

**ACCEPTANCE AND COMMITMENT  
THERAPY FOR DEPRESSION WITH  
COMORBID SOCIAL ANXIETY:  
RESULTS FROM A PILOT  
RANDOMIZED TRIAL**

**Kristy L. Dalrymple, Ph.D.**

**Emily Walsh, B.A.**

**Lia Rosenstein, B.A.**

**Mark Zimmerman, M.D.**



**BROWN**  
Alpert Medical School



**Rhode Island Hospital**  
*A Lifespan Partner*

# DISCLOSURES

- Grant support:
  - The National Institute of Mental Health (K23MH085730; PI: Dalrymple)



# DEPRESSION AND SAD ARE HIGHLY COMORBID

- SAD present in 1/3 of patients with depression
- Greater severity of symptoms
- Poorer functioning
- Shared clinical features
  - Interpersonal rejection sensitivity, avoidance behaviors, social disengagement



# EFFECTS ON TREATMENT OUTCOMES

- Pharmacotherapy studies:
  - More severe course of illness (Mulder et al., 2006)
  - Treatment-resistant depression (Souery et al., 2007)
  - Greater number of depressive recurrences (Holma et al., 2008)
- Psychotherapy studies (CBT):
  - Findings somewhat mixed
  - Poorer outcomes (DeRubeis et al., 2005)
  - No difference in rates of improvement (e.g., Erwin et al., 2002)
  - One year follow-up: SAD severity worsened (Marom et al., 2009)



# WHY ACT?

- Transdiagnostic approach
- Empirically-supported for depression (APA, SAMHSA)
- Preliminary support for SAD (e.g., Dalrymple & Herbert, 2007; Kocovski et al., 2009)
- ACT>CBT for comorbid anxiety and mood disorders at post-treatment and 1 year follow-up (Wolitzky-Taylor et al., 2012)



# OPEN TRIAL STUDY (DALRYMPLE ET AL., 2014)

- Adults (n=38) recruited from routine outpatient psychiatric practice
- 16 sessions of ACT + medication treatment as usual
- High satisfaction with treatment
- Medium-to-large effect size changes on symptoms, functioning, and processes
- Psychological flexibility and behavioral activation correlated with symptoms and functioning



# CURRENT STUDY AIMS

- Further assess feasibility and acceptability of ACT for Depression+SAD
- Test as adjunctive to medication as usual in a typical outpatient psychiatry setting
- Assess preliminary efficacy compared to medication as usual alone



# HYPOTHESES

- ACT would continue to demonstrate feasibility and acceptability
- Initial signal efficacy:
  - Greater effect size change patterns compared to medication as usual alone





# METHODS



# PARTICIPANTS

- Recruited from outpatient psychiatry practice
  - July 2012-January 2016
- Inclusion:
  - Adults 18-65
  - Diagnoses of depressive disorder and SAD
  - Receiving medication management
- Exclusion:
  - Bipolar/psychosis/borderline PD/severe substance
  - Currently in psychotherapy



# MEASURES

- Feasibility:
  - Recruitment targets and therapist training
- Acceptability:
  - Treatment Credibility (RTQ) and patient satisfaction (CSQ-8)
  - Study retention, completed sessions
- Symptoms, functioning, and processes:
  - Diagnoses (SCID & SIDP)
  - Depression severity (QIDS)
  - Social anxiety severity (LSAS)
  - Quality of life (QOLI) & functioning (WHODAS)
  - Behavioral activation (BADS) & psychological flexibility (AAQ-II)



# TREATMENTS

- Medication As Usual (MAU)
  - Med management by board-certified psychiatrist
  - Flexible frequency of sessions
  - Typical session length: 15-30 minutes
- MAU+ACT
  - Med management as above
  - Plus 16 individual sessions of ACT
  - Flexibly designed protocol
  - Therapists: doctoral students, residents, postdoctoral fellows



# ACT SESSIONS

- Phases:
  - Sessions 1-3: Identify avoidance, assess workability, introduce willingness
  - Session 4: introduce exposure linked to values
  - Sessions 5-9: defusion
  - Sessions 10-11: self-as-context
  - Sessions 12-13: formal values clarification
  - Sessions 14-15: committed action
  - Sessions 15-16: relapse prevention & post-tx planning
- Metaphors/experiential exercises used throughout



# SAMPLE SESSION OUTLINE

## ○ Session 9: Defusion

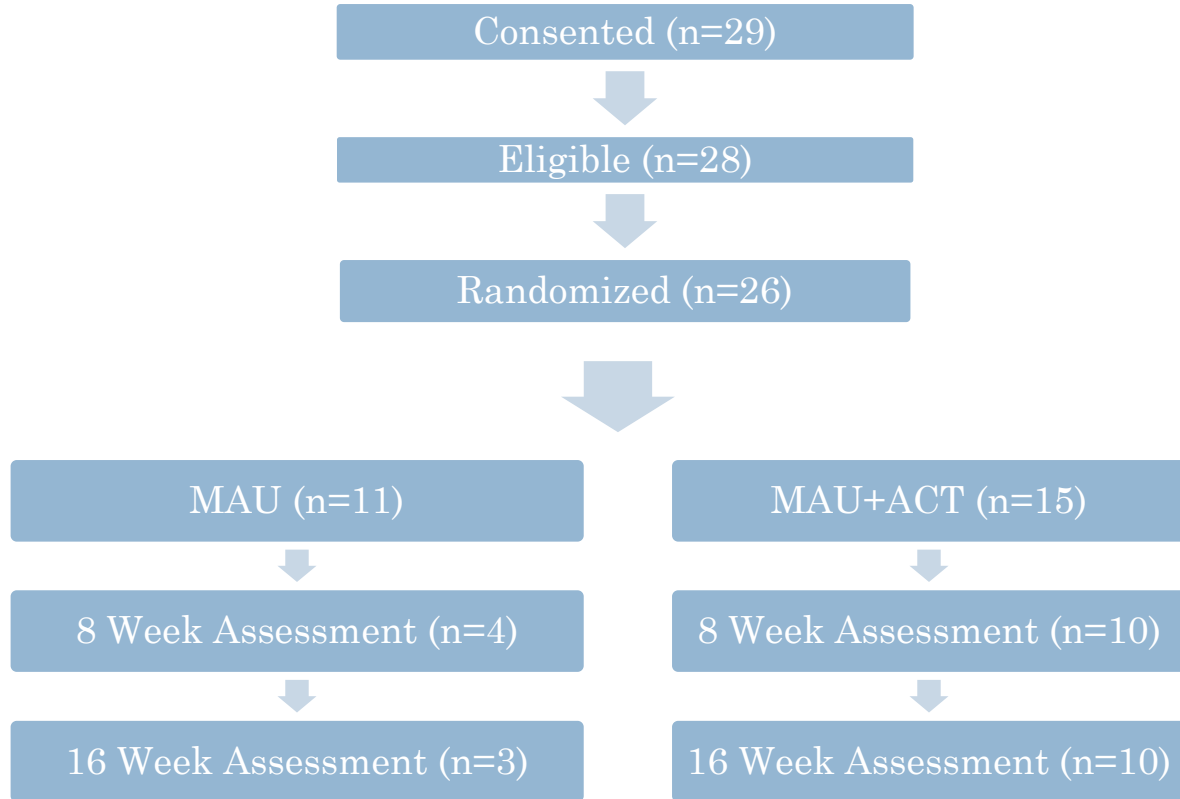
- Review homework (e.g., engagement in valued behaviors, address barriers)
- Experiential Exercise
  - e.g., Physicalizing, Content on Cards, Tin Can Monster
- In-session exposure exercise
  - Choose valued behavior to practice
  - Link to personally-identified value
  - Role play, with emphasis on practicing defusion & orienting to value



# RESULTS



# PARTICIPANT FLOW





# BASELINE CHARACTERISTICS

## ○ Demographics:

- Mean age = 38
- 46% female
- Majority Caucasian, single, <college degree

## ○ Diagnoses:

- Avg = 4 total current/partial remission diagnoses
- Next most common: GAD (52%)
- Other common: SUD, PTSD, panic, impulse control



# BASELINE COMPARISONS

- Completers vs. dropouts
  - No differences on demographics or baseline assessments
- MAU vs. MAU+ACT
  - No differences on demographics or baseline assessments



# PHARMACOTHERAPY BETWEEN CONDITIONS

Variable	MAU	MAU+ACT
Number of medication visits ( <i>M</i> )	2.2	3.1
Medication changes made (% of visits)	77.8%	46.2%



# FEASIBILITY

- Able to feasibly recruit
- Trained 7 therapists on protocol
- Drop-out rates:
  - MAU = 64%
  - MAU+ACT = 33%
- Of MAU drop-outs:
  - 3 discontinued treatment completely
- MAU+ACT session completion:
  - 6 patients completed at least 10 sessions over 16 weeks
  - 6 completed all 16 sessions, over avg. of 20 weeks



# ACCEPTABILITY (MAU+ACT)

- Patient Satisfaction (CSQ-8):
  - Assessed after final session
  - Highly satisfied with treatment ( $M = 30$ ; out of 32 pts.)

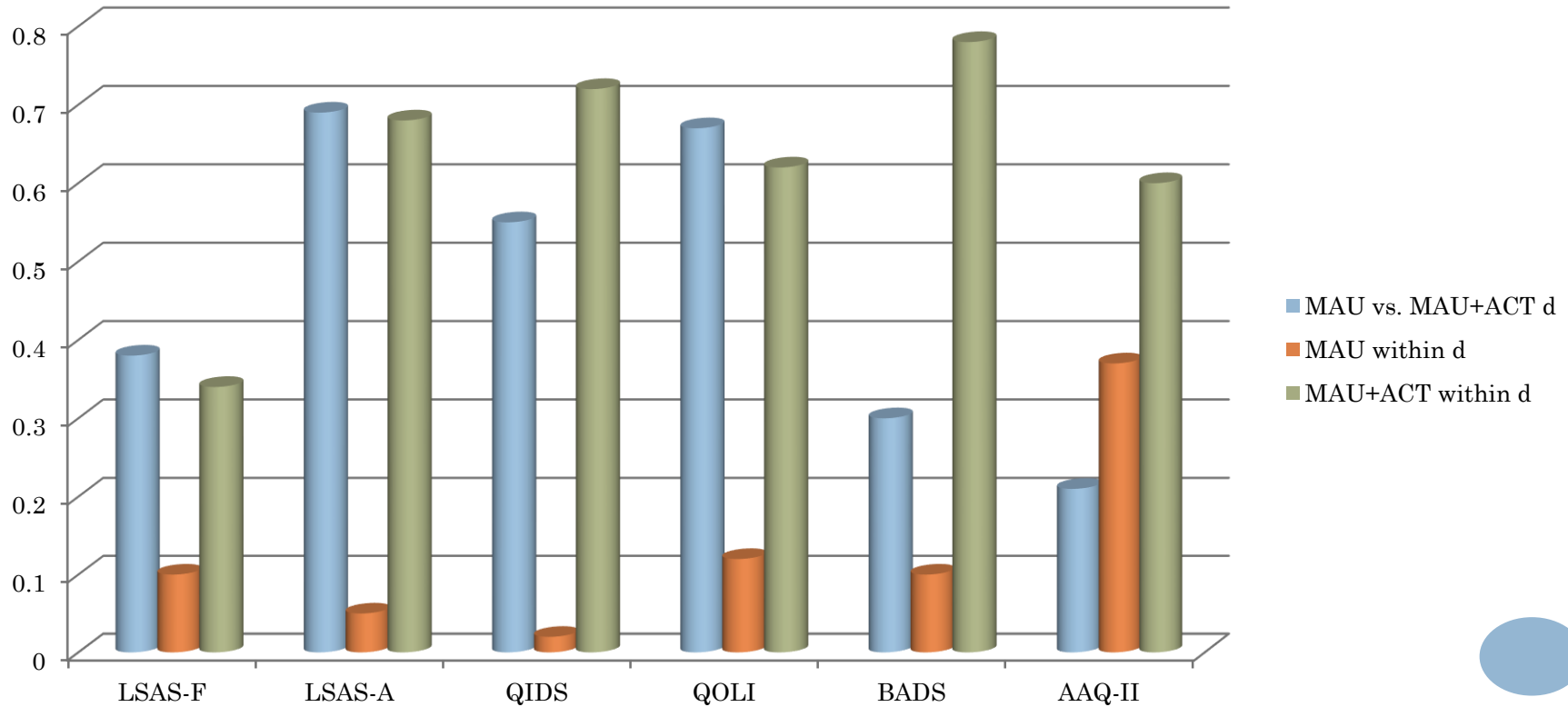


# TREATMENT CREDIBILITY

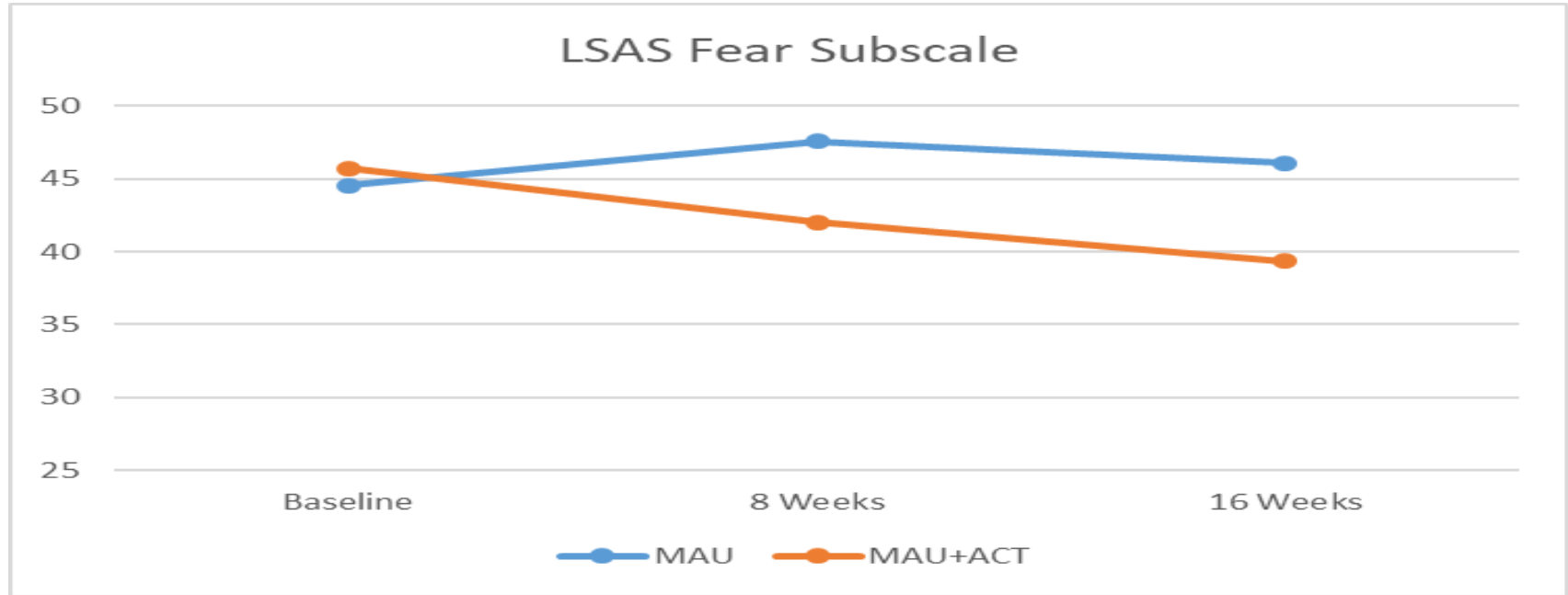
RTQ



# PRELIMINARY TREATMENT OUTCOMES

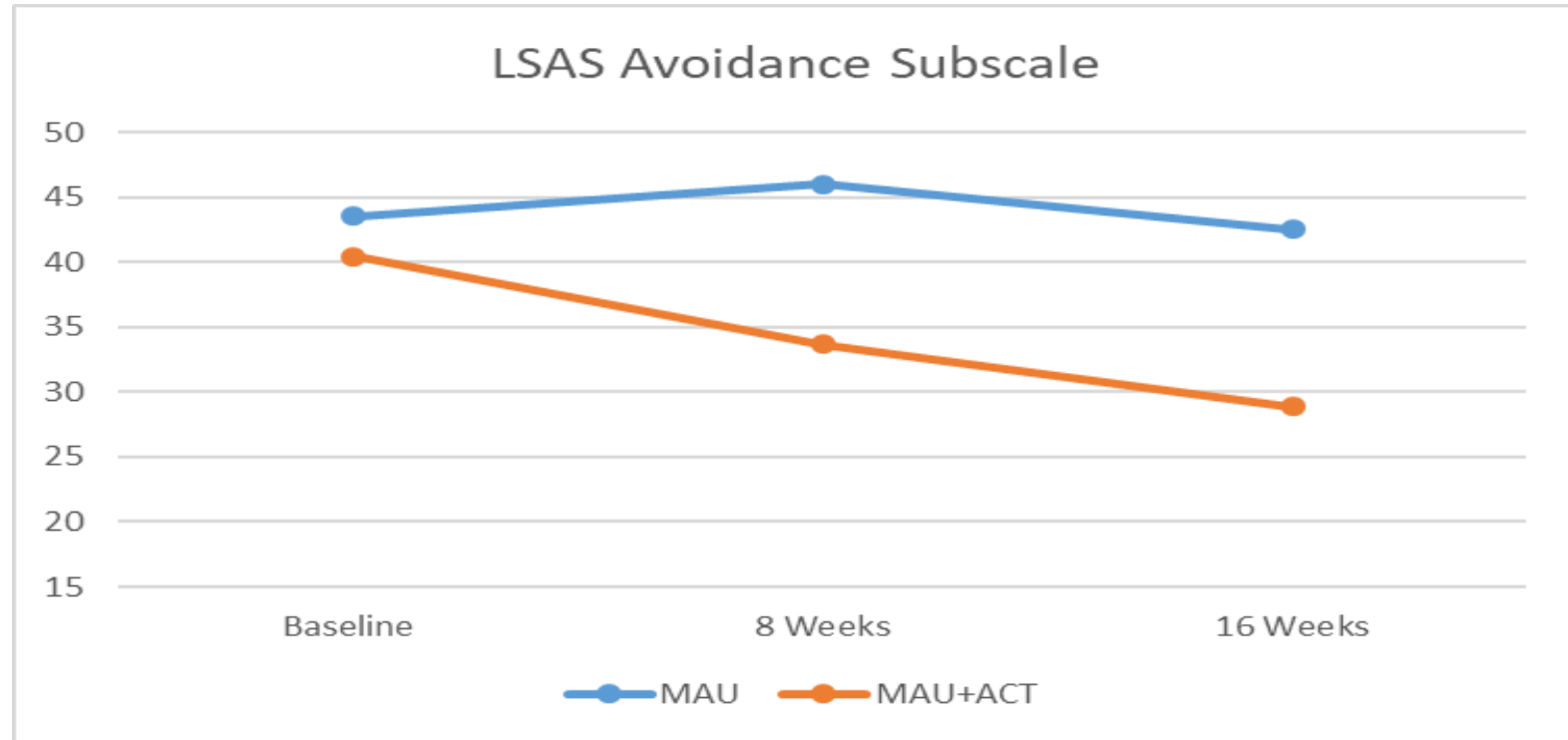


# SOCIAL FEAR

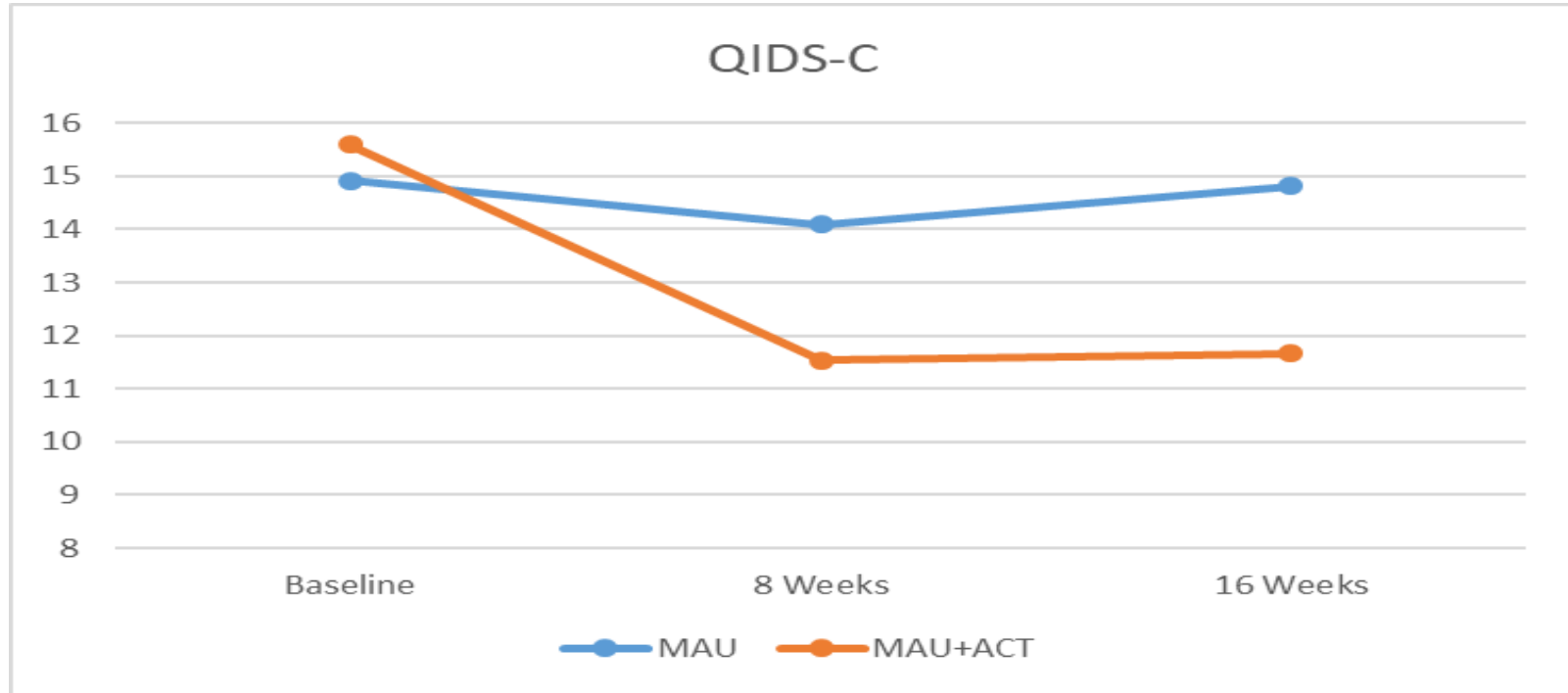




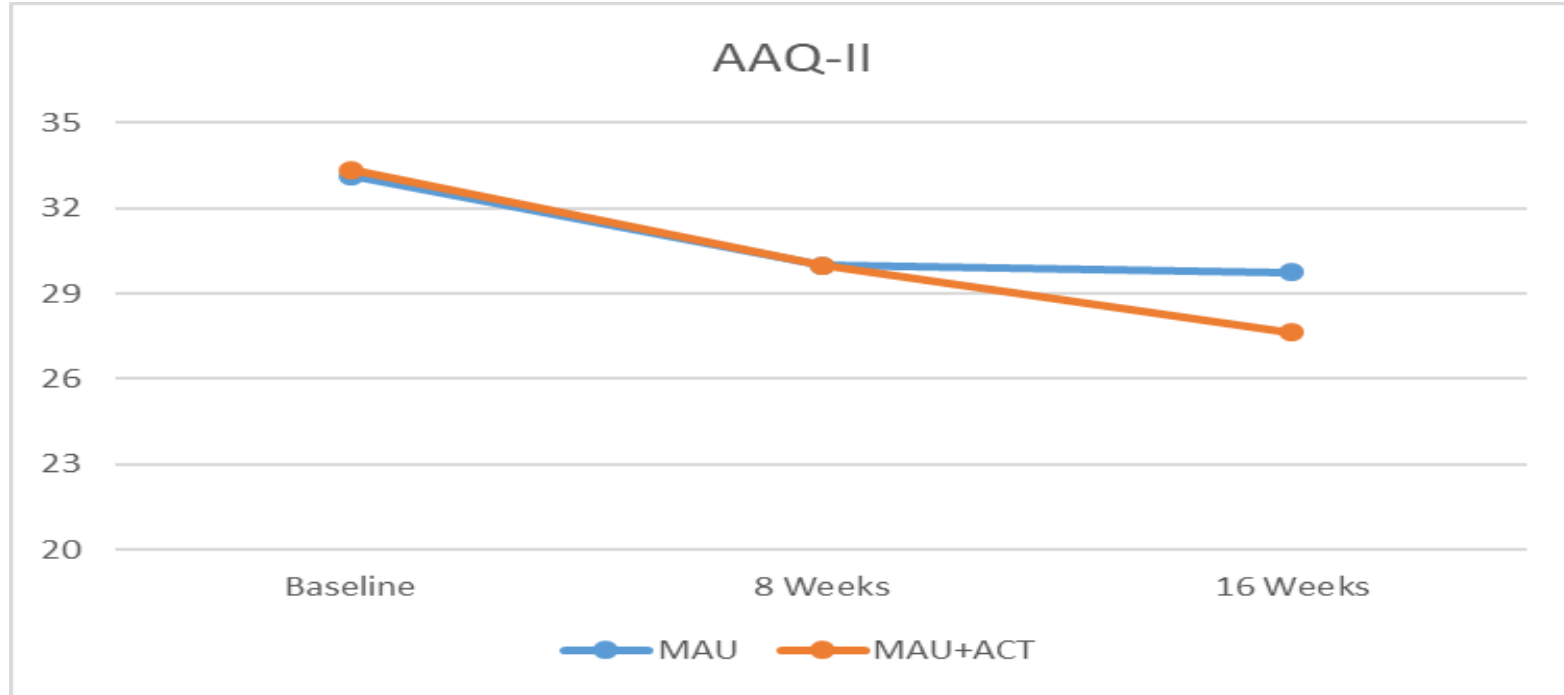
# SOCIAL AVOIDANCE



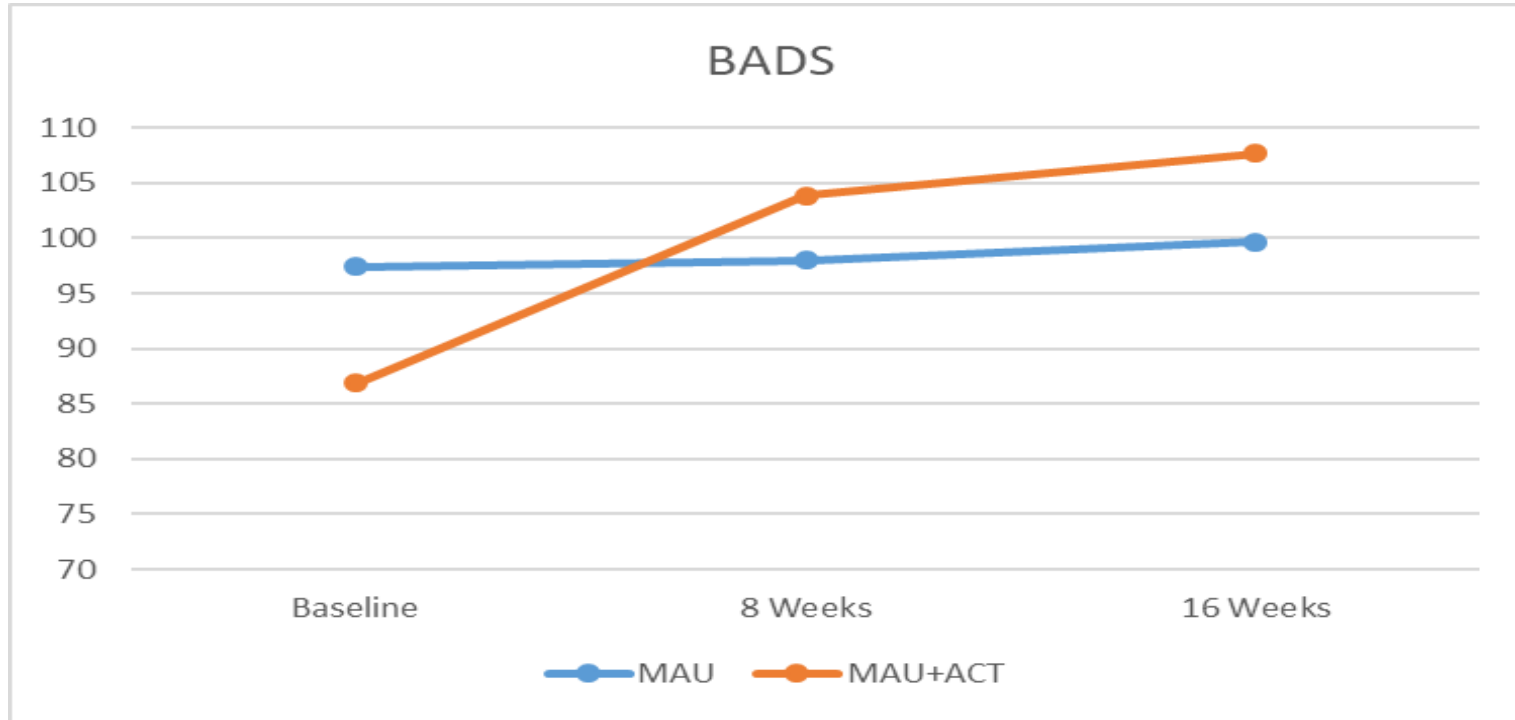
# DEPRESSION SEVERITY



# PSYCHOLOGICAL FLEXIBILITY (LOWER=BETTER)



# BEHAVIORAL ACTIVATION (HIGHER=BETTER)

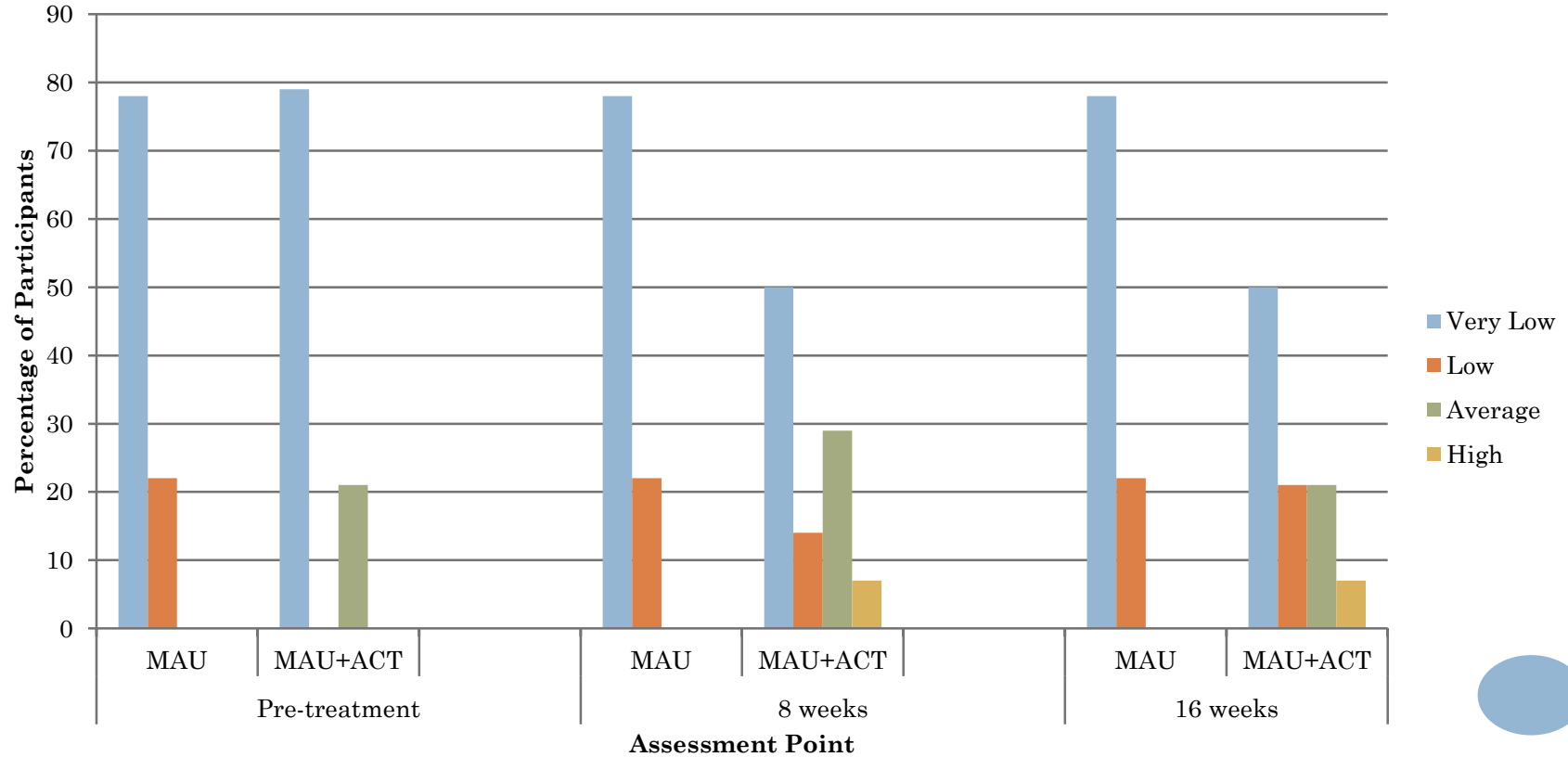


# RELIABLE CHANGE

Measure	Completer		ITT	
	MAU	MAU+ACT	MAU	MAU+ACT
QIDS-C (Depression)	0%	77.8%	9.1%	46.7%
LSAS-F (Social Anxiety Fear)	0%	22.2%	0%	13.3%
LSAS-A (Social Anxiety Avoidance)	33.3%	55.6%	9.1%	33.3%



# QUALITY OF LIFE



# DISCUSSION



# SUMMARY OF RESULTS

- Good feasibility and acceptability
- Preliminary signal of efficacy
  - Within MAU+ACT Cohen's  $d$ :
    - Depression (0.72), SA avoidance (0.68)
    - Psych flex (0.60), BA (0.78)
- But high attrition in MAU (~66%)
  - Nearly  $\frac{1}{2}$  of MAU dropouts ended treatment completely at the practice





# PREMATURE TERMINATION IN MAU

- Potential reasons:
  - Receiving non-preferred treatment
    - Depression: patients prefer psychotherapy over medication (McHugh et al., 2013)
- Consistent with recent meta-analysis (Swift et al., 2017)
  - Rates as high as 69% in comparative treatment trials
  - SAD: 1.29 OR, with higher rate in meds alone



# PRELIMINARY EFFICACY

- Results comparable to open trial
- Encouraging results with quality of life
- Consistent with effectiveness studies
  - Effect sizes - 1.06-1.13 for depression (Hans & Hiller, 2013)
  - Reliable change – 50%, 15-30% (McEvoy & Nathan, 2007; Westbrook & Kirk, 2005)



# LIMITATIONS

- Small sample size
- Large confidence intervals
- High MAU attrition rate
- Intention-to-Treat: LOCF method
- Unstructured MAU



# FUTURE IMPLICATIONS

- Comparison with other active psychotherapies
- Improve study retention, especially in MAU
- Further examination of target mechanisms



# ACKNOWLEDGEMENTS

- K award Mentors:
  - Mark Zimmerman, M.D.
  - Ivan Miller, Ph.D.
  - Kelly Wilson, Ph.D.
  - Sona Dimidjian, Ph.D.
  - David Strong, Ph.D.
  - Mark Pollack, Ph.D.
- Therapists:
  - Theresa Morgan, Ph.D.
  - Catherine D'Avanzato, Ph.D.
  - Miryam Yusufov, Ph.D.
  - Jessi Lipschitz, Ph.D.
  - Doug Long, Ph.D.
  - Bill Ellison, Ph.D.
  - Gena Gorlin, Ph.D.
- Research Assistants:
  - Emily Walsh
  - Lia Rosenstein
  - Liz Tepe
  - Jennifer Martinez
  - Katherine Wahrer



# THANK YOU!

- Questions?
  - [kristy\\_dalrymple@brown.edu](mailto:kristy_dalrymple@brown.edu)

