Supplementary Material

Table S1. Other demographic characteristics.

		Total (%) n = 129	Females (%) n = 71	Males (%) n = 58
marital status	Unmarried	40 (31)	28 (39)	12 (20)
	married	74 (57)	34 (47)	40 (68)
	divorced	3 (2)	3 (4)	0 (0)
	n/a	12 (9)	6 (8)	6 (10)
status of employment	full-time	82 (63)	36 (50)	46 (79)
	part-time	35 (27)	29 (40)	6 (10)
	n/a	12 (9)	6 (8)	6 (10)
socioeconomic status	Less than $19,250	11 (8)	9 (12)	2 (3)
	$19,250 to $38,500	34 (26)	23 (32)	11 (18)
	$38,500 to $57,750	25 (19)	18 (25)	7 (12)
	$67,500 to $77,000	32 (24)	10 (14)	22 (37)
	$77,000 or more	15 (11)	5 (7)	10 (17)
	n/a	12 (9)	6 (8)	6 (10)
educational level	Junior high school	4 (3)	3 (4)	1 (1)
	High school	12 (9)	11 (15)	1 (1)
	junior college	9 (6)	8 (11)	1 (1)
	College/University	76 (58)	37 (52)	39 (67)
	graduate school	16 (12)	6 (8)	10 (17)
	n/a	12 (9)	6 (8)	6 (10)
alcohol use	never	34 (26)	27 (38)	7 (12)
	3 days per week or less	69 (53)	34 (47)	35 (60)
	4days per week or more	26 (20)	10 (14)	16 (27)
smoking	no smoking	103 (79)	63 (88)	40 (68)
	smoking	26 (20)	8 (11)	18 (31)

"n/a" means Not Available. We calculated $1 = ¥130.

Table S2. Correlation analysis of Internet usage time during <u>weekdays.</u>

	Internet Usage Time During <u>weekdays</u>									
	Total participants n = 129		SNS– n = 85		SNS+ n = 44		Females n = 71		Males n = 58	
	r	p	r	p	r	p	r	p	r	p
BDI-II	0.029	0.757	−0.063	0.591	0.155	0.341	0.12	0.345	−0.05	0.728
PHQ-9	0.001	0.995	−0.115	0.294	0.195	0.204	0.014	0.907	0.029	0.83
HRSD	0.127	0.155	0.203	0.066	−0.023	0.882	0.118	0.332	0.197	0.142
TACS-22 #	−0.012	0.894	−0.039	0.729	0.022	0.889	−0.063	0.602	0.061	0.652
HQ 25	−0.099	0.294	−0.154	0.191	−0.062	0.7	−0.103	0.419	−0.069	0.629
IAT #	0.178	0.057	0.206	0.076	0.191	0.232	0.132	0.295	0.241	0.088
SAS-SV	0.181	**0.041**	0.151	0.17	**0.339**	**0.024**	0.216	0.07	0.131	0.33
avoidant	−0.063	0.5	−0.154	0.183	0.071	0.659	0.048	0.702	−0.177	0.209
dependent	0.115	0.216	0.036	0.755	0.224	0.158	0.203	0.104	0.03	0.833
Obsessive-compulsive	0.057	0.545	0.073	0.533	−0.087	0.59	0.185	0.14	−0.085	0.549
Passive-aggressive	0.122	0.19	0.045	0.702	0.247	0.12	0.228	0.067	−0.087	0.539
depressive	0.086	0.358	−0.083	0.474	**0.313**	**0.046**	0.118	0.349	0.077	0.589
paranoid	0.038	0.686	0.007	0.95	0.048	0.767	0.053	0.673	0.005	0.974
schizotypal	0.116	0.215	0.029	0.802	**0.321**	**0.041**	0.2	0.11	0.038	0.791
schizoid	0.054	0.566	−0.045	0.701	0.143	0.373	0.06	0.636	0.092	0.517
histrionic	0.168	0.071	0.141	0.224	0.277	0.08	**0.336**	**0.006**	−0.14	0.321
narcissistic	0.159	0.088	0.047	0.685	**0.335**	**0.035**	**0.291**	**0.02**	−0.101	0.478
borderline	0.175	0.059	0.103	0.374	0.244	0.124	0.205	0.101	0.255	0.068
antisocial	0.088	0.345	0.08	0.497	0.123	0.445	0.055	0.661	0.083	0.561

SNS+ indicates those who used the Internet primarily for SNS, and SNS– those who used it for other purposes. # These items were normally distributed. r: Spearman s or Pearson s correlation estimates, capitalized if r > 0.2 and *p*-value < 0.05. BDI-II: the Beck Depression Inventory II, PHQ-9: Patient Health Questionaire-9, HRSD: the Hamilton Rating Scale for Depression, TACS-22: the 22-item Tarumi s Modern-Type Depression Trait Scale, HQ-25: the Hikikomori Questionaire has self-rated 25 items, IAT: Young s Internet Addiction Test, SAS-SV: Smartphone Addiction Scale-Short Version, SCID-II-PQ: the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM–IV) Personality Disorders Personality Questionnaire.

Table S3. Correlation analysis between Internet usage time during holidays and each mental rating scale <u>when classified by SNS–/+ AND gender.</u>

	Internet Usage Time during Holidays							
	SNS– Females n = 40		SNS+ Females n = 31		SNS– Males n = 45		SNS+ Males n = 13	
	r	p	r	p	r	p	r	p
BDI-II	−0.224	0.196	**0.372**	**0.047**	0.192	0.234	−0.398	0.226
PHQ-9	−0.015	0.929	0.281	0.126	0.205	0.177	0.128	0.677
HRSD	0.095	0.571	0.254	0.168	0.270	0.073	**−0.679**	**0.015**
TACS-22 #	−0.082	0.620	0.157	0.399	0.134	0.388	−0.126	0.682
HQ 25	−0.100	0.569	0.215	0.263	0.148	0.370	−0.252	0.430
IAT #	0.143	0.405	**0.567**	**0.001**	**0.443**	**0.005**	0.031	0.923
SAS-SV	**0.430**	**0.006**	**0.407**	**0.023**	**0.351**	**0.019**	−0.039	0.898
avoidant	0.023	0.894	0.132	0.496	0.094	0.564	−0.122	0.705
dependent	0.150	0.382	0.235	0.220	0.178	0.271	−0.403	0.194
Obsessive-compulsive	0.094	0.587	0.278	0.145	−0.003	0.985	**−0.700**	**0.011**
Passive-aggressive	−0.016	0.926	0.195	0.310	0.063	0.698	0.060	0.853
depressive	−0.026	0.881	0.282	0.139	0.130	0.424	0.048	0.883
paranoid	−0.151	0.380	−0.004	0.985	0.122	0.453	0.249	0.435
schizotypal	0.189	0.269	0.229	0.232	−0.008	0.959	0.504	0.095
schizoid	0.082	0.634	0.184	0.340	0.030	0.855	0.247	0.438
histrionic	−0.190	0.268	0.364	0.052	−0.102	0.532	**−0.580**	**0.048**
narcissistic	0.015	0.932	0.307	0.111	0.009	0.954	−0.091	0.778
borderline	−0.027	0.875	**0.420**	**0.023**	0.115	0.478	0.424	0.169
antisocial	−0.243	0.153	0.086	0.656	0.083	0.614	−0.188	0.559

Table S4. Internet usage during holidays classified by hour.

| | Number of hours of Internet Usage during Holidays | | | | | | | | | | |
| | | Gender | | Purpose | | SNS Type | | | | | |
Hours	Total n = 129 (%)	Females n = 71 (%)	Males n = 58 (%)	SNS– n = 85 (%)	SNS+ n = 44 (%)	LINE n = 105 (%)	Twitter n = 9 (%)	Facebook n = 3 (%)	Instagram n = 5 (%)	No Use of SNS n = 5 (%)	Others or no Data n = 4
0	6 (4.7)	2 (2.8)	4 (6.9)	5 (5.9)	1 (2.3)	4 (3.8)				2 (40)	
1	29 (22.5)	15 (21.1)	14 (24.1)	17 (20)	12 (27.3)	25 (23.8)	1 (11.1)	1 (33.3)	1 (20)	1 (20)	
2	34 (26.4)	18 (25.4)	16 (27.6)	21 (24.7)	13 (29.5)	28 (26.7)	2 (22.2)	1 (33.3)	2 (40)	2 (40)	1 (25)
3	24 (18.6)	12 (16.9)	12 (20.7)	16 (18.8)	8 (18.2)	21 (20)	1 (11.1)		2 (40)		
4	16 (12.4)	10 (14.1)	6 (10.3)	12 (14.1)	4 (9.1)	12 (11.4)	2 (22.2)				2 (50)
5	6 (4.7)	4 (5.6)	2 (3.4)	5 (5.9)	1 (2.3)	5 (4.8)		1 (33.3)			
6	11 (8.5)	9 (12.7)	2 (3.4)	6 (7.1)	5 (11.4)	8 (7.6)	2 (22.2)				1 (25)
7											
8											
9	1 (0.8)	1 (1.4)		1 (1.2)		1 (1)					
10											
11											
12	1 (0.8)		1 (1.7)	1 (1.2)		1 (1)					
13											
14											
15	1 (0.8)		1 (1.7)	1 (1.2)			1 (11.1)				

Internet usage time was used for holidays. Hours were rounded down after the decimal. SNS+ indicates those who used the Internet primarily for SNS, and SNS– those who used it for other purposes. The SNS type questions were asked which of "LINE," "Twitter," "Facebook," "Instagram.".

| | Number of Hours of Internet Usage during Holidays | | | | | | | | | | | |
| | Personality type based on SC1ID-II-PQ | | | | | | | | | | | |
Hours	Avoidant n = 28 (%)	Dependent n = 7 (%)	Obsessive-Compulsive n = 41 (%)	Passive-Aggressive n = 14 (%)	Depressive n = 16 (%)	Paranoid n = 13 (%)	Schizotypal n = 4 (%)	Schizoid n = 6 (%)	Histrionic n = 6 (%)	Narcissistic n = 13 (%)	Borderline n = 17 (%)	Antisocial n = 18 (%)
0			2 (4.9)									1 (5.6)
1	5 (17.9)		9 (22)		3 (18.8)	2 (15.4)		2 (33.3)	2 (33.3)	4 (30.8)	2 (11.8)	5 (27.8)
2	8 (28.6)	2 (28.6)	8 (19.5)	7 (50)	5 (31.3)	7 (53.8)		1 (16.7)	3 (50)	4 (30.8)	5 (29.4)	1 (5.6)
3	8 (28.6)	3 (42.9)	7 (17.1)	4 (28.6)	3 (18.8)	3 (23.1)	1 (25)	1 (16.7)		2 (15.4)	2 (11.8)	4 (22.2)
4	3 (10.7)		9 (22)	1 (7.1)	2 (12.5)		1 (25)	1 (16.7)		1 (7.7)	4 (23.5)	2 (11.1)
5	1 (3.6)		2 (4.9)	2 (14.3)	1 (6.3)		1 (25)			1 (7.7)	1 (5.9)	1 (5.6)
6	3 (10.7)	2 (28.6)	4 (9.8)		2 (12.5)	1 (7.7)	1 (25)	1 (16.7)	1 (16.7)	1 (7.7)	3 (17.6)	2 (11.1)
7												
8												
9												
10												
11												
12												1 (5.6)
13												
14												
15												1 (5.6)

SCID-II-PQ: the Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM–IV) Personality Disorders Personality Questionnaire. Personality type was rated as having personality traits if the Self-Rated Question based on the SCID-II-PQ was above the cutoff. Personality type judgments are based on subjective evaluation and are not objective diagnoses. The cutoff points are as follows; avoidant 4 points, dependent 5 points, obsessive-compulsive 4 points, passive-aggressive 4 points, depressive 5 points, paranoid 4 points, schizotypal 5 points, schizoid 4 points, histrionic 5 points, narcissistic 5 points, borderline 5 points, and antisocial 3 points.