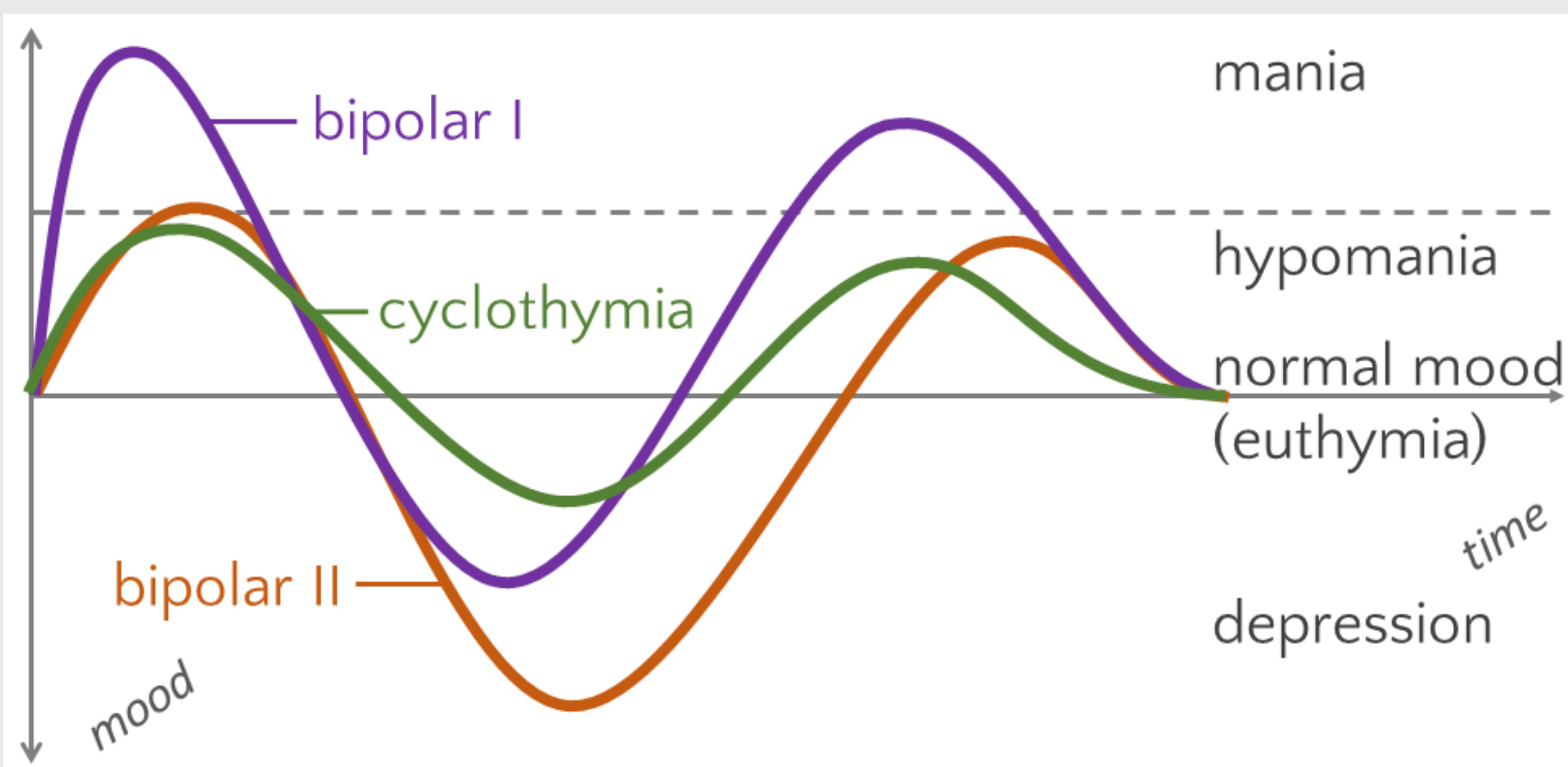


What?

Bipolar Disorder

severe mood disorder [1]



affects 2% of UK population, 0.1%-4.4% worldwide [2]

Clinical recovery

no symptoms for ≥ 8 weeks, difficult to sustain

Personal recovery

satisfying, hopeful, contributing life even with imitations caused by illness [3]

Components [4]

- Connectedness
- Hope and optimism
- Identity
- Meaning and purpose
- Empowerment



How do people describe personal recovery experiences in bipolar disorder in structured and informal settings?

Who?

Lancaster University



Glorianna Jagfeld
g.jagfeld@lancaster.ac.uk



Steven Jones
Fiona Lobban



Paul Rayson



Why?

Motivation

research so far: structured settings, small samples, Western, English speaking participants
 → **leverage large quantities of 'natural' statements from social media**
 → better understanding of personal recovery to improve mental health care for bipolar disorder

Research questions

How do individuals diagnosed with bipolar disorder talk about personal recovery online? What new insights do we get about facilitators or barriers of recovery?

- 1) Western population, English-language posts
- 2) diverse ethnicities, multilingual posts

How?

Methods

Approaches

- exploratory quantitative → qualitative data analysis
- corpus & computational linguistics methods:
 - language & country identification
 - sentiment & emotion analysis
- identify users via self-reported diagnosis statements, e.g. 'I was diagnosed with bipolar disorder'

Challenges

- identifying relevant content: what is 'about recovery'?
- missing/unreliable demographic information
- text analysis tools/resources mainly available for English

concordance: term context

ough at this point in my recovery to know when I need a cou
 or the input ! Are there recovery centers that are for ment
 Someone in the middle of recovery from an episode is not in
 about my mental illness recovery through a local chapter o
 us out) strengths based recovery model which is delivered
 recovery ward mental health
 I 'm in a recovery program
 responsible for your own recovery ? What plans have you mad
 do I disagree that your recovery depends on your partner b
 way to possibly the best recovery of my life which I 'm sti
 ch is worth the agony of recovery . But it is there for me
 ty and focus on your own recovery . You ca n't save everyon
 ull time job has been my recovery . I have used therapy as
 therapy as a tool in my recovery from severe childhood abu

Data

Twitter: public tweets



Reddit: public posts



Blogs

longer, more carefully edited texts, manually selected: less quantity, ask for individual consent

Ethics

Approaches

- consult service user panel
- ethics committee approval
- share data only for research under usage agreement

Challenges

- mental health sensitive information, even more combined with ethnicity
- consent: Twitter & Reddit terms of service allow research use of public posts, but deidentify and paraphrase tweets/posts to protect anonymity of vulnerable users [5]
- alarming content: risk of (self-harm) → only analyse posts older than 3 months

References

1. Jones S, Lobban F, Cook A. Understanding Bipolar Disorder - Why some people experience extreme mood states and what can help. British Psychological Society; 2010. 85 p.
2. Merikangas KR, Jin R, He J, Kessler RC, Lee S, Sampson N a, et al. Prevalence and correlates of bipolar spectrum disorder in the world mental health survey initiative. Vol. 68, Archives of general psychiatry. 2011;68(3):241-51.
3. Anthony WA. Recovery from mental illness: the guiding vision of the mental health system in the 1990s. Vol. 16, Psychosocial Rehabilitation Journal. 1993;16(4):11-23.
4. Leamy M, Bird V, Le Boutillier C, Williams J, Slade M. Conceptual framework for personal recovery in mental health: Systematic review and narrative synthesis. Vol. 199, British Journal of Psychiatry. 2011;199(6):445-52.
5. Benton A, Coppersmith C, Dredze M. Ethical Research Protocols for Social Media Health Research. In: Proceedings of the First Workshop on Ethics in Natural Language Processing. 2017. p. 94-102.