Table S2. Perplexity values for the LDA models and AIC values for LCA

Class	AIC
2	413467
3	408433
4	406164
5	404638
6	404039
7	403444
8	403040

Topic	Perplexity
2	28.1
3	30.42
4	32.48
5	34.42
6	35.98
7	37.39
8	38.51

LDA: latent Dirichlet allocation, AIC: Akaike information criterion, LCA: latent class analysis.

Table S3. Symptom distributions for the latent Dirichlet allocation models

Class	Primary symptoms and probabilities				
2	Tearful 0.11	Paranoia 0.10	Mood instability 0.09	Agitation 0.08	Hallucination 0.07
	Hopelessness 0.11	Suicidal ideation 0.10	Poor concentration 0.10	Low energy 0.09	Tearful 0.09
3	Paranoia 0.10	Hallucination 0.09	Agitation 0.09	Tearful 0.08	Aggression 0.07
	Hopelessness 0.19	Suicidal ideation 0.12	Tearful 0.11	Guilt 0.09	Worthlessness 0.08
	Poor concentration 0.12	Low energy 0.11	Tearful 0.10	Poor motivation 0.10	Mood instability 0.10
4	Paranoia 0.12	Hallucination 0.11	Agitation 0.08	Poor insight 0.08	Delusion 0.07
	Hopelessness 0.23	Suicidal ideation 0.10	Worthlessness 0.10	Tearful 0.09	Helplessness 0.08
	Low energy 0.18	Poor motivation 0.18	Poor concentration 0.11	Anhedonia 0.10	Mood instability 0.08
	Tearful 0.22	Poor concentration 0.11	Guilt 0.09	Irritability 0.08	Mood instability 0.08
5	Hallucination 0.12	Paranoia 0.11	Delusion 0.08	Agitation 0.07	Poor insight 0.07
	Hopelessness 0.21	Worthlessness 0.10	Suicidal ideation 0.10	Helplessness 0.09	Tearful 0.08
	Low energy 0.19	Poor motivation 0.17	Poor concentration 0.11	Anhedonia 0.09	Tearful 0.08
	Insomnia 0.16	Agitation 0.13	Aggression 0.11	Tearful 0.08	Mood instability 0.06
	Tearful 0.23	Poor concentration 0.14	Guilt 0.13	Irritability 0.10	Mood instability 0.10

Class	Primary symptoms and probabilities				
6	Hallucination 0.12	Paranoia 0.11	Delusion 0.08	Poor insight 0.07	Agitation 0.07
	Hopelessness 0.19	Worthlessness 0.14	Helplessness 0.11	Tearful 0.09	Low energy 0.08
	Poor motivation 0.21	Low energy 0.12	Mood instability 0.12	Poor concentration 0.11	Tearful 0.10
	Aggression 0.18	Insomnia 0.13	Agitation 0.11	Tearful 0.07	Mood instability 0.07
	Tearful 0.22	Guilt 0.14	Poor concentration 0.14	Irritability 0.11	Weight loss 0.10
	Anhedonia 0.19	Blunted Affect 0.12	Suicidal ideation 0.11	Poor concentration 0.08	Hopelessness 0.08
7	Paranoia 0.10	Hallucination 0.10	Poor insight 0.09	Delusion 0.08	Agitation 0.07
	Hopelessness 0.16	Worthlessness 0.15	Helplessness 0.13	Tearful 0.07	Low energy 0.07
	Poor motivation 0.24	Low energy 0.18	Poor concentration 0.13	Mood instability 0.11	Tearfulness 0.09
	Aggression 0.20	Insomnia 0.14	Agitation 0.09	Tearfulness 0.08	Mood instability 0.07
	Poor concentration 0.17	Weight loss 0.15	Irritability 0.14	Tearful 0.14	Guilt 0.07
	Anhedonia 0.21	Blunted affect 0.12	Suicidal ideation 0.11	Poor concentration 0.08	Hopelessness 0.08
	Tearful 0.28	Guilt 0.16	Paranoia 0.12	Hopelessness 0.10	Suicidal ideation 0.10
8	Agitation 0.15	Poor insight 0.14	Tearful 0.08	Mood instability 0.06	Paranoia 0.06
	Worthlessness 0.17	Hopelessness 0.17	Helplessness 0.14	Low energy 0.07	Tearful 0.07
	Poor motivation 0.26	Low energy 0.17	Poor concentration 0.12	Mood instability 0.11	Tearful 0.08
	Aggression 0.17	Insomnia 0.17	Agitation 0.08	Tearful 0.07	Mood instability 0.06
	Irritability 0.21	Weight loss 0.16	Poor concentration 0.15	Tearful 0.12	Suicidal ideation 0.06
	Anhedonia 0.20	Blunted affect 0.11	Suicidal ideation 0.10	Poor concentration 0.08	Hopelessness 0.08
	Tearful 0.29	Guilt 0.19	Suicidal ideation 0.11	Hopelessness 0.11	Paranoia 0.08
	Hallucination 0.17	Paranoia 0.14	Delusion 0.13	Persecution 0.08	Agitation 0.06

The top 5 symptoms for each topic are included.