

Supplementary materials

Suppl.Table 1. Results of stimuli rating revealed no differences between groups regarding familiarity and arousal, but difference in representation

	Social (Mean±SD)	Non-social (Mean±SD)	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Representation	3.30±0.47	2.93±0.40	2.738	(1,38)	0.009	0.848
Familiarity	3.33±0.49	3.19±0.49	0.891	(1,38)	0.378	0.286
Arousal	3.16±0.42	3.02±0.41	1.032	(1,38)	0.309	0.337

Note: *SD*: standard deviation

Suppl.Table 2. RT (in ms) results of the attentional bias between PSMU and Control group

Conditions		PSMU group		Control group	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
social stimuli	Valid cue	506.87	87.21	581.63	120.70
	Invalid cue	524.06	94.50	574.12	119.88
non-social stimuli	Valid cue	516.11	96.28	574.55	115.94
	Invalid cue	512.93	89.89	583.16	124.49
social stimuli	score of attentional bias	17.19	17.99	-7.51	20.94
non-social stimuli	score of attentional bias	-3.18	25.89	8.62	16.68

Note: *PSMU*: problematic social media users

Suppl.Table 3. ANOVA of score of attentional bias of RT results of the attentional bias between PSMU and Control group

Dependent variable	Effect	Sum-of-squares	Mean square	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2
score of attentional bias	Group	1289.43	1289.43	4.001	(1,60)	0.050	0.063
	Type of stimuli	139.89	139.89	0.262	(1,60)	0.610	0.004
	Type of stimuli × group	10320.77	10320.77	19.361	(1,60)	<0.001	0.244

Suppl.Table 4. T-test of score of attentional bias of RT results of the attentional bias between PSMU and Control group

Score of attentional bias	<i>t</i>	<i>df</i>	<i>p</i>	95% confidence interval	
				Lower	Upper
score of attentional bias_s (PSMU vs. 0)	5.319	(1,30)	0.000	10.59	23.79
score of attentional bias_n (PSMU vs. 0)	-0.684	(1,30)	0.499	-12.68	6.32
score of attentional bias_s (Control vs. 0)	-1.996	(1,30)	0.055	-15.18	0.17
score of attentional bias_n (Control vs. 0)	2.876	(1,30)	0.007	2.50	14.74

Note: *s*: social stimuli; *n*: non-social stimuli; *PSMU*: problematic social media users

Suppl. Table 5. Eye-tracking indicators (in ms) results of the attentional bias between PSMU and Control group

Eye-tracking indicators	Type of stimuli	PSMU group		Control group	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
first fixation latency	social stimuli	669.86	115.98	680.53	102.39
	non-social stimuli	640.91	117.67	676.38	102.10
	score of attentional bias_s	39.66	71.99	26.87	68.28
	score of attentional bias_n	1.94	64.88	11.80	41.52
first fixation duration	social stimuli	316.66	72.02	321.56	81.48
	non-social stimuli	311.41	67.92	327.65	75.44
	score of attentional bias_s	4.77	22.22	7.11	25.92
	score of attentional bias_n	12.62	18.81	19.28	26.29
dwell time	social stimuli	678.68	106.61	676.90	111.14
	non-social stimuli	684.35	101.46	712.28	102.79
	score of attentional bias_s	0.51	0.03	0.49	0.03
	score of attentional bias_n	0.50	0.02	0.51	0.03

Note: *PSMU*: problematic social media users; *s*: social stimuli; *n*: non-social stimuli

Suppl.Table 6. ANOVA of score of attentional bias of Eye-tracking indicators results of the attentional bias between PSMU and Control group

Dependent variable	Effect	Sum-of-squares	Mean square	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2
the score of attentional bias of first fixation latency	Group	66.653	66.653	0.016	(1,60)	0.899	0.000
	Type of stimuli	21593.104	21593.104	1.054	(1,60)	0.020	0.087
	Type of stimuli $\times$ group	3974.367	3974.367	1.054	(1,60)	0.309	0.017
the score of attentional bias of first fixation duration	Group	629.439	629.439	1.014	(1,60)	0.318	0.017
	Type of stimuli	3107.617	3107.617	6.417	(1,60)	0.014	0.097
	Type of stimuli $\times$ group	144.441	144.441	0.298	(1,60)	0.587	0.005
the score of attentional bias of dwell time	Group	0.001	0.001	1.070	(1,60)	0.305	0.018
	Type of stimuli	0.001	0.001	3.526	(1,60)	0.065	0.056
	Type of stimuli $\times$ group	0.003	0.003	8.162	(1,60)	0.006	0.120

Suppl.Table 7. T-test of score of attentional bias of dwell time results of the attentional bias between PSMU and Control group

Score of attentional bias		<i>t</i>	<i>df</i>	<i>p</i>	95% confidence interval	
					Lower	Upper
the score of attentional bias of dwell time	score of attentional bias_s (PSMU vs. 50%)	2.324	(1,30)	0.027	0.002	0.025
	score of attentional bias_n (PSMU vs. 50%)	1.059	(1,30)	0.298	-0.004	0.014
	score of attentional bias_s (Control vs. 50%)	-1.564	(1,30)	0.128	-0.194	0.003
	score of attentional bias_n (Control vs. 50%)	1.667	(1,30)	0.106	-0.002	0.018

Note: *s*: social stimuli; *n*: non-social stimuli; *PSMU*: problematic social media users

Suppl. Table 8. RT (in ms) results of the attentional bias among different FoMO levels of PSMUs

Conditions		high FoMO		low FoMO	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
social stimuli	Valid cue	514.16	86.75	537.06	100.75
	Invalid cue	515.85	83.05	541.30	105.39
non-social stimuli	Valid cue	512.27	84.47	542.53	107.81
	Invalid cue	519.04	90.01	542.44	106.87
social stimuli	score of attentional bias	1.69	22.93	4.24	25.10
non-social stimuli	score of attentional bias	6.77	22.58	-0.09	27.03

Note: *high FoMO*: high FoMO problematic social media users; *low FoMO*: low FoMO problematic social media users

Suppl.Table 9. ANOVA of score of attentional bias of RT results of the attentional bias among different FoMO levels of PSMUs

Dependent variable	Effect	Sum-of-squares	Mean square	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2
score of attentional bias	Group	141.350	141.350	0.231	(1, 59)	0.632	0.004
	Type of stimuli	4.318	4.318	0.007	(1, 59)	0.932	0.000
	Type of stimuli $\times$ group	674.040	674.040	1.132	(1, 59)	0.292	0.019

Suppl.Table 10. Eye-tracking indicators (in ms) results of the attentional bias among different FoMO levels of PSMUs

Eye-tracking indicators	Type of stimuli	high FoMO		low FoMO	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
first fixation latency	social stimuli	625.22	95.63	677.53	116.52
	non-social stimuli	648.15	96.43	647.58	118.67
	score of attentional bias_s	-19.93	42.59	38.31	71.39
	score of attentional bias_n	12.19	43.85	12.14	77.67
first fixation duration	social stimuli	300.87	48.09	303.19	65.11
	non-social stimuli	300.76	46.63	298.03	61.21
	score of attentional bias_s	1.49	22.85	-2.84	31.35
	score of attentional bias_n	12.70	31.36	9.43	25.16
dwell time	social stimuli	685.01	97.79	643.45	90.95
	non-social stimuli	691.68	85.14	674.06	88.75
	score of attentional bias_s	0.52	0.04	0.49	0.03
	score of attentional bias_n	0.51	0.03	0.50	0.03

Note: *high FoMO*: high FoMO problematic social media users; *low FoMO*: low FoMO problematic social media users; *s*: social stimuli; *n*: non-social stimuli

Suppl.Table 11. ANOVA of score of attentional bias of Eye-tracking indicators results of the attentional bias among different FoMO levels of PSMUs

Dependent variable	Effect	Sum-of-squares	Mean square	<i>F</i>	<i>df</i>	<i>p</i>	η_p^2
the score of attentional	Group	25753.967	25753.967	5.042	(1, 59)	0.029	0.079
bias of first fixation	Type of stimuli	268.570	268.570	0.107	(1, 59)	0.745	0.002
latency	Type of stimuli $\times$ group	25838.405	25838.405	10.281	(1, 59)	0.002	0.148
the score of attentional	Group	438.910	438.910	0.507	(1, 59)	0.479	0.009
bias of first fixation	Type of stimuli	4196.613	4196.613	6.023	(1, 59)	0.017	0.093
duration	Type of stimuli $\times$ group	8.425	8.425	0.012	(1, 59)	0.913	0.000
the score of attentional	Group	0.005	0.005	3.380	(1, 59)	0.071	0.054
bias of dwell time	Type of stimuli	0.000	0.000	0.037	(1, 59)	0.848	0.001
	Type of stimuli $\times$ group	0.003	0.003	5.962	(1, 59)	0.018	0.092

Table 12. T-test of score of attentional bias of Eye-tracking indicators results of the attentional bias among different FoMO levels of PSMUs

Score of attentional bias		<i>t</i>	<i>df</i>	<i>p</i>	95% confidence interval	
					Lower	Upper
the score of attentional bias of first fixation latency	score of attentional bias_s (high FoMO vs. 0)	-2.520	(1,28)	0.018	-19.93	-36.13
	score of attentional bias_n (high FoMO vs. 0)	1.497	(1,28)	0.146	-4.50	28.87
	score of attentional bias_s (low FoMO vs. 0)	3.035	(1,31)	0.005	12.57	64.05
	score of attentional bias_n (low FoMO vs. 0)	0.884	(1,31)	0.383	-15.87	40.14
the score of attentional bias of dwell time	score of attentional bias_s (high FoMO vs. 50%)	2.074	(1,28)	0.047	0.000	0.031
	score of attentional bias_n (high FoMO vs. 50%)	0.865	(1,28)	0.395	-0.007	0.017
	score of attentional bias_s (low FoMO vs. 50%)	-1.239	(1,31)	0.225	-0.018	0.004
	score of attentional bias_n (low FoMO vs. 50%)	0.496	(1,31)	0.623	-0.007	0.012

Note: *s*: social stimuli; *n*: non-social stimuli; *high FoMO*: high FoMO problematic social media users; *low FoMO*: low FoMO problematic social media users