

Designing and Delivering ACT  
Interventions for Individuals with  
Medical Conditions:  
Transdiagnostic principles and  
key change processes

# Preliminary evaluation of an ACT group for patients with psychiatric and chronic medical conditions

Megan Oser, PhD

Vanessa Alvarez, MA

Gabe Gruner, LICSW

BRIGHAM  
AND  
WOMEN'S  
HOSPITAL



# Introduction

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- Transdiagnostic psychological vulnerability factors play a role in a variety of clinical presentations and health problems
- Heterogeneous (i.e., comorbidities) and treatment-refractory patient populations abound in real world clinical practice
- ACT to treat a heterogeneous and treatment-resistant (relapse, chronicity, multiple attempts at fixing problem) group of patients with medical and psychiatric conditions
  - Theoretical (transdiagnostic psychological flexibility)
  - Empirical (e.g. ACT for heterogeneous group of treatment-resistant patients (Clarke et al., 2012; 2014), and chronic pain group study (McCracken, Sato, & Taylor, 2013))

# Study Aims

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- To examine the potential utility of an ACT group treatment for outpatients with chronic medical and psychiatric conditions in an open trial pilot study
- To examine whether particular transdiagnostic psychological vulnerability factors improved during ACT group

# Objectives

- Characterize our sample at baseline
- Examine differences between completers and non-completers
- Examine changes in process measures from pre- to –post intervention
- Describe adaptations/modifications made to ACT group for this particular patient population

# ACT Group Session Outline

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- 8-12 weekly group sessions; 75-90 minutes each
- Format
  - Mindfulness exercise
  - 6 core components: didactic and experiential
  - Practice/behavioral experiments (e.g. behavioral commitment)

# Procedures

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- 4 cohorts of patients
- Assessed at baseline at end of treatment/  
group and at booster groups

# Measures

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- Acceptance and Action Questionnaire-II (AAQ-II): 7 item version
- Anxiety Sensitivity Index (ASI)
- Distress Tolerance Scale (DTS)
- PHQ-4: 4-item anxiety and depression screener



# Sample at Baseline

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- 24 patients recruited from academic hospital outpatient psychiatry clinic; all patients currently receiving psychiatric services
- Inclusion Criteria: medical and psychiatric condition
- 63% female;  $M_{age} = 54$  years; 71% Caucasian
- 58% graduated from college or postgraduate school; 1 pt 8<sup>th</sup> grade or less; 1 pt only some high school
- 75% were unemployed and/or on disability; 46% on Medicaid
- 83% mood disorder; 42% anxiety disorder, 13% substance use
- 83% prescribed antidepressant; 75% benzodiazepine; 21% mood stabilizer; 17% opioid
- 25% married; 33% single
- Most frequently mentioned medical diagnosis was fibromyalgia

# Sample: Medical Conditions

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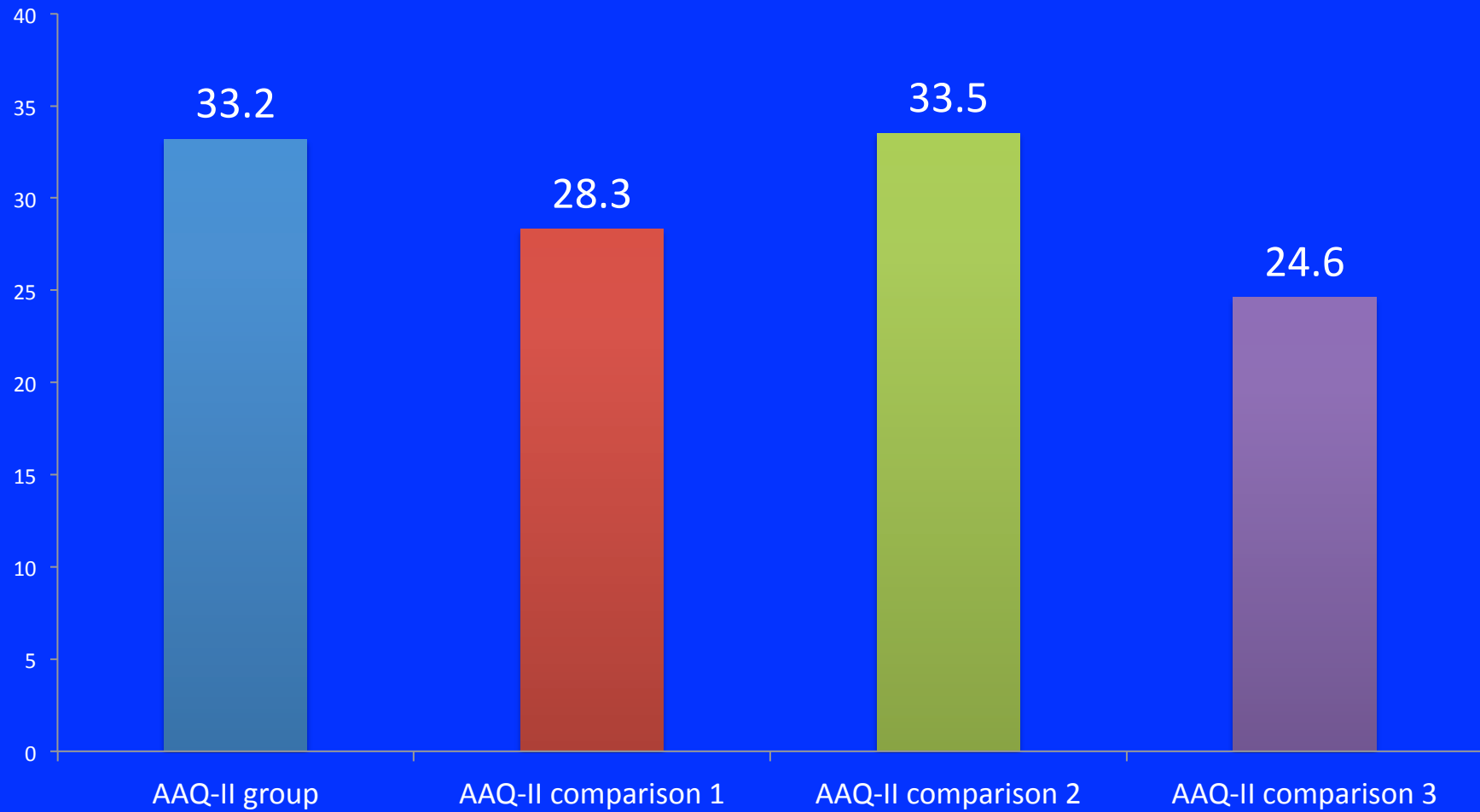
- Crohn's Disease
- TBI resulting in seizures
- Hydrocephalus with multiple shunt surgeries
- Hepatitis C
- Diabetes with renal failure, on dialysis, and retinopathy
- Multiple sclerosis
- Systemic infection- prolonged ICU stay- and resulting in PTSD
- HIV
- Spinal muscular atrophy
- End stage renal failure-Alport's disease; congestive heart failure, and intracranial bleeds requiring surgical intervention
- Fibromyalgia

# Adaptations of ACT for Chronic Medical Conditions

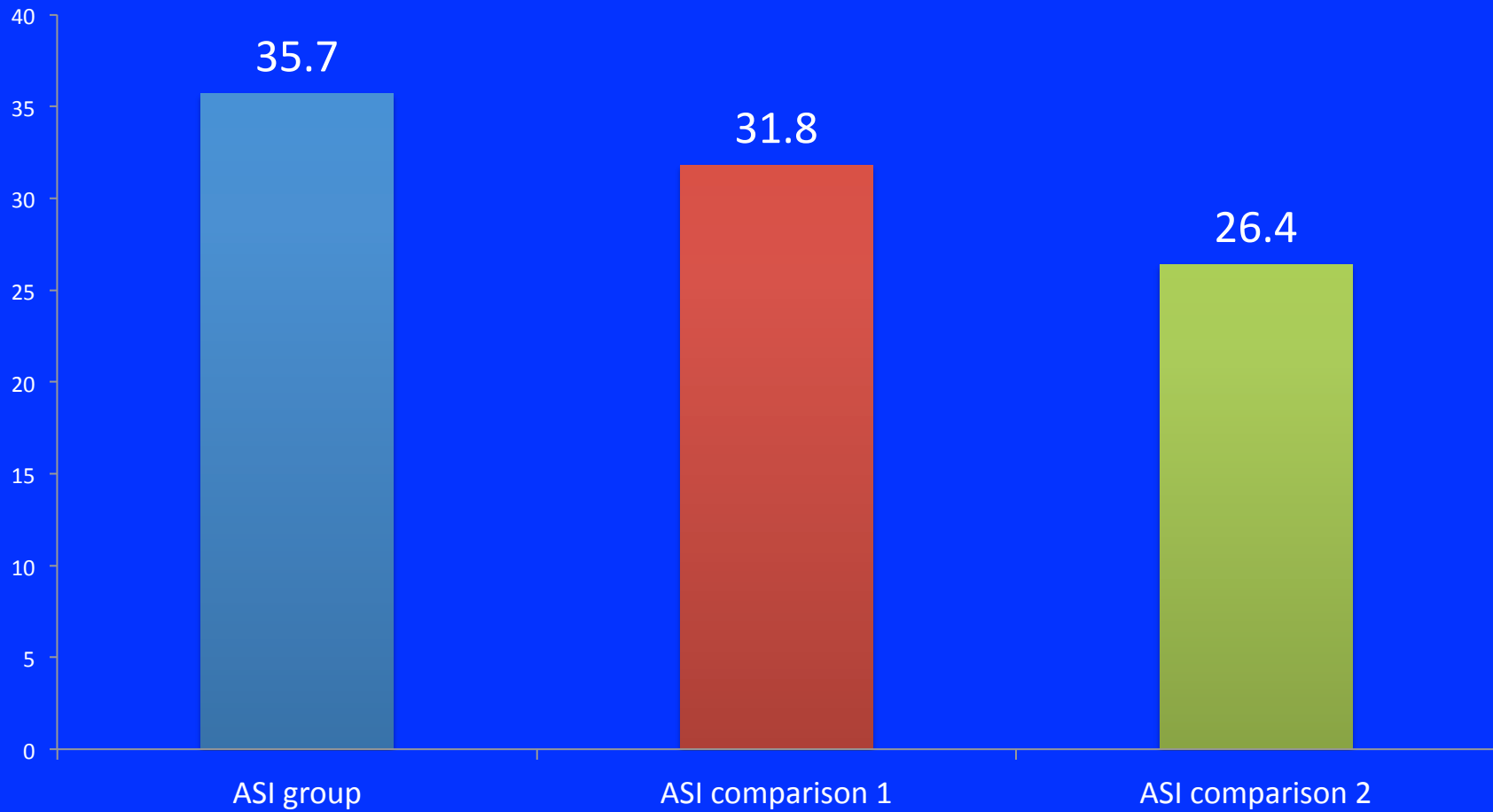
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- Focus on physical pain, body sensations, physical changes (mindfulness and acceptance)
- Self-as-context: role changes and limitations
- Adherence to difficult medical regimens and social functioning (values, committed action)
- Make accommodations for wheelchairs and assistive devices
  - Modify ‘take your mind for a walk’
- Legitimately miss sessions due to illness, medical complications, hospitalizations, etc.

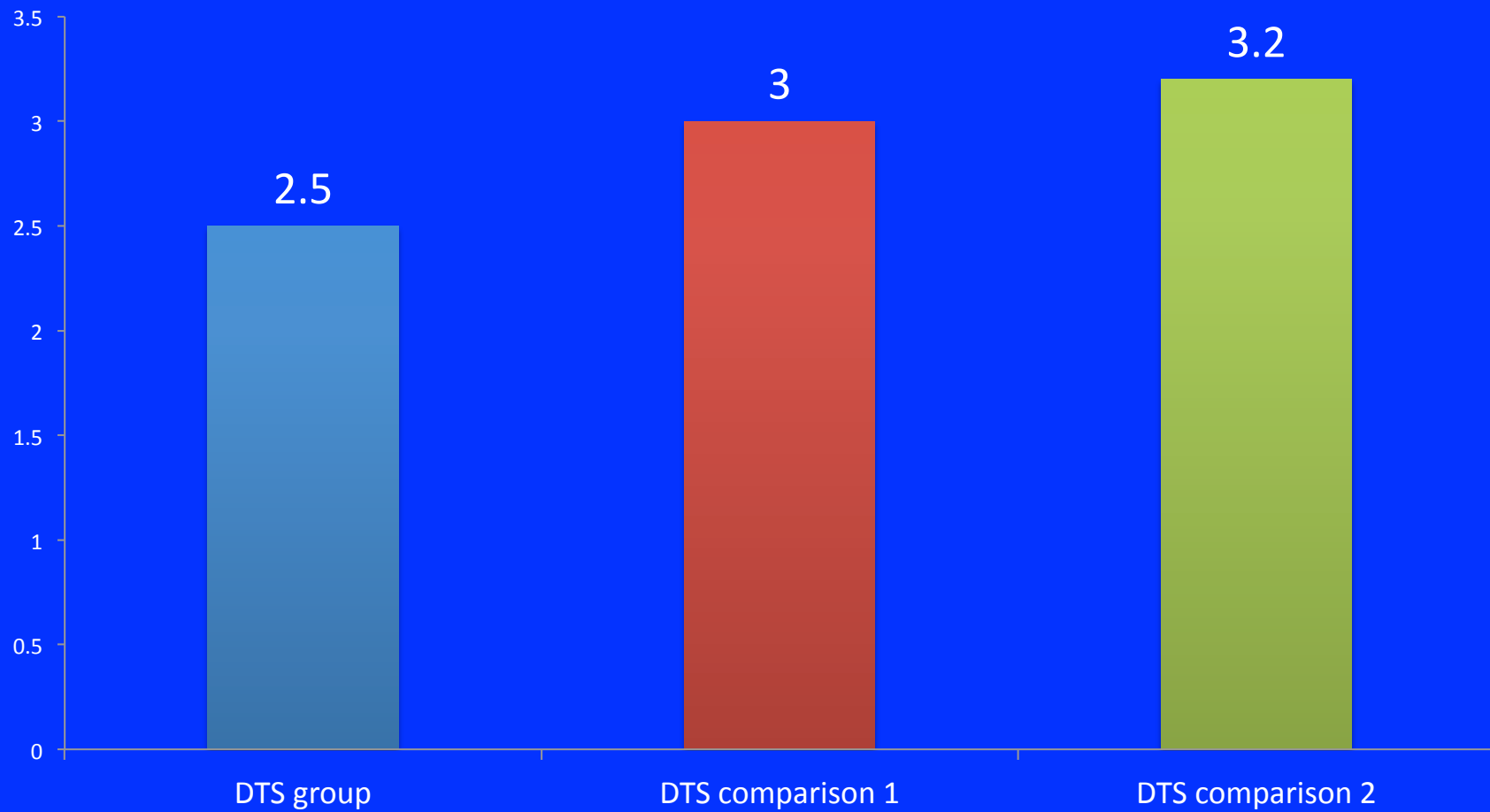
# Baseline: Experiential Avoidance



# Baseline: Anxiety Sensitivity



# Baseline: Distress Tolerance



## Baseline: GAD and Depression Screener

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- 83% screen positive for depression (PHQ-2)
- 79% positive for anxiety (PHQ-2)

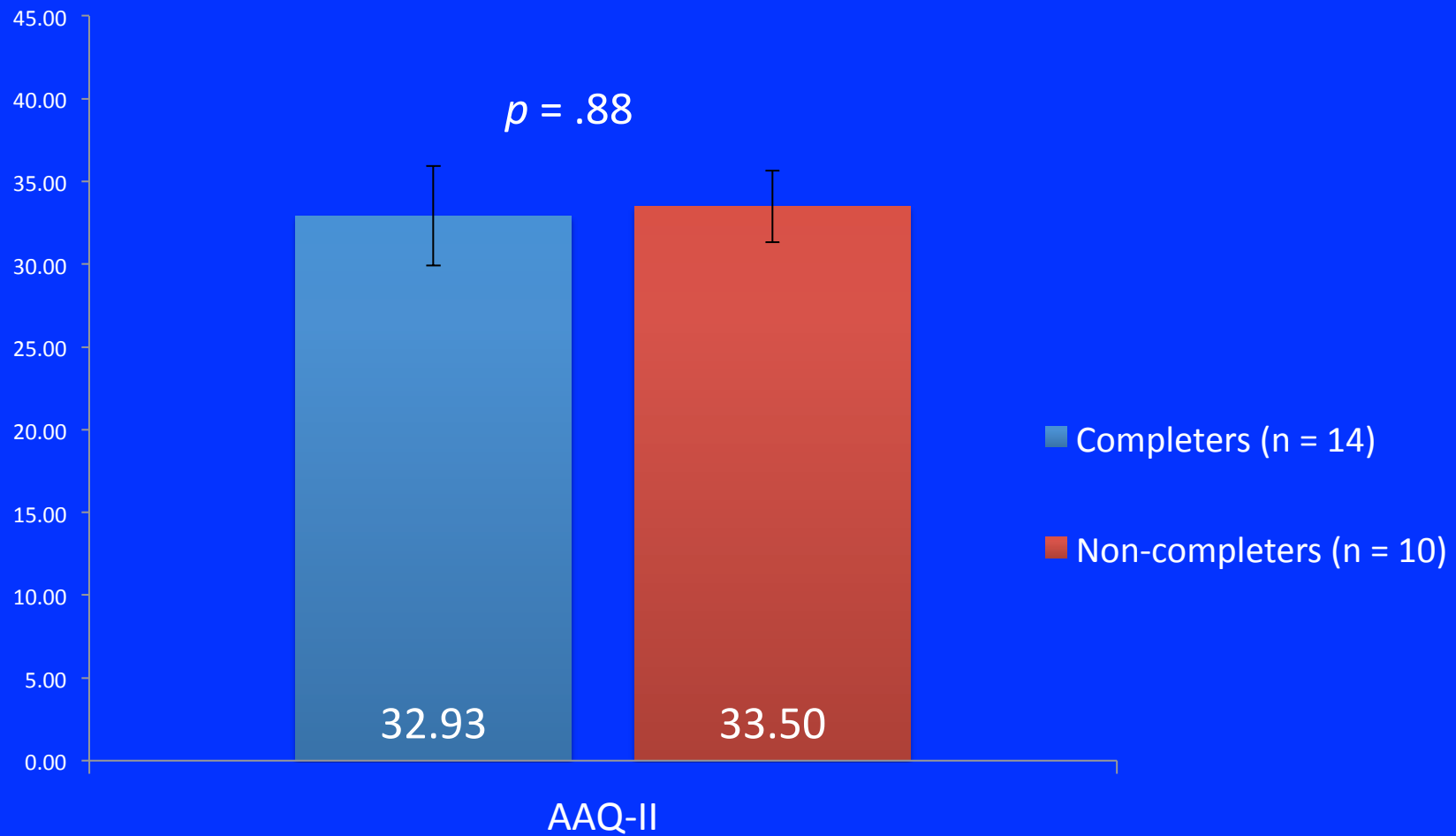
## Results: Completers v. Non-Completers

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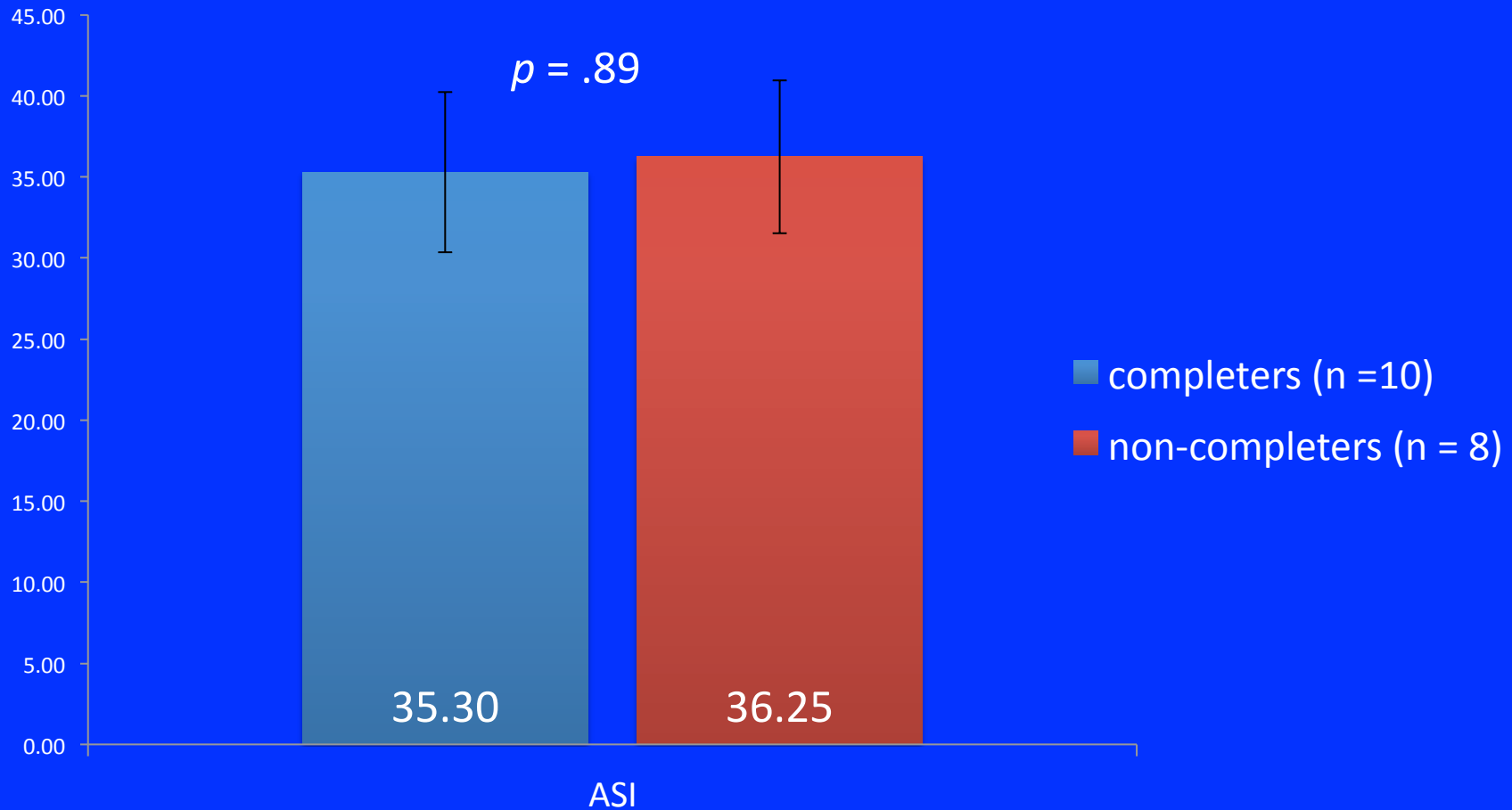
- Treatment completers missing no more than 3 sessions ( $\approx$  70% group session attendance)
- Avg 61% of total group sessions; 58% missed no more than 3 sessions (roughly 30%)
- No difference on demographic and descriptive variables



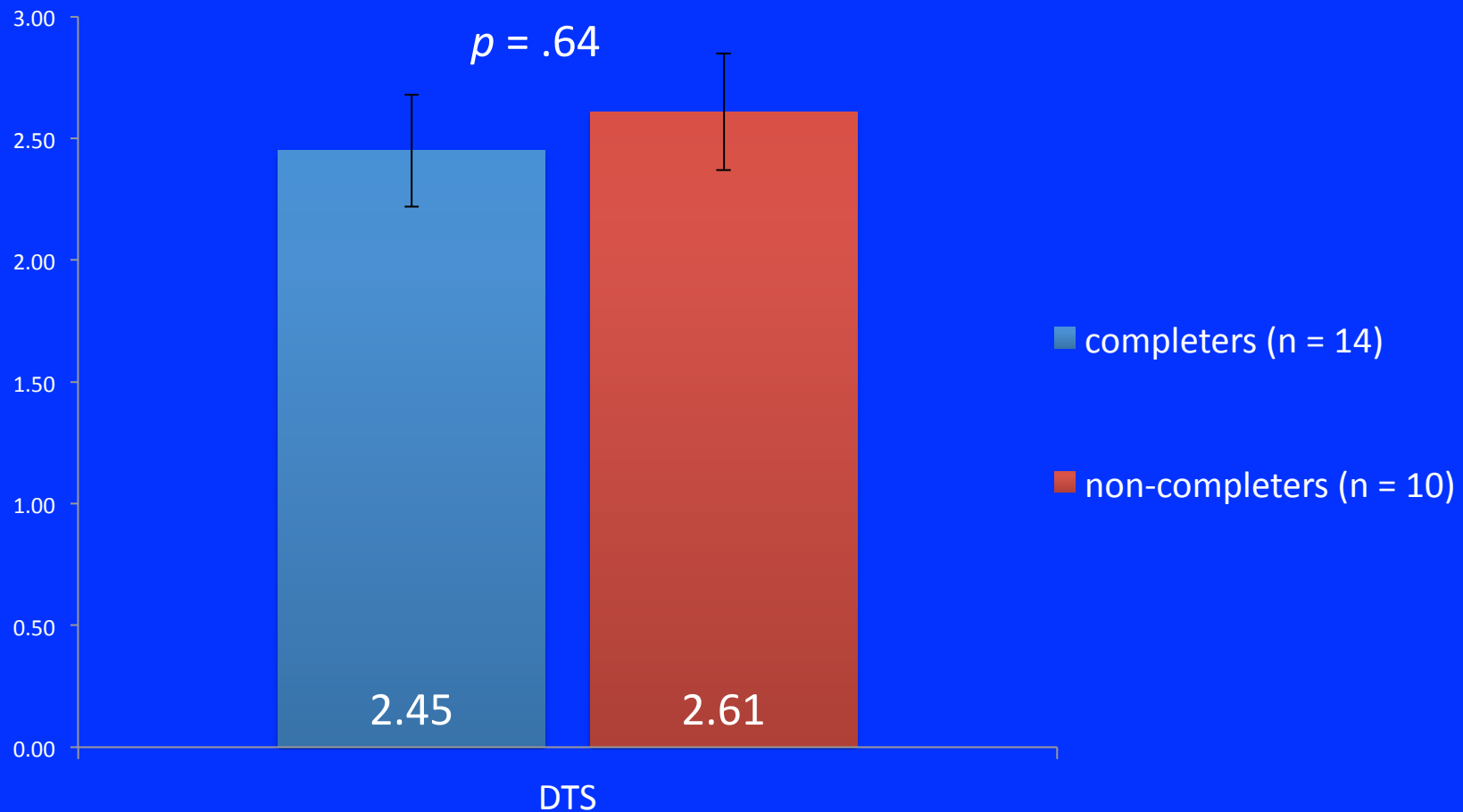
# Contrast of Completers and Non-Completers: AAQ-II



# Contrast of Completers and Non-Completers: ASI



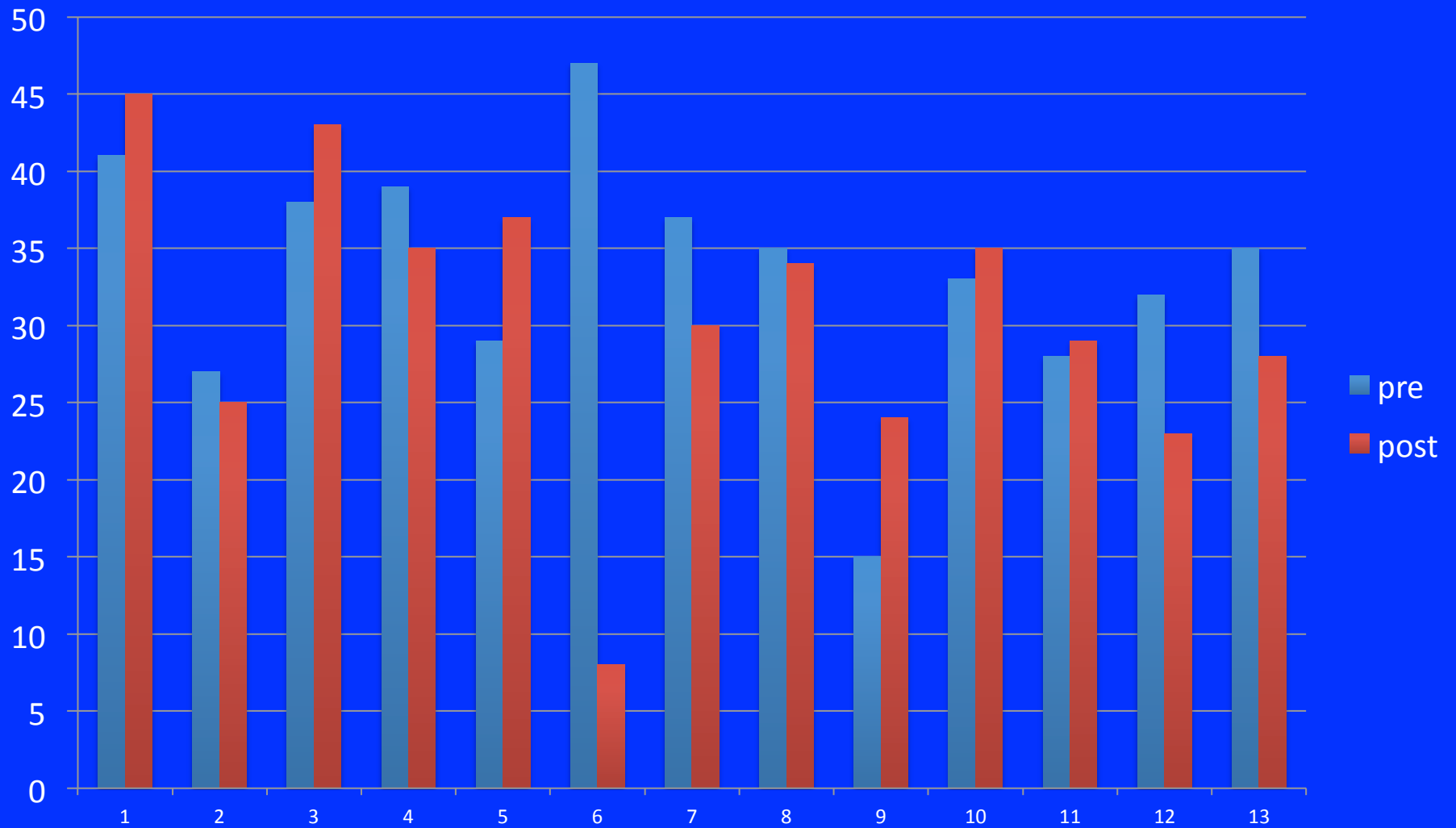
# Contrast of Completers and Non-Completers: DTS



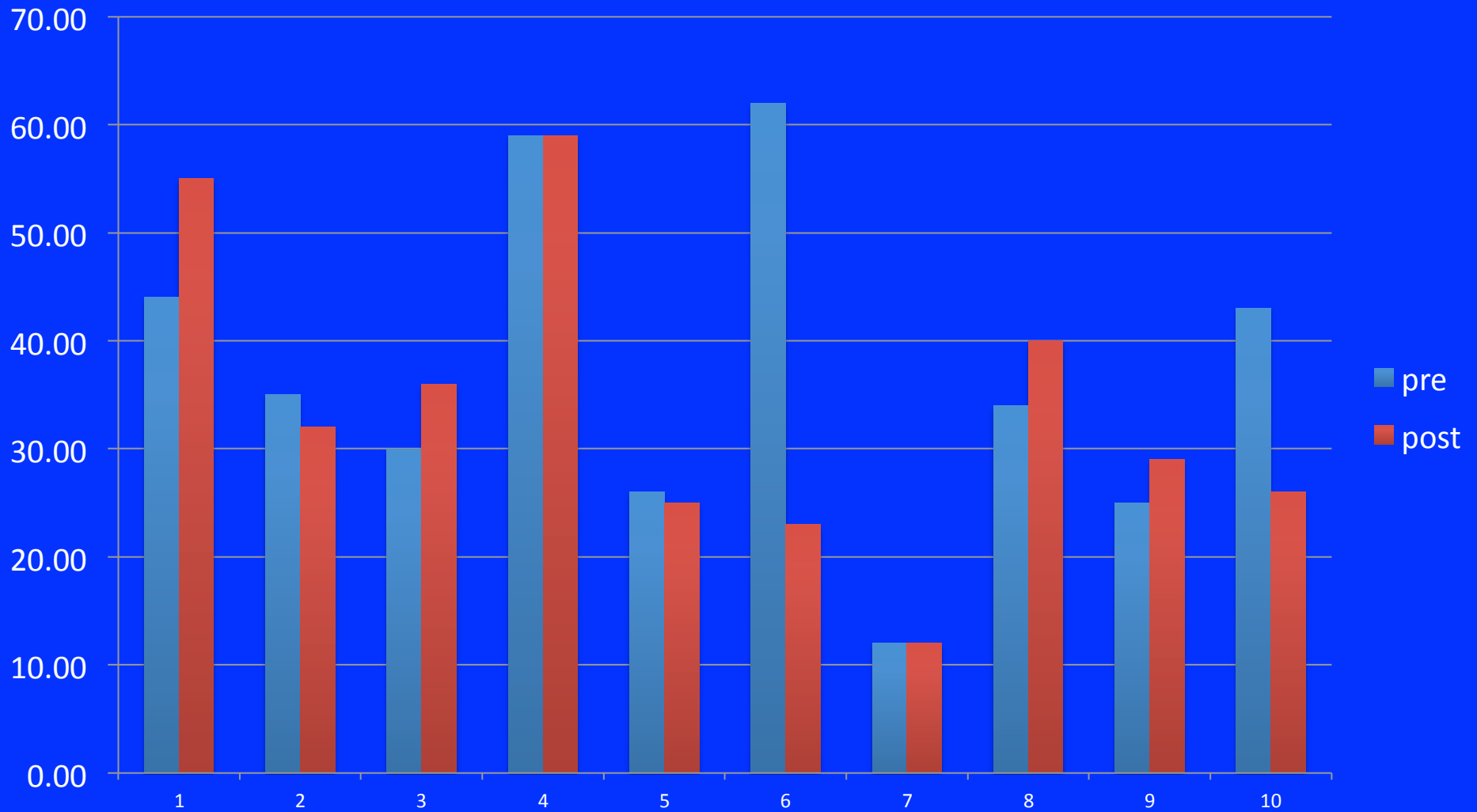
# Contrast of Pre-Treatment and Post-Treatment ( $n = 13$ )

	Pre-treatment		Post-treatment			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i> value	Effect Size
<b>AAQ-II</b>	33.54	7.87	30.46	9.60	.38	.35
<b>ASI</b>	37.00	15.44	33.7	14.47	.49	.22
<b>DTS</b>	2.42	0.84	3.02	1.12	<b>.03</b>	<b>.60</b>

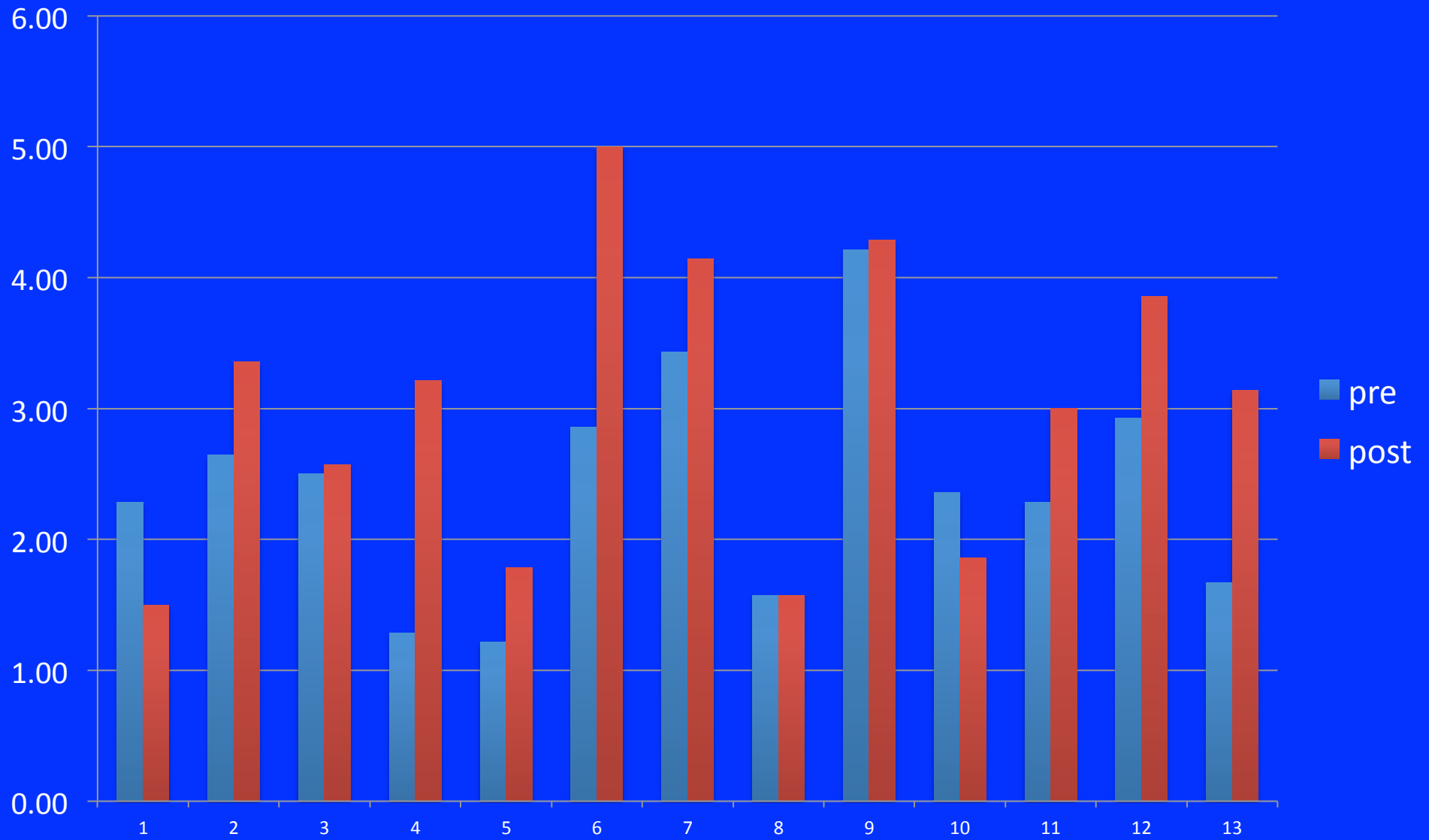
# Experiential Avoidance



# Anxiety Sensitivity Index



# Distress Tolerance



# Depression/GAD screen results

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- Screening positive for depression remained the same pre (69%) to post-treatment (69%).
- Likewise, screen positive for anxiety remained same pre (77%) to post-treatment (77%).
- For GAD and depression screen:
  - 3 patients no longer positive screen from pre-post
  - 3 patients who did not screen positive at pre screened positive at post
  - 7 patients remained the same from pre-post



# Discussion

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- Preliminary support for an ACT group intervention adapted for individuals with chronic medical and psychiatric conditions.
- Improvements were observed on all measures; however, ACT only significantly improved perceived tolerance of distress
  - Values based actions require ability to tolerate distress/uncertainty
  - Tolerance of affective distress in context of medical conditions may promote behavior consistent with health-related values (e.g., adherence to medical and behavioral treatment recommendations).
- Incubation period for capturing improvements exists; improvements may not be realized until > 6 months post-treatment (Gifford et al., 2004; Hayes et al., 2004).

# Limitations

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- Small sample size; underpowered
- Relatively high attrition
- No follow-up
  - Incubation period for capturing improvements

# Future Directions

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- Include longer follow-up periods to determine whether desired outcomes are maintained over time
- Explore medical record data to obtain objective proxy measures of change in management of medical conditions.
- Temporal hypothesis of distress tolerance changing first then larger construct of experiential avoidance
- Need values measure... and perhaps behavioral measures

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