

Supplemental Material – Tables

Finding the “Sweet Spot” of Smartphone Use: Reduction or Abstinence to Increase Well-Being and Healthy Lifestyle?! An Experimental Intervention Study

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Supplementary Table S1. *Pairwise comparisons of time points within the three groups (baseline to four months)*

	Group	Baseline vs. Post-Intervention		Baseline vs. One Month		Baseline vs. Four Months		Post-Intervention vs. One Month		Post-Intervention vs. Four Months		One Month vs. Four Months		
		md, 95%CI	d _{RM}	md, 95%CI	d _{RM}	md, 95%CI	d _{RM}	md, 95%CI	d _{RM}	md, 95%CI	d _{RM}	md, 95%CI	d _{RM}	
Smartphone use time	Abstinence			42.32* , [27.79, 56.84]	.45	37.72* , [22.00, 53.44]	.38						-4.60, [-17.86, 8.67]	
	Reduction			39.70* , [26.03, 53.36]	.53	44.99* , [30.20, 59.78]	.50						5.30, [-7.18, 17.77]	
	Control			4.54, [-10.25, 19.34]		15.42, [-5.9, 31.42]							10.87, [-2.63, 24.37]	
Smartphone use intensity	Abstinence	1.26* , [0.80, 1.71]	.52	1.29* , [0.84, 1.73]	.52	1.74* , [1.23, 2.24]	.67	.03, [-.39, .45]		.48, [-.02, .98]			.45* , [0.00, .90]	.16
	Reduction	1.10* , [0.67, 1.53]	.51	1.24* , [0.83, 1.66]	.60	1.52* , [1.04, 1.99]	.65	.14, [-.26, .54]		.42, [-.06, .89]			.27, [-.15, .70]	
	Control	.61* , [0.14, 1.07]	.29	.49* , [0.03, .94]	.23	.64* , [0.13, 1.16]	.26	-.12, [-.55, .31]		.04, [-.47, .55]			.16, [-.30, .61]	
Problematic smartphone use	Abstinence	.59, [-.26, 1.44]		2.17* , [1.35, 2.98]	.49	1.99* , [1.18, 2.79]	.45	1.58* , [0.72, 2.43]	.33	1.40* , [0.56, 2.23]	.28		-.18, [-.91, .55]	
	Reduction	-.10, [-.91, .70]		1.95* , [1.18, 2.71]	.54	1.85* , [1.09, 2.62]	.43	2.05* , [1.24, 2.86]	.60	1.96* , [1.17, 2.75]	.51		-.09, [-.78, .60]	
	Control	.23, [-.64, 1.10]		.09, [-.74, .91]		.21, [-.62, 1.03]		-.14, [-1.01, .73]		-.02, [-.88, .83]			.12, [-.63, .86]	
Life satisfaction	Abstinence	-.59, [-1.18, .01]		-.81* , [-1.54, -.07]	.20	-.77, [-1.61, .07]		-.22, [-.87, .43]		-.19, [-.97, .60]			.04, [-.77, .84]	
	Reduction	-.60* , [-1.15, -.04]	.21	-.81* , [-1.50, -.12]	.23	-1.16* , [-1.96, -.37]	.27	-.21, [-.83, .40]		-.57, [-1.31, .17]			-.35, [-1.11, .40]	
	Control	.17, [-.44, .77]		.18, [-.57, .93]		.24, [-.62, 1.10]		.02, [-.65, .68]		.07, [-.73, .87]			.06, [-.76, .88]	
Depressive symptoms	Abstinence	.99* , [.38, 1.60]	.30	.68* , [.02, 1.34]	.20	.78* , [.07, 1.49]	.20	-.31, [-.89, .27]		-.21, [-.85, .43]			.10, [-.48, .68]	
	Reduction	.72* , [.15, 1.29]	.22	.62, [-.01, 1.23]		.89* , [.23, 1.55]	.20	-.11, [-.65, .44]		.17, [-.43, .77]			.27, [-.27, .82]	
	Control	.02, [-.60, .64]		-.02, [-.68, .65]		-.22, [-.94, .50]		-.04, [-.62, .55]		-.24, [-.90, .41]			-.21, [-.80, .38]	
Anxiety symptoms	Abstinence	1.01* , [.46, 1.56]	.34	.92* , [.39, 1.45]	.30	.86* , [.28, 1.44]	.30	-.09, [-.62, .44]		-.15, [-.75, .45]			-.06, [-.56, .44]	
	Reduction	.59* , [.07, 1.10]	.20	.63* , [.13, 1.12]	.22	1.01* , [.47, 1.56]	.29	.04, [-.46, .54]		.43, [-.14, .99]			.39, [-.08, .85]	
	Control	.07, [-.48, .63]		.12, [-.41, .66]		-.01, [-.60, .58]		.05, [-.49, .60]		-.08, [-.69, .53]			-.14, [-.64, .37]	
Physical activity	Abstinence	-.23* , [-.37, -.08]	.25	-.14, [-.30, .03]		-.15, [-.35, .05]		.09, [-.07, .25]		.08, [-.11, .26]			-.02, [-.19, .16]	
	Reduction	-.20* , [-.34, -.06]	.22	-.24* , [-.39, -.09]	.24	-.38* , [-.57, -.20]	.34	-.05, [-.20, .10]		-.19* , [-.36, -.01]	.18		-.14, [-.30, .03]	
	Control	-.03, [-.18, .12]		-.07, [-.23, .10]		.07, [-.13, .27]		-.04, [-.20, .13]		.10, [-.09, .30]			.14, [-.04, .32]	
Smoking behavior	Abstinence	.15, [-.86, 1.15]		.32, [-1.18, 1.81]		.27, [-1.33, 1.87]		.17, [-.95, 1.29]		.12, [-1.25, 1.50]			-.05, [-1.22, 1.12]	
	Reduction	1.61* , [.54, 2.68]	.50	1.75* , [.16, 3.34]	.36	2.11* , [.41, 3.82]	.48	.14, [-1.06, 1.34]		.50, [-.97, 1.97]			.36, [-.89, 1.61]	
	Control	.00, [-1.21, 1.21]		-.61, [-2.41, 1.20]		-.50, [-2.43, 1.43]		-.61, [-1.96, .75]		-.50, [-2.16, 1.16]			.11, [-1.31, 1.53]	

Notes. Experimental Group Abstinence: $N=200$, Experimental Group Reduction: $N=226$, Control Group: $N=193$, exception: smoking behavior: Experimental Group Abstinence: $n=41$, Experimental Group Reduction: $n=36$, Control Group: $n=28$; Baseline to Four Months=measurement time points; md=mean difference; CI=Confidence Interval; d_{RM}=Cohen's d_{Repeated Measures}, effect-size measure of post-hoc comparisons within groups; pairwise comparisons are Bonferroni-corrected ($p<.050$, two-tailed); significant results are marked in bold. * $p<.050$.

Supplementary Table S2.

Pairwise comparisons between the three groups (baseline to four months)

	Groups	Baseline		Post-Intervention		One Month		Four Months	
		md, 95%CI	d	md, 95%CI	d	md, 95%CI	d	md, 95%CI	d
Smartphone use time	Abstinence vs. Reduction	-16.22, [-40.82, 8.38]				-18.84, [-42.14, 4.47]		-8.95, [-32.59, 14.70]	
	Abstinence vs. Control	-3.01, [-28.58, 22.56]				-40.78* , [-65.00, -16.56]	.37	-25.31* , [-49.89, -7.74]	.23
	Reduction vs. Control	13.21, [-11.63, 38.05]				-21.94, [-45.47, 1.59]		-16.37, [-40.24, 7.50]	
Smartphone use intensity	Abstinence vs. Reduction	-.17, [-.79, .45]		-.33, [-1.04, .39]		-.21, [-.90, .47]		-.39, [-1.11, .33]	
	Abstinence vs. Control	-.14, [-.78, .50]		-.79* , [-1.53, -.05]	.25	-.94* , [-1.65, -.23]	.31	-1.23* , [-1.98, -.49]	.39
	Reduction vs. Control	.03, [-.59, .66]		-.46, [-1.18, .26]		-.73* , [-1.42, -.03]	.27	-.84* , [-1.57, -.12]	.29
Problematic smartphone use	Abstinence vs. Reduction	.48, [-.66, 1.62]		-.21, [-1.126, .83]		.26, [-.85, 1.37]		.35, [-.73, 1.42]	
	Abstinence vs. Control	1.02, [-.17, 2.20]		.66, [-.43, 1.74]		-1.06, [-2.21, .09]		-.76, [-1.88, .36]	
	Reduction vs. Control	.54, [-.61, 1.69]		.87, [-.18, 1.92]		-1.32* , [-2.44, -.20]	.28	-1.11* , [-2.19, -.02]	.25
Life satisfaction	Abstinence vs. Reduction	.05, [-1.18, 1.29]		.04, [-1.20, 1.28]		.05, [-1.20, 1.29]		-.34, [-1.64, .95]	
	Abstinence vs. Control	.00, [-1.28, 1.29]		.75, [-.54, 2.05]		.99, [-.30, 2.28]		1.01, [-.33, 2.36]	
	Reduction vs. Control	-.05, [-1.29, 1.20]		.72, [-.54, 1.97]		.94, [-.31, 2.20]		1.35* , [.05, 2.66]	.25
Depressive symptoms	Abstinence vs. Reduction	.47, [-.43, 1.37]		.20, [-.67, 1.07]		.41, [-.48, 1.29]		.58, [-.26, 1.42]	
	Abstinence vs. Control	.68, [-.25, 1.62]		-.29, [-1.19, .62]		-.01, [-.93, .91]		-.32, [-1.19, .55]	
	Reduction vs. Control	.21, [-.69, 1.12]		-.49, [-1.37, .39]		-.42, [-1.31, .48]		-.90* , [-1.74, -.05]	.26
Anxiety symptoms	Abstinence vs. Reduction	.30, [-.50, 1.10]		-.12, [-.95, .71]		.01, [-.76, .78]		.46, [-.31, 1.22]	
	Abstinence vs. Control	.51, [-.32, 1.34]		-.43, [-1.29, .44]		-.29, [-1.09, .52]		-.36, [1.16, .43]	
	Reduction vs. Control	.21, [-.60, 1.01]		-.31, [-1.15, .53]		-.30, [-1.08, .48]		-.82* , [-1.59, -.05]	.25
Physical activity	Abstinence vs. Reduction	-.03, [-.28, .22]		.00, [-.24, .25]		-.14, [-.37, .10]		-.26* , [-.49, -.03]	.27
	Abstinence vs. Control	.01, [-.25, .28]		.21, [-.05, .46]		.08, [-.16, .32]		.24, [-.01, .48]	
	Reduction vs. Control	.04, [-.21, .30]		.21, [-.04, .45]		.22, [-.02, .46]		.50* , [.26, .73]	.52
Smoking behavior	Abstinence vs. Reduction	.26, [-2.54, 3.05]		1.72, [-.99, 4.43]		1.69, [-1.33, 4.70]		2.10, [-1.01, 5.20]	
	Abstinence vs. Control	.51, [-2.50, 3.51]		.36, [-2.55, 3.27]		-.42, [-3.65, 2.82]		-.26, [-3.60, 3.07]	
	Reduction vs. Control	.25, [-2.84, 3.34]		-1.36, [-4.35, 1.63]		-2.11, [-5.43, 1.22]		-2.36, [-5.79, 1.07]	

Notes. Experimental Group Abstinence: $N=200$, Experimental Group Reduction: $N=226$, Control Group: $N=193$, exception: smoking behavior: Experimental Group Abstinence: $n=41$, Experimental Group Reduction: $n=36$, Control Group: $n=28$; Baseline to Four Months=measurement time points; md=mean difference; CI=Confidence Interval; d=Cohen's d, effect-size measure of post-hoc comparisons between groups; pairwise comparisons are Bonferroni-corrected ($p<.050$, two-tailed); significant results are marked in bold. * $p<.050$.