



Age Differences in Treatment Response to a Collaborative Care Intervention for Anxiety Disorders in Primary Care

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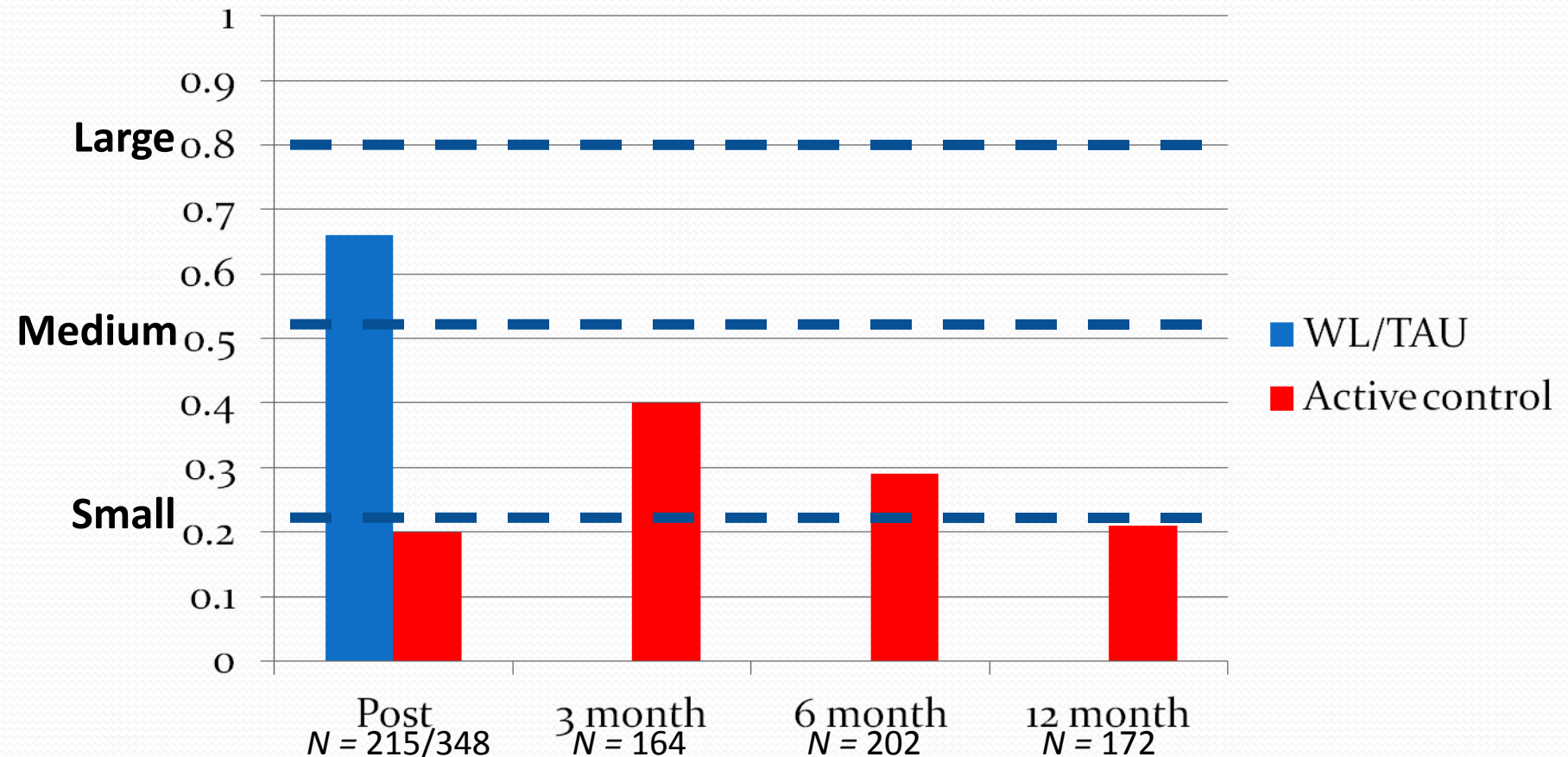
Disclosures

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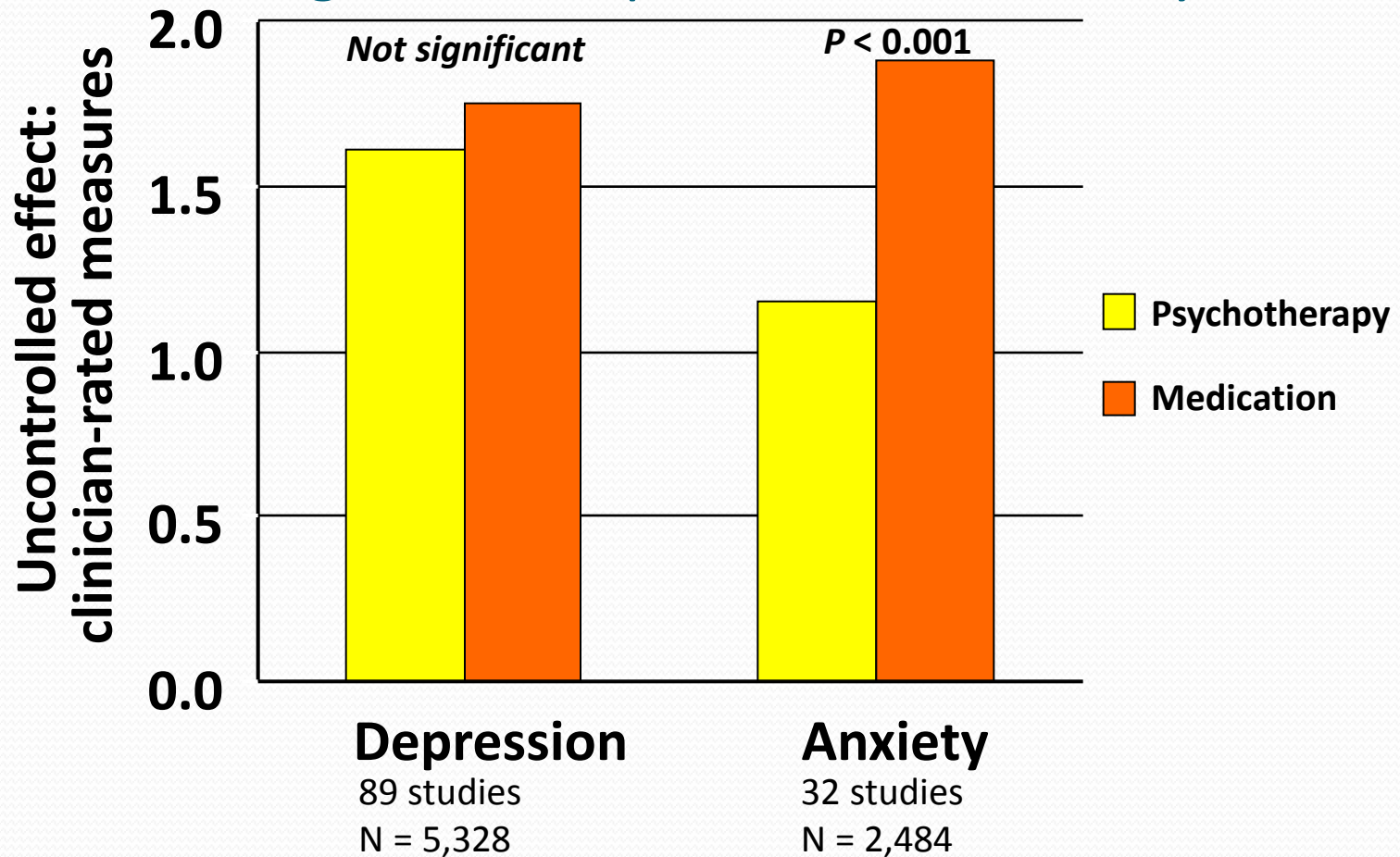
Overview

- Anxiety disorders are the most common mental health problem in older adults
- Lead to poorer health and cognitive decline
- Present in primary care; typically unrecognized and untreated
- If treated, usually benzodiazepines
- Benzodiazepines cause falls and cognitive decline in older people
- CBT is considered very effective for anxiety in younger and middle-aged adults
- Meta-analyses suggest that CBT doesn't work as well in older individuals
- Most research on Generalized Anxiety Disorder

Effect sizes from meta-analysis of CBT for anxiety in older adults



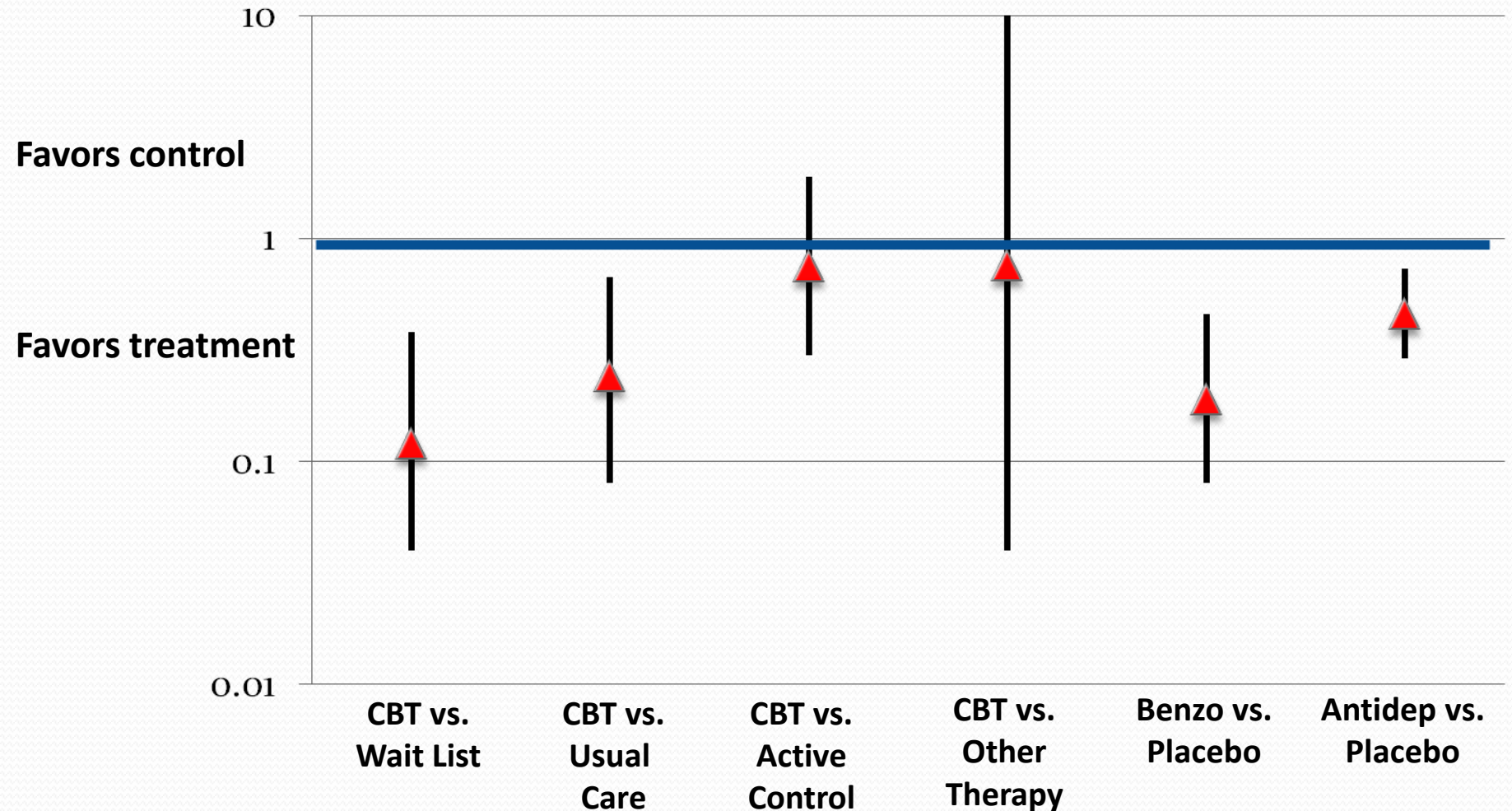
Meta-analyses comparing psychotherapy and medication for geriatric depression and anxiety



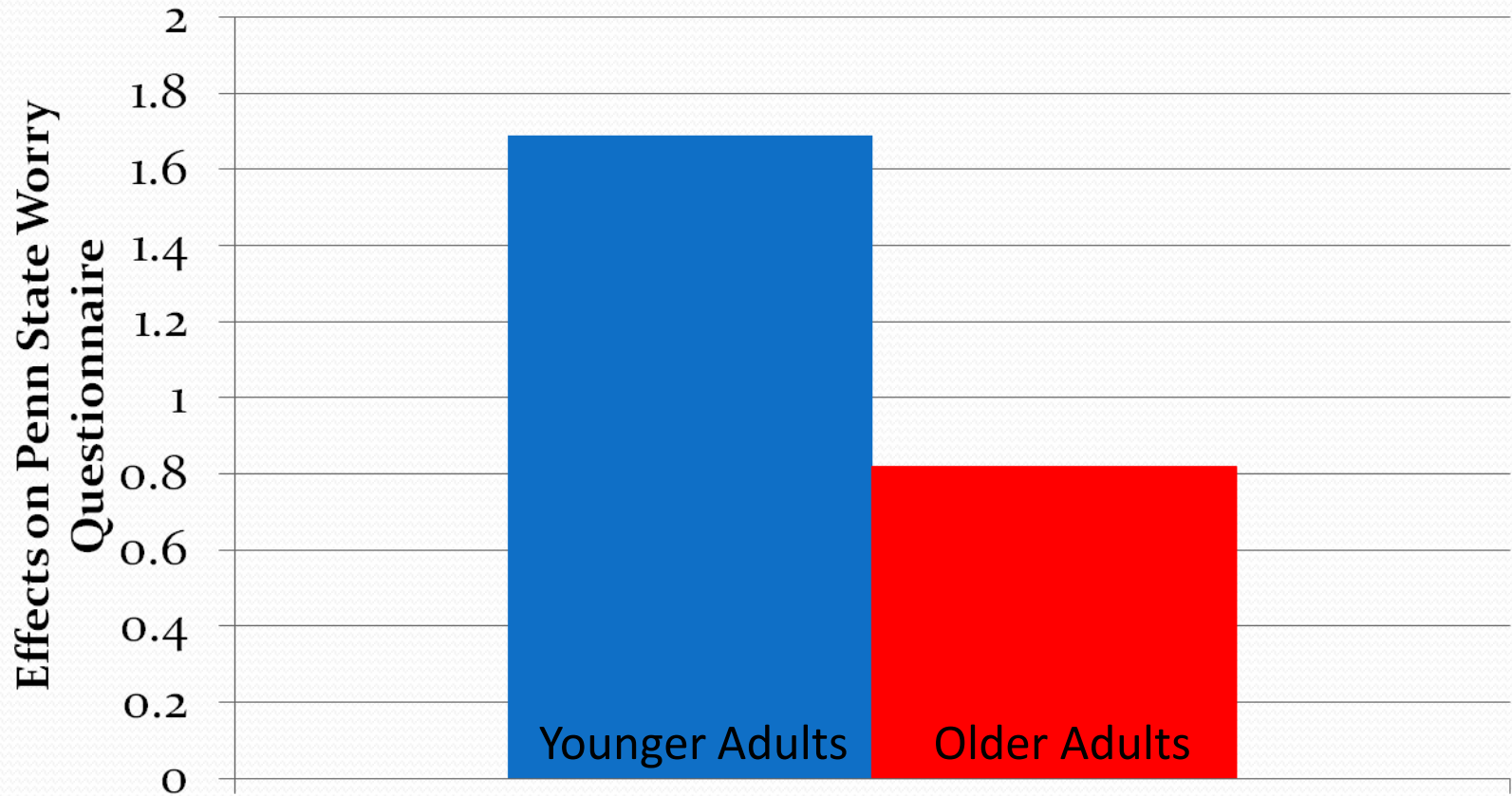
Pinquart M et al. *Am J Psychiatry* 2006;163:1493-1501

Pinquart M, Duberstein JF. *Am J Geriatr Psychiatry* 2007;15:639-51

Response to treatment for late-life GAD



Effect sizes for CBT for GAD in younger and older adults



Controlling Anxiety with Learning and Management (CALM) Study

- Effectiveness trial in primary care
- Collaborative care intervention vs. treatment as usual
- Algorithm-driven treatment with medications and computer-assisted CBT
- Administered by care manager
- 4 anxiety disorders: generalized anxiety disorder, panic disorder, social anxiety disorder, posttraumatic stress disorder
- 18 month duration
- Age 18-75
- First study to allow for age comparisons within a single trial

The present study

- Compared response to the CALM intervention for younger (age 18-59) and older (age 60-75) adults
- Examined anxiety symptoms (BSI Anxiety) and depressive symptoms (PHQ) in the full sample
- Examined generalized anxiety disorder symptoms among the subsample with GAD
- Used linear mixed models to examine treatment by time interaction within each age group
- Examined intervention/treatment as usual differences at each time point
- Controlled for appropriate medication use

Demographics

	Age 18-59 (n = 870)	Age 60-75 (n = 134)
Female	71%	71%
Latino	20%	16%
> 12 years of education*	79%	70%
Employed*	76%	40%
Number of chronic medical conditions*	2.1 (1.9)	3.7 (2.2)
Number of primary care visits	4.3 (4.2)	5.0 (5.8)
Number of medical specialist visits*	1.0 (2.4)	1.7 (2.8)

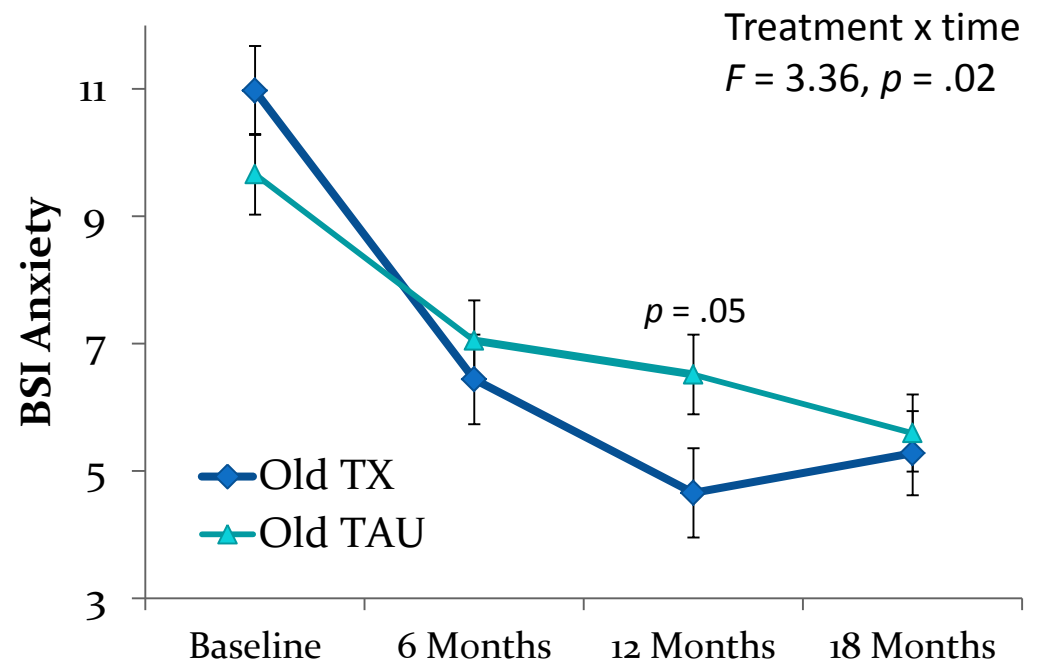
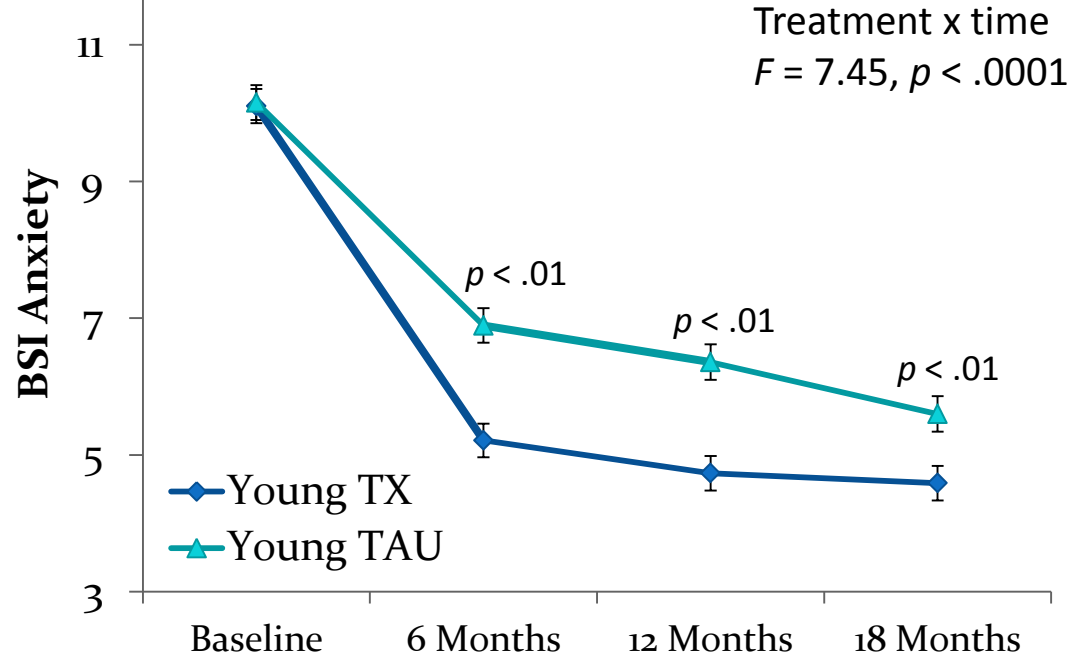
* $p < .05$

Baseline clinical variables

	Age 18-59 (<i>n</i> = 870)	Age 60-74 (<i>n</i> = 134)
Brief Symptom Inventory (BSI) Anxiety T-score	65.2 (8.6)	65.7 (8.4)
Patient Health Questionnaire-9 (PHQ)	12.7 (6.3)	13.4 (6.5)
SF-12 Physical*	50.0 (11.2)	43.8 (11.6)
SF-12 Mental	31.7 (10.1)	32.9 (9.8)
Generalized Anxiety Disorder Symptom Scale (GADS)	13.9 (3.9) <i>n</i> = 655 with GAD	13.9 (3.7) <i>n</i> = 100 with GAD

**p* < .001

- **BSI Anxiety**
- Treatment by time interactions significant in both age groups
- Among younger adults, the CALM intervention was superior to treatment as usual on overall anxiety symptoms at all time points, after controlling for appropriate medication use
- Among older adults, the CALM intervention was superior to treatment as usual on overall anxiety symptoms at 12 months but did not differ at 6 or 18 months

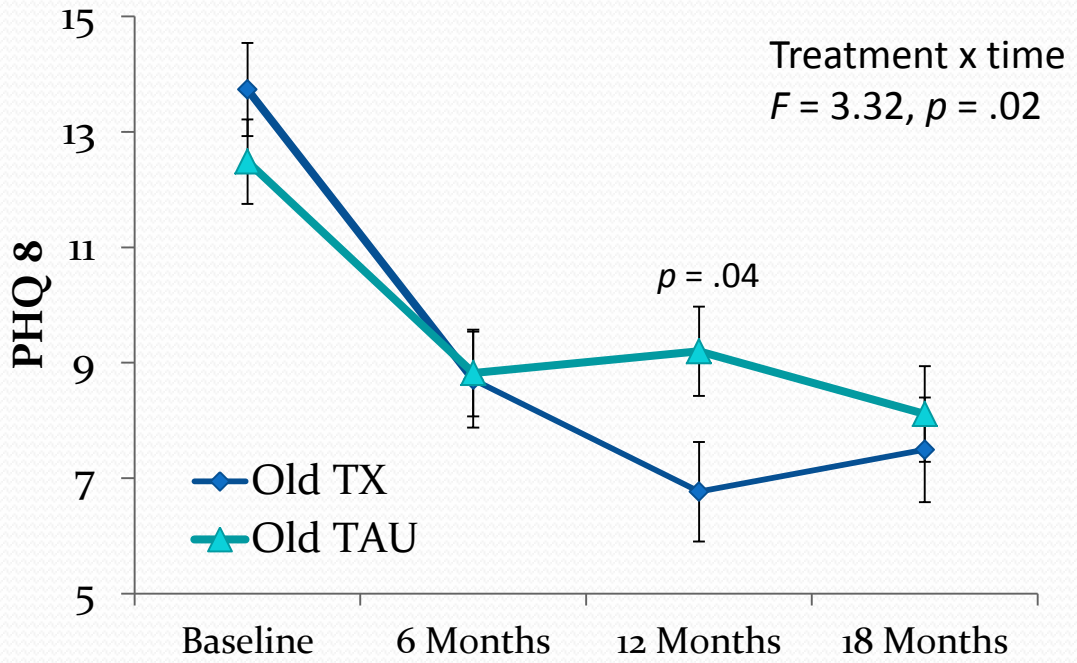
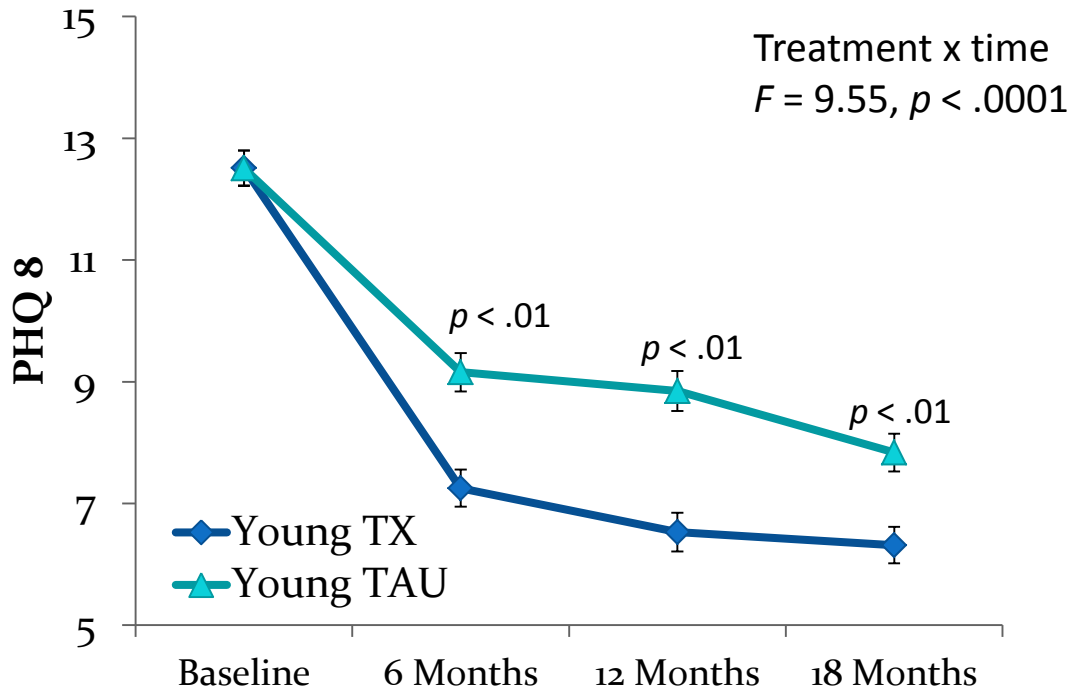


- **PHQ Depression**

- Treatment by time interactions significant in both age groups

- Among younger adults, the CALM intervention was superior to treatment as usual on depressive symptoms at all time points, after controlling for appropriate medication use

- Among older adults, the CALM intervention was superior to treatment as usual on depressive symptoms at 12 months but did not differ at 6 or 18 months

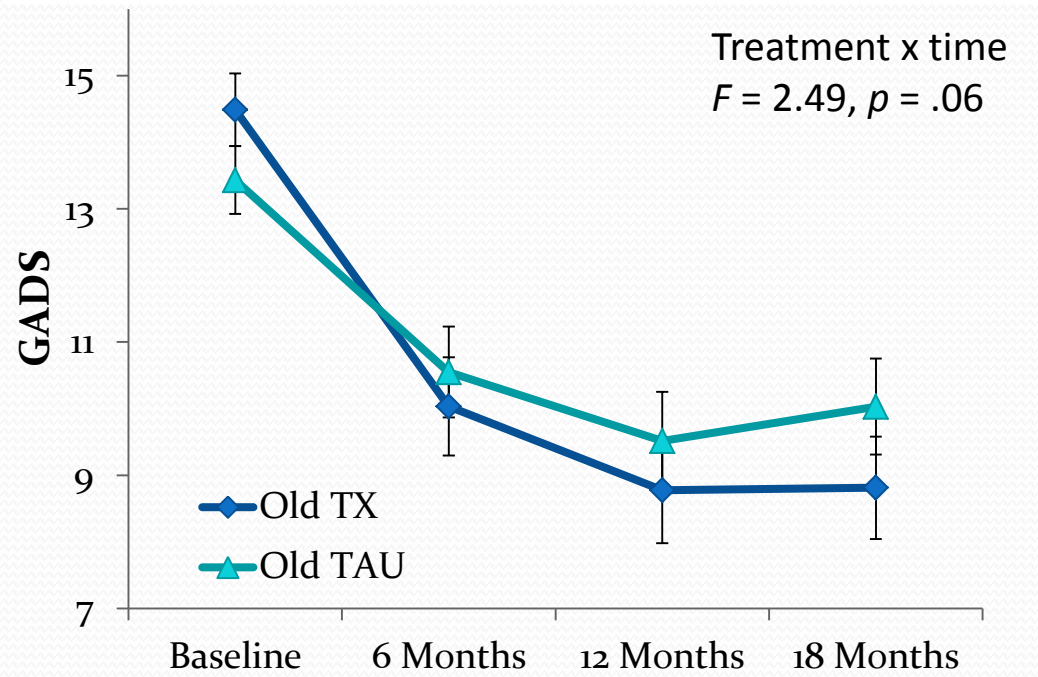
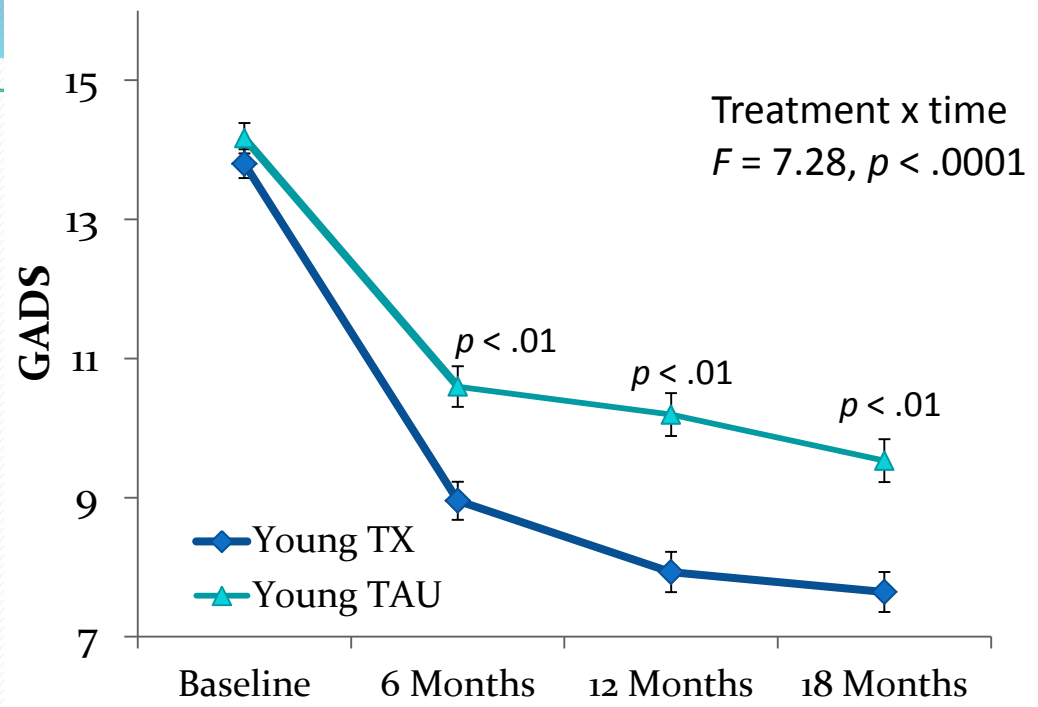


- **GAD Symptoms**

- Treatment by time interactions significant in younger but not older

- Among the younger adults with generalized anxiety disorder, the CALM intervention was superior to treatment as usual on GAD symptoms at all time points after controlling for appropriate medication use.

- Among the older adults, the CALM intervention was not superior to treatment as usual on GAD symptoms at any time point.



Limitations and conclusions

- Insufficient power to examine three-way interactions (age by treatment by time)
- Relatively small number of older adults
- Unable to analyze medications and CBT separately
- No active control condition
- CALM intervention appears to work less well for older adults, particularly for individuals with GAD
- Older adults may benefit from booster sessions at 18 months

Questions?

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