Supplemental Tables

Table S1

Study 1: Confidence Intervals for Within- and Between-Person Correlations among Focal Study Variables

Level	Variables		*r*	95% conf. int.	
Within-person	Social comparison favorability (SC)	Positive affect (PA)	.389	.362	.416
		Negative affect (NA)	−.387	−.414	−.360
		Social anxiety (SA)	−.212	−.242	−.182
	Positive affect (PA)	Negative affect (NA)	−.400	−.426	−.373
		Social anxiety (SA)	−.055	−.087	−.024
	Social anxiety (SA)	Social anxiety (SA)	.301	.272	.329
Between-person	Social comparison favorability (SC)	Positive affect (PA)	.450	.327	.558
		Negative affect (NA)	−.366	−.485	−.234
		Social anxiety (SA)	−.310	−.435	−.174
	Positive affect (PA)	Negative affect (NA)	−.327	−.450	−.192
		Social anxiety (SA)	−.254	−.384	−.114
	Social anxiety (SA)	Social anxiety (SA)	.603	.502	.687

Table S2

Study 2: Confidence Intervals for Within- and Between-Person Correlations among Focal Study Variables

Level	Variables		r	95% conf. int.	
Within-person	Social comparison favorability (SC)	Positive affect (PA)	.417	.393	.441
		Negative affect (NA)	−.401	−.426	−.377
		Social anxiety (SA)	−.316	−.341	−.289
	Positive affect (PA)	Negative affect (NA)	−.465	−.488	−.442
		Social anxiety (SA)	−.169	−.197	−.140
	Social anxiety (SA)	Social anxiety (SA)	.356	.330	.381
Between-person	Social comparison favorability (SC)	Positive affect (PA)	.733	.618	.818
		Negative affect (NA)	−.485	−.631	−.306
		Social anxiety (SA)	−.472	−.621	−.290
	Positive affect (PA)	Negative affect (NA)	−.419	−.579	−.229
		Social anxiety (SA)	−.261	−.447	−.053
	Social anxiety (SA)	Social anxiety (SA)	.688	.558	.785

Table S3

Study 2: SAD Diagnosis Differences on Social Comparison Instability, Accounting for Uneven Time Intervals

Term	Within-day social comparison instability[a]			
	b	95% conf. int.		t
(Intercept)	12.49	6.76	18.23	4.24
SAD diagnosis	1.82	−0.84	4.47	1.33
Person-level mean SC favorability	−0.07	−0.15	0.010	−1.71
$\tau_{00\ \text{Person}}$	5.01	4.14	5.87	
$\tau_{00\ \text{Day}}$				
σ_{res}	7.06	6.77	7.38	
Marginal R^2	0.042	−0.025	0.074	
Conditional R^2	0.363	0.273	0.438	
N people	87			
N days	1088			
N observations				

Note. Focal parameter estimates shaded in gray; SAD = social anxiety disorder; SC = social comparison; b = unstandardized regression coefficient; conf. int. = confidence (compatibility) intervals constructed using profile likelihood for b, τ, and σ and empirical parametric bootstrap for R^2; for single-level models, R^2 is adjusted R^2 and confidence intervals constructed using pivots for b and σ and bias-corrected accelerated nonparametric bootstrap; SC favorability scaled as POMP scores; SC instability scaled as the RMSSD between successive within-day observations; τ_{00} = random effects standard deviation, σ = residual standard deviation; [*]results do not meaningfully change if we also control for day-level SC favorability. Time intervals accounted for using the normalized time interval adjustment procedure described by Jahng et al. (2008, Equation 12). Following their procedure, successive differences between SC scores were adjusted by dividing the observed score difference by the normalized time interval between assessments (expressed in hours). The normalized time interval for between measurements i and $i - 1$ for a person on a day was computed as $(\text{Interval}_i) / \text{Median(Interval)}^\lambda$, where Median(Interval) is the median interval between successive measurements across people and days and λ is an exponent that was chosen to minimize the relationship absolute successive score differences and time interval (see Jahng et al., 2008, Equation 12). The estimated λ was $\lambda = 0.1604942$. This led to adjustments to the observed successive social comparison score differences with mean = 1.00 (SD = 0.09, *min* = 0.43, *max* = 1.36). These adjustments were minor and had no discernible effect on results.

Table S4

Study 2: SAD Diagnosis Differences on Social Comparison Instability, Controlling for Person-Mean Social Comparison Favorability

Term	Within-day social comparison instability[a]				Across-days social comparison instability			
	b	95% conf. int.		t	b	95% conf. int.		t
(Intercept)	12.49	6.76	18.23	4.24	9.31	2.51	16.11	2.72
SAD diagnosis	1.82	−0.84	4.47	1.33	2.30	−0.84	5.45	1.46
Person-level mean SC favorability	−0.07	−0.15	0.010	−1.71	−0.03	−0.12	0.06	−0.66
$\tau_{00\ \text{Person}}$	5.01	4.14	5.87					
$\tau_{00\ \text{Day}}$								
σ_{res}	7.06	6.77	7.38		6.28	5.38	7.25	
Marginal R^2	0.042	−0.025	0.074		0.032	0.001	0.144	
Conditional R^2	0.363	0.273	0.438					
N people	87				87			
N days	1088							
N observations								

Note. Focal parameter estimates shaded in gray; SAD = social anxiety disorder; SC = social comparison; b = unstandardized regression coefficient; conf. int. = confidence (compatibility) intervals constructed using profile likelihood for b, τ, and σ and empirical parametric bootstrap for R^2; for single-level models, R^2 is adjusted R^2 and confidence intervals constructed using pivots for b and σ and bias-corrected accelerated nonparametric bootstrap; SC favorability scaled as POMP scores; SC instability scaled as the RMSSD between successive within-day observations; τ_{00} = random effects standard deviation, σ = residual standard deviation; [*]results do not meaningfully change if we also control for day-level SC favorability.

Table S5

Study 2: Within-Day Social Comparison Instability Predicting Average Within-Day Affect and Social Anxiety, Accounting for Uneven Time Intervals

Term	Positive affect				Negative affect				Social anxiety			
	b	95% conf. int.		t	b	95% conf. int.		t	b	95% conf. int.		t
(Intercept)	48.25	40.43	56.08	12.08	7.54	3.76	11.32	3.91	9.63	2.86	16.39	2.79
Within-day SC instability	−0.09	−0.19	0.01	−1.84	0.10	0.04	0.16	3.16	0.20	0.11	0.28	4.44
Person-level mean within-day SC instability	−0.86	−1.60	−0.12	−2.27	0.41	0.05	0.77	2.24	0.43	−0.21	1.07	1.31
$\tau_{00\ \text{Person}}$	19.12	16.32	22.17		9.14	7.77	10.62		16.53	14.10	19.18	
σ_{res}	11.12	10.65	11.62		6.98	6.68	7.30		9.78	9.37	10.22	
Marginal R^2	0.055	−0.041	0.106		0.061	−0.038	0.112		0.036	−0.055	0.068	
Conditional R^2	0.761	0.704	0.830		0.654	0.583	0.730		0.750	0.694	0.816	
N people	87				87				87			
N days	1088				1088				1088			

Note. Focal parameter estimates shaded in gray; SC = social comparison; b = unstandardized regression coefficient; conf. int. = confidence (compatibility) intervals constructed using profile likelihood for b, τ, and σ and empirical parametric bootstrap for R^2; SC favorability scaled as POMP scores; SC instability scaled as the RMSSD between successive within-day observations; τ_{00} = random effects standard deviation, σ = residual standard deviation.

Table S6

Study 2: SAD Diagnosis Moderation of Social Comparison Instability Effects, Including Within-Day Mean Social Comparison as a Covariate

Term	Positive affect				Negative affect				Social anxiety			
	b	95% conf. int.		t	b	95% conf. int.		t	b	95% conf. int.		t
(Intercept)	53.89	44.94	62.85	11.65	3.96	−0.19	8.12	1.85	3.80	−3.50	11.09	1.01
Within-day SC instability	0.02	−0.11	0.15	0.32	0.09	0.01	0.17	2.29	0.11	0.00	0.23	1.89
SAD diagnosis	−18.59	−33.47	−3.71	−2.42	11.56	4.66	18.46	3.24	19.47	7.36	31.59	3.11
Person-level mean within-day SC instability	−0.79	−1.76	0.17	−1.59	0.35	−0.10	0.81	1.52	0.24	−0.55	1.02	0.58
Within-day mean SC favorability	0.59	0.47	0.72	9.20	−0.19	−0.26	−0.11	−4.72	−0.14	−0.25	−0.03	−2.42
Within-day SC instability × SAD diagnosis	0.00	−0.18	0.18	−0.03	−0.12	−0.23	−0.01	−2.18	0.04	−0.12	0.19	0.45
Person-level mean within-day SC instability × SAD diagnosis	0.33	−1.05	1.72	0.47	−0.16	−0.81	0.49	−0.47	−0.24	−1.38	0.89	−0.42
Within-day mean SC favorability × SAD diagnosis	0.08	−0.09	0.25	0.88	−0.38	−0.49	−0.28	−7.17	−0.62	−0.77	−0.47	−8.09
Simple slopes for within-day SC instability												
SAD diagnosis = No	0.02	−0.11	0.15	0.32	0.09	0.01	0.17	2.29	0.11	0.00	0.23	1.89
SAD diagnosis = Yes	0.02	−0.10	0.14	0.30	−0.03	−0.10	0.05	−0.75	0.15	0.04	0.25	2.68
$\tau_{00\ \text{Person}}$	17.60	14.84	20.16		8.08	6.79	9.28		14.30	12.05	16.40	
σ_{res}	10.10	9.66	10.54		6.19	5.91	6.46		8.85	8.46	9.23	
Marginal R^2	0.209	0.085	0.292		0.271	0.160	0.361		0.270	0.149	0.369	
Conditional R^2	0.804	0.757	0.851		0.731	0.676	0.783		0.798	0.753	0.843	
N people	87				87				87			
N days	1088				1088				1088			

Note. Focal parameter estimates shaded in gray; SAD = social anxiety disorder; SC = social comparison; b = unstandardized regression coefficient; conf. int. = confidence (compatibility) intervals constructed using profile likelihood for b, τ, and σ and empirical parametric bootstrap

for R^2; SC favorability scaled as POMP scores; SC instability scaled as the RMSSD between successive within-day observations; τ_{00} = random effects standard deviation, σ = residual standard deviation.

Table S7

Study 2: Lagged Analysis: SAD Diagnosis Moderation of Later Within-Day Affect, Social Anxiety, and Social Comparison Favorability Predictions

Term	Positive affect				Negative affect				Social anxiety			
	b	95% conf. int.		t	b	95% conf. int.		t	b	95% conf. int.		t
Predicting later within-day affect/anxiety												
(Intercept)	47.85	42.56	53.15	17.71	7.27	4.75	9.79	5.66	6.22	2.01	10.43	2.89
Lagged SC favorability	0.04	−0.02	0.11	1.28	0.02	−0.03	0.07	0.74	0.00	−0.06	0.06	−0.01
SAD diagnosis	−17.03	−24.65	−9.40	−4.38	9.76	6.13	13.38	5.28	17.65	11.59	23.71	5.70
Lagged affect/anxiety	0.43	0.38	0.47	19.25	0.28	0.21	0.34	9.72	0.12	0.04	0.19	3.43
Lagged SC favorability × SAD diagnosis	0.01	−0.08	0.11	0.29	−0.12	−0.18	−0.05	−3.40	−0.07	−0.16	0.02	−1.63
Lagged affect/anxiety × SAD diagnosis	−0.11	−0.18	−0.04	−3.10	0.00	−0.07	0.07	0.06	0.23	0.15	0.31	5.66
$\tau_{00 \text{ Person}}$	17.96	15.36	20.80		2.17	0.00	3.12		3.99	2.56	5.09	
$\tau_{00 \text{ Day}}$	—ᵃ	—ᵃ	—ᵃ		8.42	7.17	9.79		14.18	12.09	16.47	
σ_{res}	13.79	13.46	14.12		9.33	9.02	9.65		12.52	12.11	12.95	
Marginal R^2	0.176	0.074	0.253		0.173	0.082	0.242		0.211	0.099	0.300	
Conditional R^2	0.694	0.640	0.757		0.558	0.492	0.627		0.669	0.612	0.733	
Predicting later within-day social comparison favorability												
(Intercept)	70.29	66.04	74.54	32.39	70.29	66.03	74.54	32.36	70.29	66.04	74.54	32.38
Lagged SC favorability	0.34	0.27	0.40	12.96	0.35	0.28	0.40	13.20	0.35	0.29	0.41	14.08
SAD diagnosis	−17.54	−23.66	−11.42	−5.61	−17.55	−23.68	−11.43	−5.61	−17.54	−23.67	−11.42	−5.61
Lagged affect/anxiety	0.01	−0.02	0.04	0.48	−0.01	−0.07	0.05	−0.29	0.03	−0.02	0.09	1.20
Lagged SC favorability × SAD diagnosis	−0.03	−0.11	0.04	−0.90	−0.07	−0.14	0.00	−1.90	−0.07	−0.14	0.00	−1.90
Lagged affect/anxiety × SAD diagnosis	0.00	−0.05	0.06	0.13	−0.08	−0.16	0.00	−2.00	−0.08	−0.14	−0.02	−2.58
$\tau_{00 \text{ Person}}$	1.13	0.00	2.67		0.87	0.00	2.56		1.02	0.00	2.62	
$\tau_{00 \text{ Day}}$	14.43	12.34	16.72		14.45	12.35	16.73		14.44	12.35	16.72	
σ_{res}	10.36	10.01	10.66		10.36	10.01	10.64		10.35	10.01	10.64	

Marginal R^2	0.221	0.099	0.320		0.223	0.102	0.321		0.222	0.102	0.321
Conditional R^2	0.736	0.685	0.797		0.737	0.685	0.797		0.737	0.685	0.798
N people	87				87				87		
N days	1088				1088				1088		
N observations	3422				3422				3422		

Note. Focal parameter estimates shaded in gray; SAD = social anxiety disorder; SC = social comparison; b = unstandardized regression coefficient; conf. int. = confidence (compatibility) intervals constructed using profile likelihood for b, τ, and σ and empirical parametric bootstrap for R^2; SC favorability scaled as POMP scores; τ_{00} = random effects standard deviation, σ = residual standard deviation.

Table S8

Study 2: Three-Way Interaction of SAD Diagnosis and Presence of People Moderating Social Comparison Favorability Relationships with Affect and Social Anxiety

Term	Positive affect				Negative affect				Social anxiety			
	b	95% conf. int.		t	b	95% conf. int.		t	b	95% conf. int.		t
(Intercept)	46.54	41.32	51.76	17.47	7.80	5.29	10.30	6.09	5.38	1.08	9.68	2.45
SC favorability	0.46	0.38	0.54	11.55	−0.25	−0.31	−0.20	−8.91	−0.20	−0.27	−0.12	−4.86
People present	3.04	1.86	4.23	5.02	−0.85	−1.70	−0.01	−1.99	2.43	1.23	3.62	3.99
SAD diagnosis	−16.64	−24.15	−9.14	−4.34	10.11	6.51	13.71	5.50	17.56	11.37	23.75	5.56
SC favorability × People present	0.08	−0.02	0.19	1.59	−0.08	−0.15	0.00	−2.05	−0.04	−0.14	0.07	−0.66
SC favorability × SAD diagnosis	0.10	0.00	0.20	2.06	−0.15	−0.22	−0.08	−4.21	−0.31	−0.41	−0.21	−6.05
People present × SAD diagnosis	−1.35	−3.11	0.40	−1.51	0.41	−0.84	1.66	0.65	2.58	0.82	4.35	2.87
SC favorability × People present × SAD diagnosis	0.00	−0.14	0.14	−0.01	0.04	−0.06	0.14	0.84	−0.07	−0.22	0.07	−1.01
$\tau_{00 \text{ Person}}$	8.24	7.71	8.79		4.73	4.35	5.11		6.82	6.30	7.36	
$\tau_{00 \text{ Day}}$	17.52	14.96	20.32		8.26	7.02	9.60		14.36	12.24	16.67	
σ_{res}	11.15	10.88	11.41		8.19	7.99	8.38		11.54	11.27	11.82	
Marginal R^2	0.187	0.085	0.266		0.214	0.131	0.285		0.224	0.122	0.311	
Conditional R^2	0.797	0.761	0.839		0.666	0.617	0.718		0.732	0.686	0.783	
N people	87				87				87			
N days	1137				1137				1137			
N observations	4551				4551				4551			

Note. Focal parameter estimates shaded in gray; SAD = social anxiety disorder; SC = social comparison; b = unstandardized regression coefficient; conf. int. = confidence (compatibility) intervals constructed using profile likelihood for b, τ, and σ and empirical parametric bootstrap for R^2; SC favorability scaled as POMP scores; τ_{00} = random effects standard deviation, σ = residual standard deviation.