (offline group: χ^2 = 468.28, df = 82, p < .001, CFI = .974, TLI = .967, RMSEA = .086, 90% CI [.078, .093], SRMR = .047; online group: χ^2 = 380.35, df = 82, p < .001, CFI = .971, TLI = .963, RMSEA = .084, 90% CI [.076, .093], SRMR = .049). Based on these results, the four-factor model of the GPIUS2 in which cognitive preoccupation and compulsive Internet use were combined into a single factor of deficient self-regulation and covariances between these two pairs of items were allowed was used as a configural model when testing measurement invariance of the GPIUS2.

Table S1

Comparison of the offline group and the online group in terms of scores on the criterion variables

Variable	Group	n	M	SD	df	t	p	d
Gender	Offline	634	1.29	0.46	1145	0.40	.691	.02
	Online	513	1.28	0.45				
Age	Offline	634	21.06	2.58	1009.4	−4.65	< .001	−.28
	Online	513	21.84	3.03				
Facebook addiction	Offline	629	13.07	4.85	1139	1.98	.048	.12
	Online	512	12.50	4.68				
Social networking sites addiction	Offline	634	15.03	4.79	1143	2.51	.012	.15
	Online	511	14.33	4.55				
Problematic pornography consumption	Offline	295	29.60	15.46	603	0.02	.985	.00
	Online	310	29.58	15.10				
Anxious attachment	Offline	624	27.26	10.85	1129	−2.35	.019	−.14
	Online	507	28.80	11.09				
Avoidant attachment	Offline	632	20.84	9.29	1138	−1.78	.075	−.11
	Online	508	21.84	9.70				
Loneliness	Offline	638	4.71	1.66	1042.7	−5.28	< .001	−.32
	Online	512	5.26	1.84				
Social anxiety	Offline	640	10.55	3.39	1149	−3.87	< .001	−.23
	Online	511	11.35	3.66				

Table S2

Comparison of the correlation coefficients between factors of the GPIUS2 and the criterion variables in the offline group and in the online group

GPIUS Factor	Variable	$n_{offline}$	$r_{offline}$	n_{online}	r_{online}	Z	p
Gender[a]	POSI	634	.08	513	−.06	2.43	.015
	MR	634	−.01	513	−.11	1.67	.096
	DSR	634	.03	513	−.10	2.05	.040
	NO	634	.10	513	.01	1.50	.135
Age	POSI	634	.01	513	−.04	0.81	.415
	MR	634	−.12	513	−.08	−0.71	.475
	DSR	634	−.13	513	−.08	−0.83	.404
	NO	634	−.11	513	−.06	−0.71	.474
Facebook addiction[b]	POSI	629	.20	512	.22	−0.36	.719
	MR	629	.39	512	.41	−0.39	.695
	DSR	629	.60	512	.64	−0.98	.327
	NO	629	.46	512	.50	−1.00	.319
Social networking sites addiction[c]	POSI	634	.17	511	.24	−1.20	.231
	MR	634	.44	511	.49	−1.08	.282
	DSR	634	.59	511	.65	−1.71	.088
	NO	634	.43	511	.53	−2.17	.029
Problematic pornography consumption[d]	POSI	294	.08	310	.09	−0.17	.869
	MR	294	.18	310	.09	1.13	.258
	DSR	294	.27	310	.24	0.42	.673
	NO	294	.34	310	.33	0.18	.854
Anxious attachment	POSI	615	.28	505	.31	−0.55	.579
	MR	615	.41	505	.39	0.53	.597
	DSR	615	.26	505	.33	−1.15	.248
	NO	615	.30	505	.32	−0.50	.618
Avoidant attachment	POSI	615	.29	505	.23	1.11	.268
	MR	615	.13	505	.09	0.57	.568
	DSR	615	.10	505	.11	−0.09	.932
	NO	615	.14	505	.19	−0.77	.442
Loneliness	POSI	638	.26	512	.30	−0.77	.439
	MR	638	.35	512	.41	−1.12	.264
	DSR	638	.20	512	.27	−1.28	.201
	NO	638	.31	512	.29	0.39	.694
Social anxiety	POSI	640	.39	511	.40	−0.34	.734
	MR	640	.38	511	.24	2.61	.009
	DSR	640	.35	511	.30	0.83	.406
	NO	640	.35	511	.33	0.39	.696

Note. GPIUS2 – Generalized Problematic Internet Use Scale 2; POSI – preference for online social interaction; MR – mood regulation; DSR – deficient self-regulation; NO – negative outcomes. [a]Point-biserial correlation coefficient (0 – females, 1 – males). [b]Only individuals who use Facebook are included. [c]Only individuals who use social networking sites are included. [d]Only individuals who watch pornography are included.