

Bipolar disorder is an illness characterized by financial instability and risky decision-making.

Open banking data can inform **supportive financial tools** that situate into existing networks of care.

Assessing acceptance and privacy preferences of third-party financial data sharing in bipolar disorder

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Background

Bipolar disorder (BD) is strongly associated with financial instability [3]. Symptomatic periods in BD often manifest in poor financial decision-making. **70% individuals with BD have reported impulsive spending during hypomania [2].**

Problematic financial behaviors during symptomatic periods can lead to serious long-term financial instability, which can severely impact the quality of life for individuals with BD and their care partners.

Little is known about how illness-specific factors impact financial decision-making in BD. The lack of granular assessment methods is a key challenge against developing just-in-time and personalized interventions focusing on financial stability for this population.

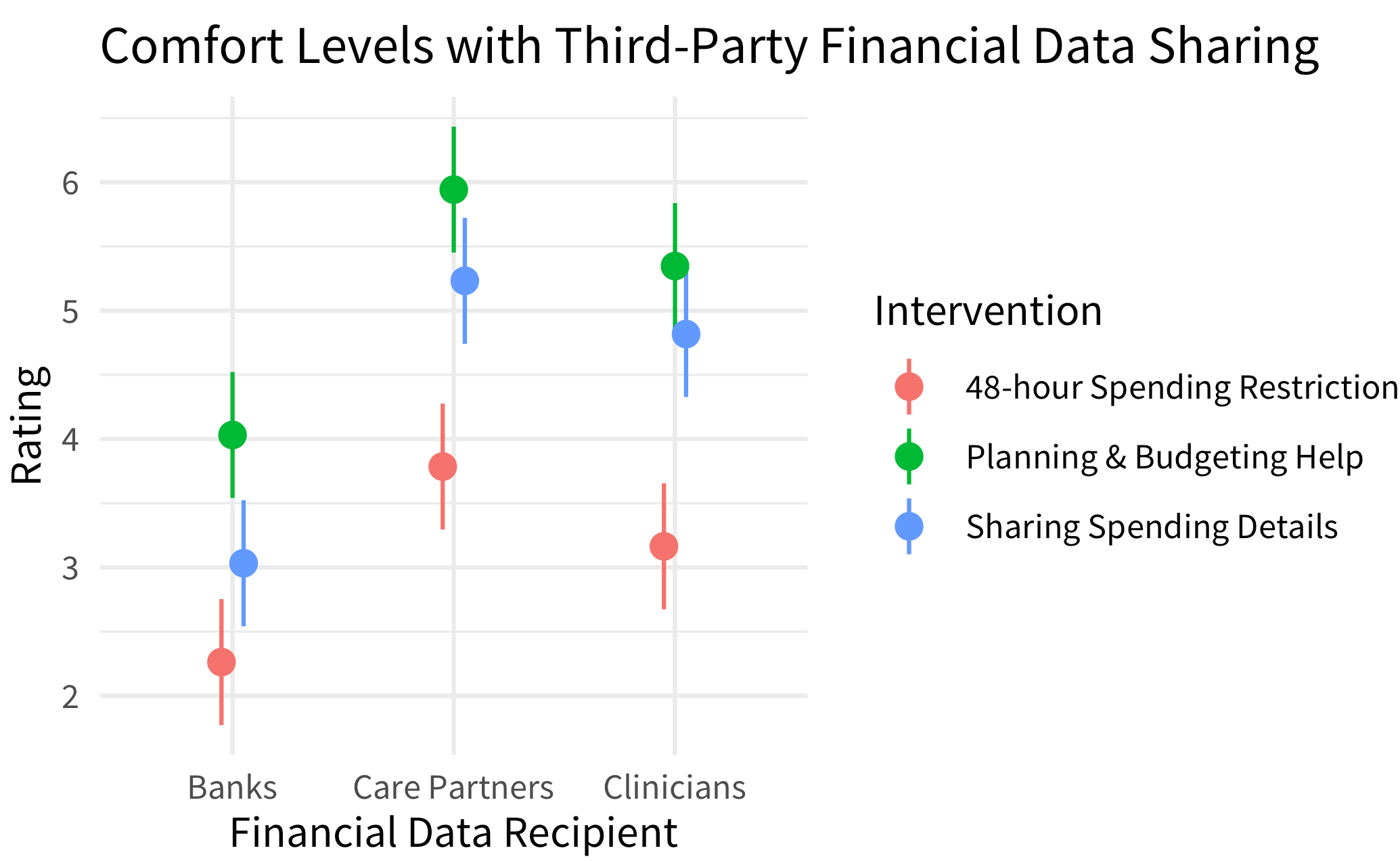
Methods

We conducted an online conjoint survey (N=500; US Prolific) to understand whether and how individuals with BD are comfortable sharing financial data for illness management.

We used a factorial vignette approach to assess level of comfort with 18 hypothetical scenarios involving intervention actors, contexts, and timing. We chose to include only third-party actors, opting to exclude self-management as a possibility. **Our prior survey findings signal a high level of comfort when sharing financial data for self-management [1].** Participants rated level of comfort on a scale of 0 –10.

Factor	Levels
Actors	Clinicians Care partners Banks
Intervention Context	Share spending details Planning & bugeting 48-hour spending restriction
Mood State	During a mood episode During stable mood

Results



Our respondents were mostly female (59.9%), aged 35 - 44 (24.8%), university-educated (30.1%), and employed full-time (41.4%). BD-II was the most common diagnosis (43.3%), with 23% reporting a BD-1 diagnosis and 23.8% reporting BD Not Otherwise Specified. The majority received their BD diagnosis when aged 19 to 29 years. **11.4% of respondents had declared bankruptcy and 31.7% had considered it as a possibility.**

Evidence of high trust in care partners, prior advanced care planning, or prior adverse financial difficulties were associated with statistically significant increases to third-party data sharing comfort.

Conclusion

- Individuals in our sample were, on average, most comfortable sharing financial data for help with planning and budgeting.
- When compared with our prior work on financial data sharing comfort for illness *self-management*, comfort ratings were lower in the case of third-party data sharing.
- Individuals in trusting care partner relationships appear to be significantly more comfortable with third-party financial interventions, although more research is needed to better understand how digital tools might situate into these relationships.

Future Work

- Demonstrate feasibility and acceptance of collecting financial data from individuals with BD, simultaneously creating a retrospective dataset of mood state and spending (N=60)
- Assess whether and how such data might be viable as an objective behavioral marker of illness state using statistical and machine learning approaches
- Incorporate findings from this survey along with semi-structured interviews into supportive digital intervention prototypes

References

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[3] Thomas Richardson, Megan Jansen, and Chris Fitch. 2018. Financial difficulties in bipolar disorder part 1: Longitudinal relationships with mental health. *Journal of Mental Health* 27, 6 (December 2018), 595–601. <https://doi.org/10.1080/09638237.2018.1521920>



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