

Are dysfunctional attitudes elevated and linked to mood in bipolar disorder? A meta-analysis and systematic review

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Overview

- Introduction
 - What are DA and how they present in Bipolar
 - Aims of the review
- Method
- Results
 - Meta-analysis
 - Narrative synthesis
- Discussion
- Clinical implication & Limitations
- Questions

What are Dysfunctional Attitudes?

A person should do well at everything he undertakes

If others dislike you, you cannot be happy

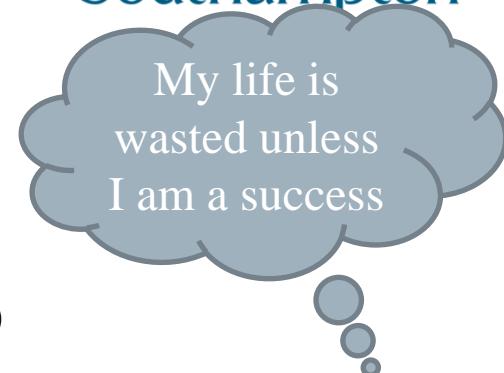
My life is wasted unless I am a success

I am nothing if a person I love doesn't love me

Dysfunctional Attitudes in Depression

- Elevated (Keller, 1983) and linked to more depressive episodes (Otto Et al., 2007).
- DA can predict future depressive symptoms and severity (Kërqeli et al., 2013; Wang et al., 2010).
- Characteristic (Fresco et al., 2006) or mood dependent in depression (Pearson & Miranda, 2002)?

Dysfunctional Attitudes in Bipolar



- Mixed findings about the prevalence of DA in BD
 - Higher scores for 'goal attainment' DA for Bipolar (Lam et al., 2004)
 - DA scores higher in BD population vs unipolar depressed and HC (Batmaz, et al., 2013).
 - No significant difference in DAS scores between BD, UP and HC (Alatiq et al., 2010).
- Mixed findings about the influence of mood
 - Goldberg et al., (2008) reported significant associations between mania symptoms and increased DA scores. (not dep)

Aims

1. explore the presence DA in BD vs a comparison group
2. identify any associations and provide a narrative review of DA in BD and reported relationships between mood & DA
3. to review the methodological quality of the studies;
4. explore evidence for psychological therapy on DA in BD
5. to reflect upon current research/ implications/ recommendations for future research in BD and DA.

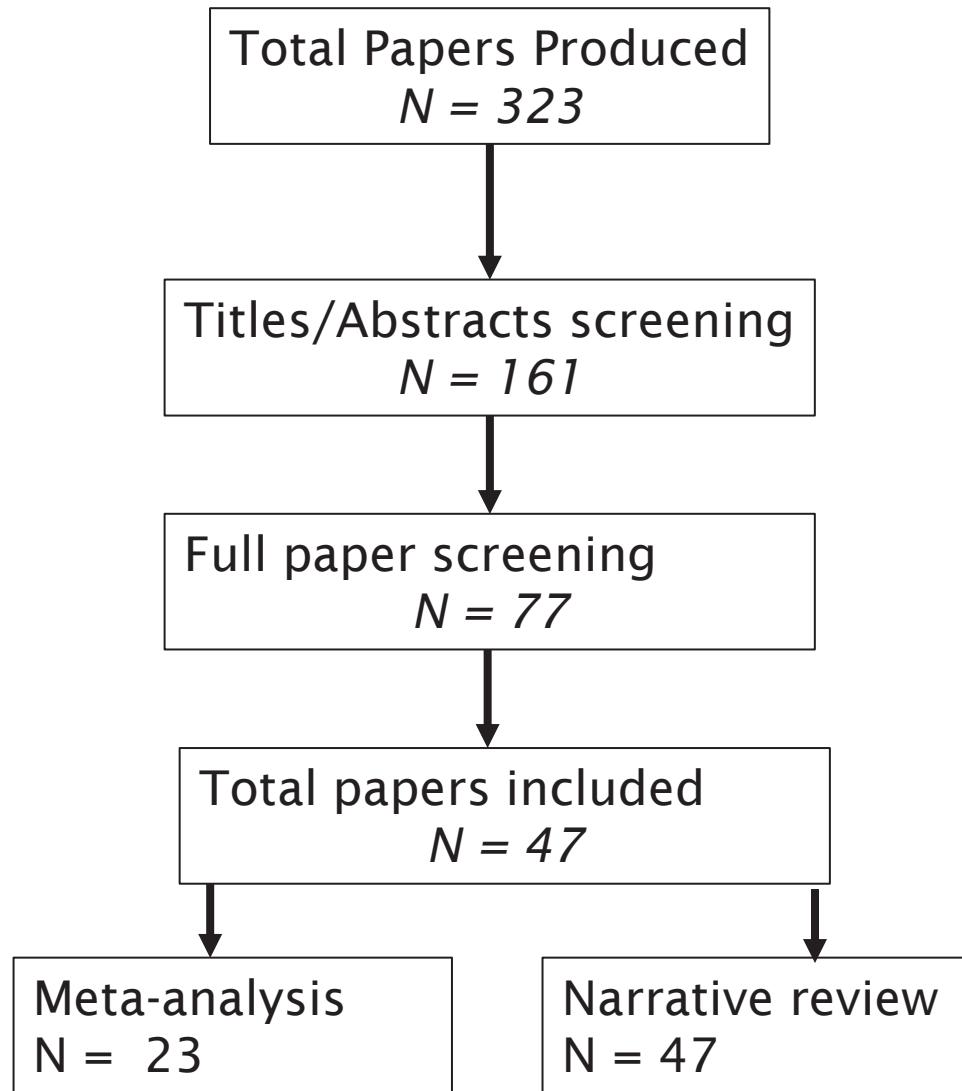
Method

- Databases = Medline, PsycInfo and Web of Science
- Search terms =
 - ‘bipolar’ AND
 - “dysfunctional attitude*” or “dysfunctional belie*” or “dysfunctional assum*” or “negative cognitions” or “maladaptive belie*”

Method- Inclusion/ Exclusion

Inclusion	Exclusion
Any study design	Reviews, meta-analyses, abstracts, commentaries
Participants diagnosed with BD	No formal diagnosis (DSM, ICD)
Participants 18+	Child/ adolescent studies
Peer reviewed journal	Non standardised
Written in English	Data collected during or post intervention
Standardised measure for DA + Mood (means + SD)	Statistical results not raw data (means, SD, sample size)
At least two group (BDI vs BDII / BD vs HC)	

Method- PRISMA

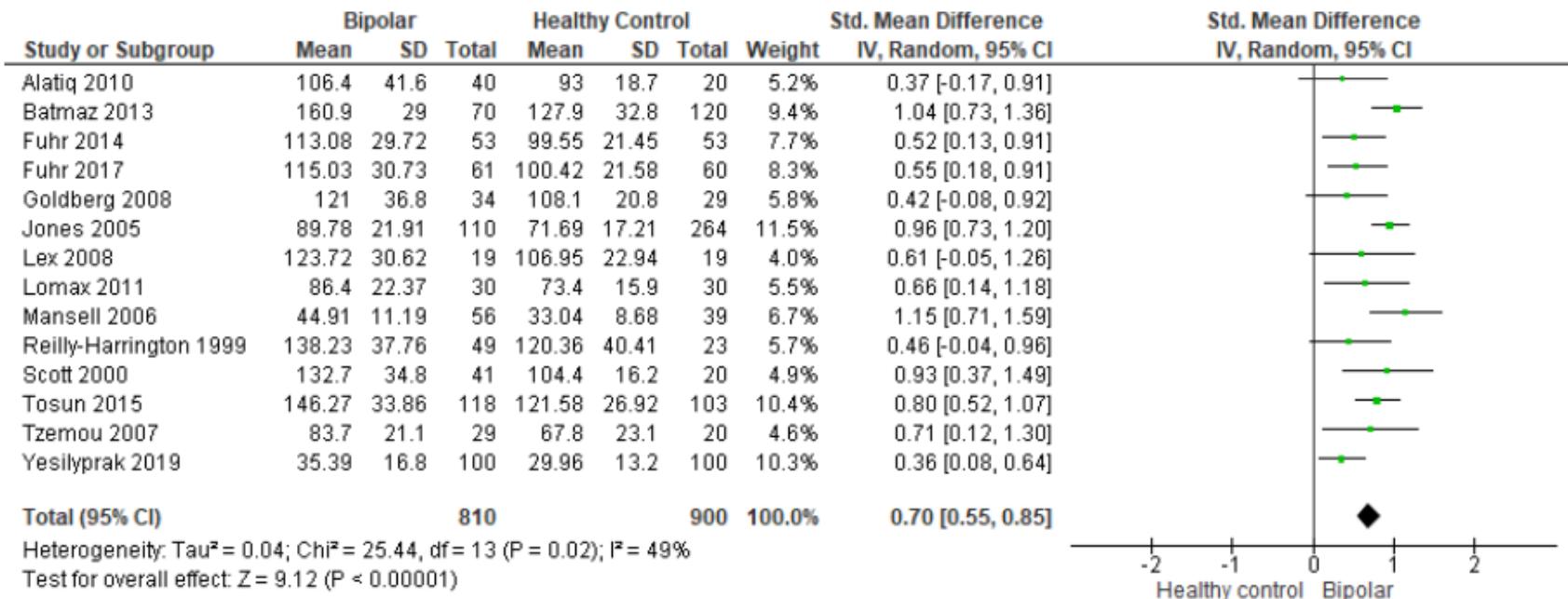


Method

- Quality assessment tool
 - National Heart Lung and Blood Institute (NHLBI; 2014) Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies
- Effect size computation
 - Random effects meta-analysis using RevMan (2020) to identify SMD between groups
 - Group means, SD and sample size (Borenstien et al. 2009).
 - DAS total scores to avoid Type I error.

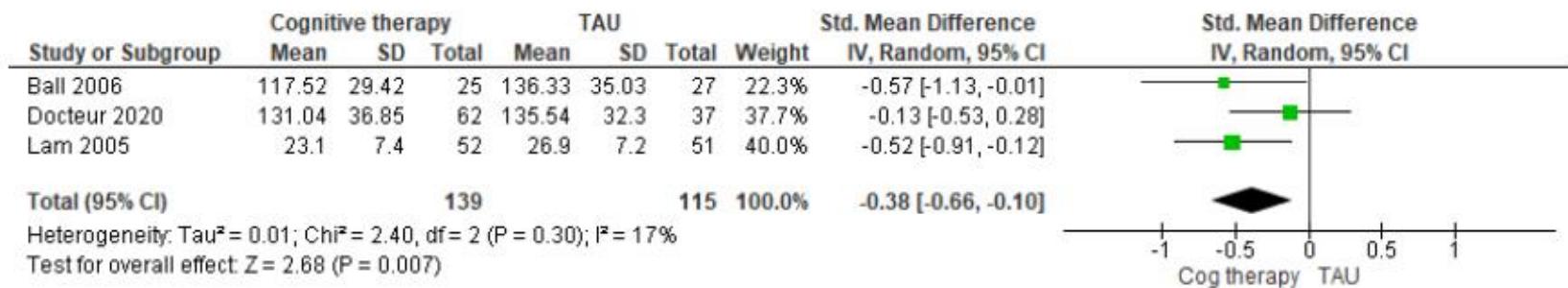
Results- Meta-analysis

- No difference was observed between BD and unipolar participants ($d = -0.16$).
- A significant mean difference was found between BD and healthy controls ($d = 0.70$).



Results- Meta-analysis

- Mood state in BD- a SMD was found between DA scores for euthymic vs. depressed participants ($d = -0.71$).
- 3 studies included in the meta-analysis were suggestive of lower DA in those who had engaged in psychological therapy compared to TAU.



Results- Narrative Synthesis

- DA are a characteristic of BD that is not as prevalent in healthy populations
- Initial studies are in support of psychological therapies being effective at reducing DA in BD.
- DA are higher in depressed individuals with BD when compared to other mood states (euthymic, manic, mixed).
- Using the DAS mania does not correlate with increased DA

Discussion

- DA are not unique to unipolar depression as previously thought (Keller, 1983; Abela & D'Alessandro, 2002), but also are not more extreme in bipolar depressive episodes.
- The severity of DA are dependent on a individuals state, rather than just a trait of their diagnosis (Person & Miranda, 2002).
- Remains mixed evidence whether DA can predict mood episode in BD
- High heterogeneity of studies

Limitations

- Limited hand searching
- Data extraction for full papers reviewed
- Fair or poor quality studies
- Lack of longitudinal studies
- No analysis of subscales (DAS)

Clinical implications/ Future research

- DA are most active when individuals are depressed, treatment targeting this phase of illness
- Limited understanding of DA and mania phase of BD
- Need for further longitudinal studies

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YOUR QUESTIONS