

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
<p>The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Service Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p>PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ORGANIZATION.</p>					
1. REPORT DATE (DD-MM-YYYY) 26/09/2018		2. REPORT TYPE presentation		3. DATES COVERED (From - To) 09/26-29/2018	
4. TITLE AND SUBTITLE Do Mindfulness Exercises Reduce Anxiety During Urodynamic Testing? A Randomized Controlled Trial				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
				5d. PROJECT NUMBER	
6. AUTHOR(S) Uberoi, Pansy Maj				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 59th Clinical Research Division 1100 Willford Hall Loop, Bldg 4430 JBSA-Lackland, TX 78236-9908 210-292-7141				8. PERFORMING ORGANIZATION REPORT NUMBER 17952	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) 59th Clinical Research Division 1100 Willford Hall Loop, Bldg 4430 JBSA-Lackland, TX 78236-9908 210-292-7141				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.					
13. SUPPLEMENTARY NOTES AUA South Central Section, Nashville, TN, September 26-29, 2018					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			Clarice Longoria
					19b. TELEPHONE NUMBER (Include area code) 210-292-7141



Incorporation of Mindfulness Exercises to Reduce Anxiety and Pain During Urodynamic Testing: A Randomized Controlled Pilot Study

Maj Pansy Uberoi, MD, MPH; LtCol Forrest Jellison, MD; Anna Smitherman, PhD; James Aden, PhD; Maj

Grace Park, MD

Presented by Maj Uberoi

San Antonio Military Medical Center, San Antonio, TX



Disclaimer



- The views expressed herein are those of the authors and do not reflect the official policy or position of the San Antonio Military Medical Center, the U.S. Army Medical Department, the U.S. Army Office of the Surgeon General, the Department of the Air Force or Army, the Department of Defense or the U.S. Government.
- The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DODI 3216.02_AFI 40-402
- Source of funding: none





Mindfulness

-
- Mindfulness based stress reduction
 - Incorporates meditation and yoga based exercises
 - Aims to improve awareness of experiences and mental content
 - Classified as complementary alternative medicine
 - Mindfulness has been studied acute and chronic conditions (ie IBS, LBP, fibromyalgia and IC/BPS)
 - UDS is associated with emotional and physical discomfort

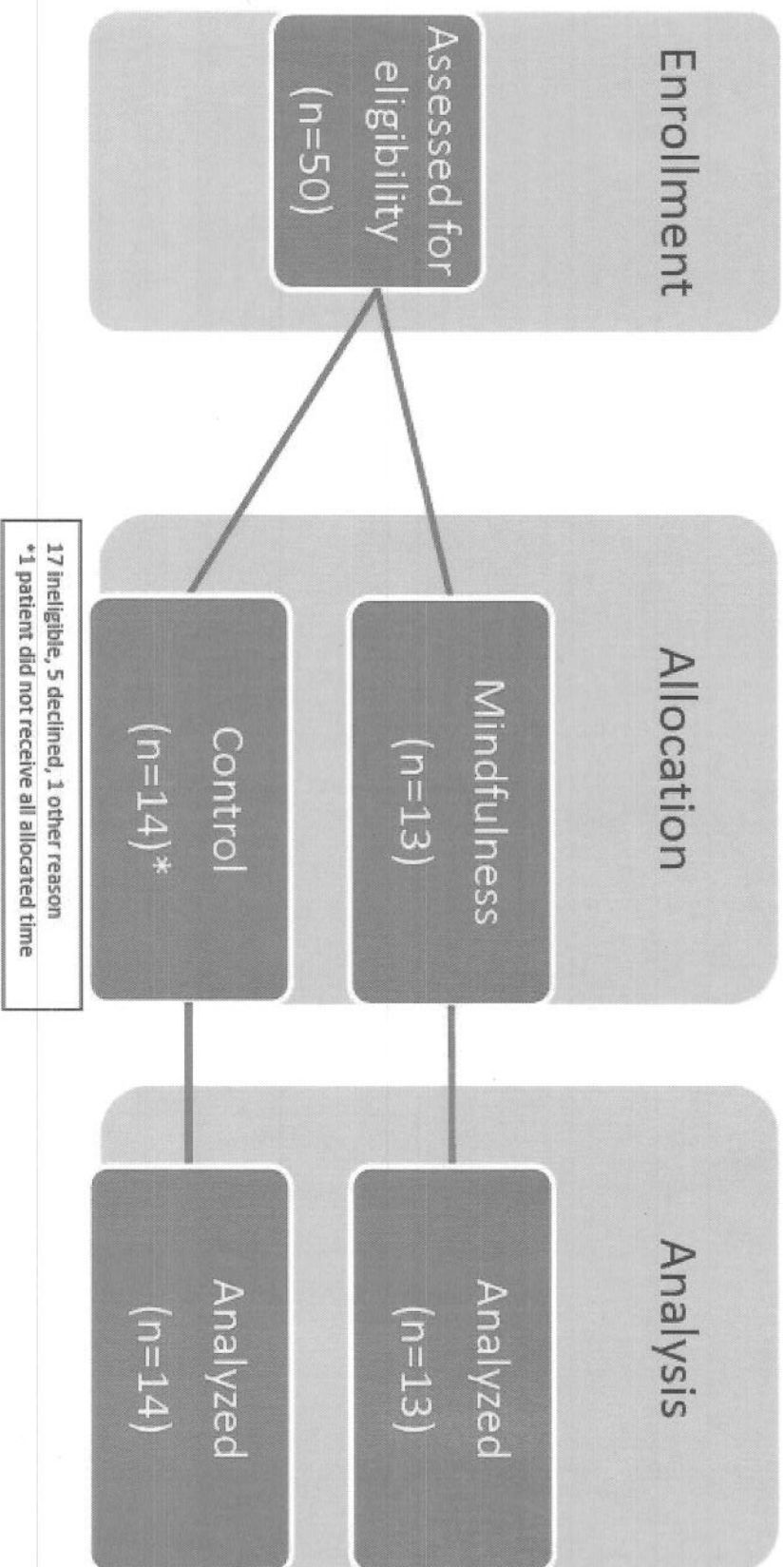


Objectives

- Investigate impact of mindfulness prior to urodynamic studies
- Primary endpoint
 - Anxiety
- Secondary endpoints
 - Pain
 - Fear
 - Embarrassment

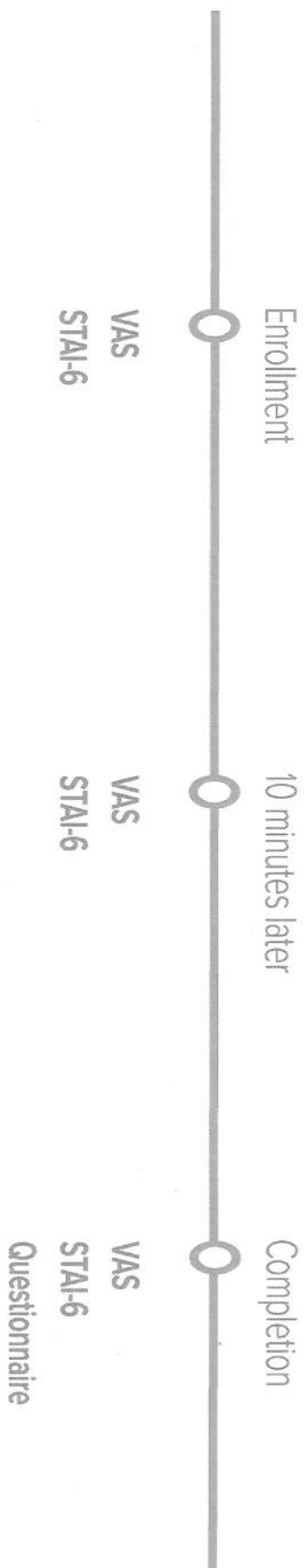


Methods





Data Collection



Control	Empty Room	UDS
Study	Mindfulness	UDS



Demographics



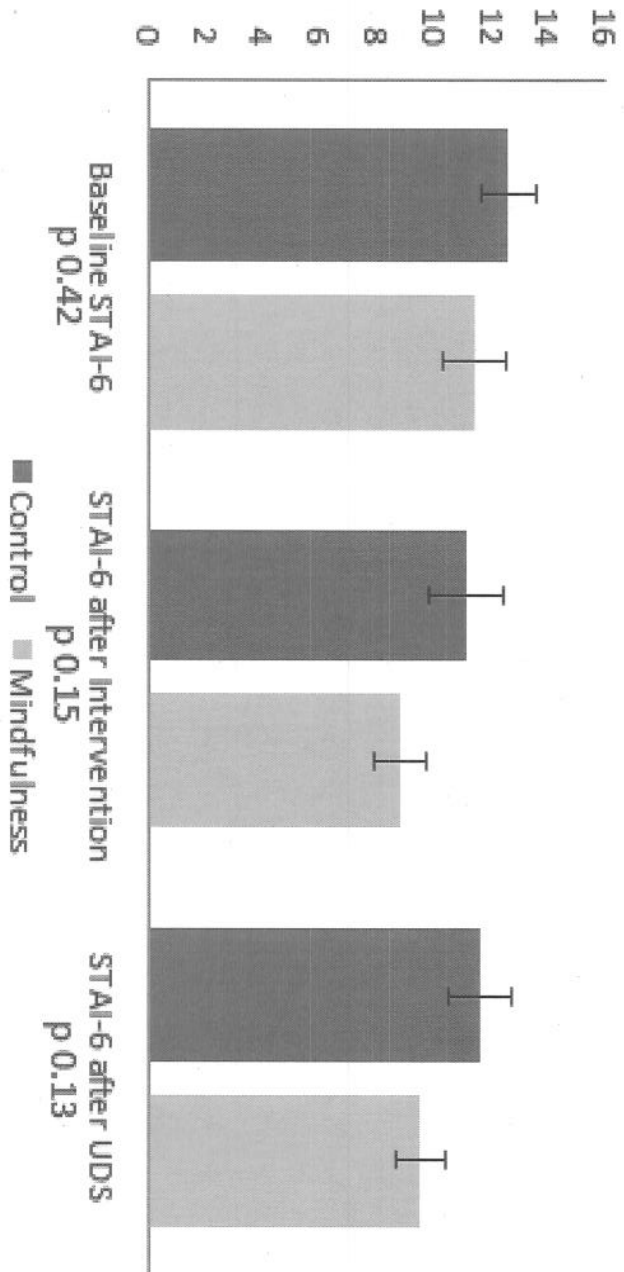
	Control (n=14)	Mindfulness (n=13)	p-value
Age	57	59	0.94
No prior UDS	64%	54%	0.73
Race			0.64
White	50%	34%	
Black	25%	50%	
Asian	0%	0%	
Hispanic	25%	16%	
Education			0.21
Less than HS	0%	0%	
HS Diploma	25%	0%	
Some College	17%	16%	
College Degree	50%	50%	
Graduate School	8%	34%	
Health			0.37
Excellent	0%	7%	
Very Good	8%	38%	
Good	59%	54%	
Fair	33%	0%	
Poor	0%	0%	
Incontinence			0.88
Stress	38%	28%	
Retention/Obstruction	7%	50%	
Urgency	12%	34%	
Mixed	28%	14%	



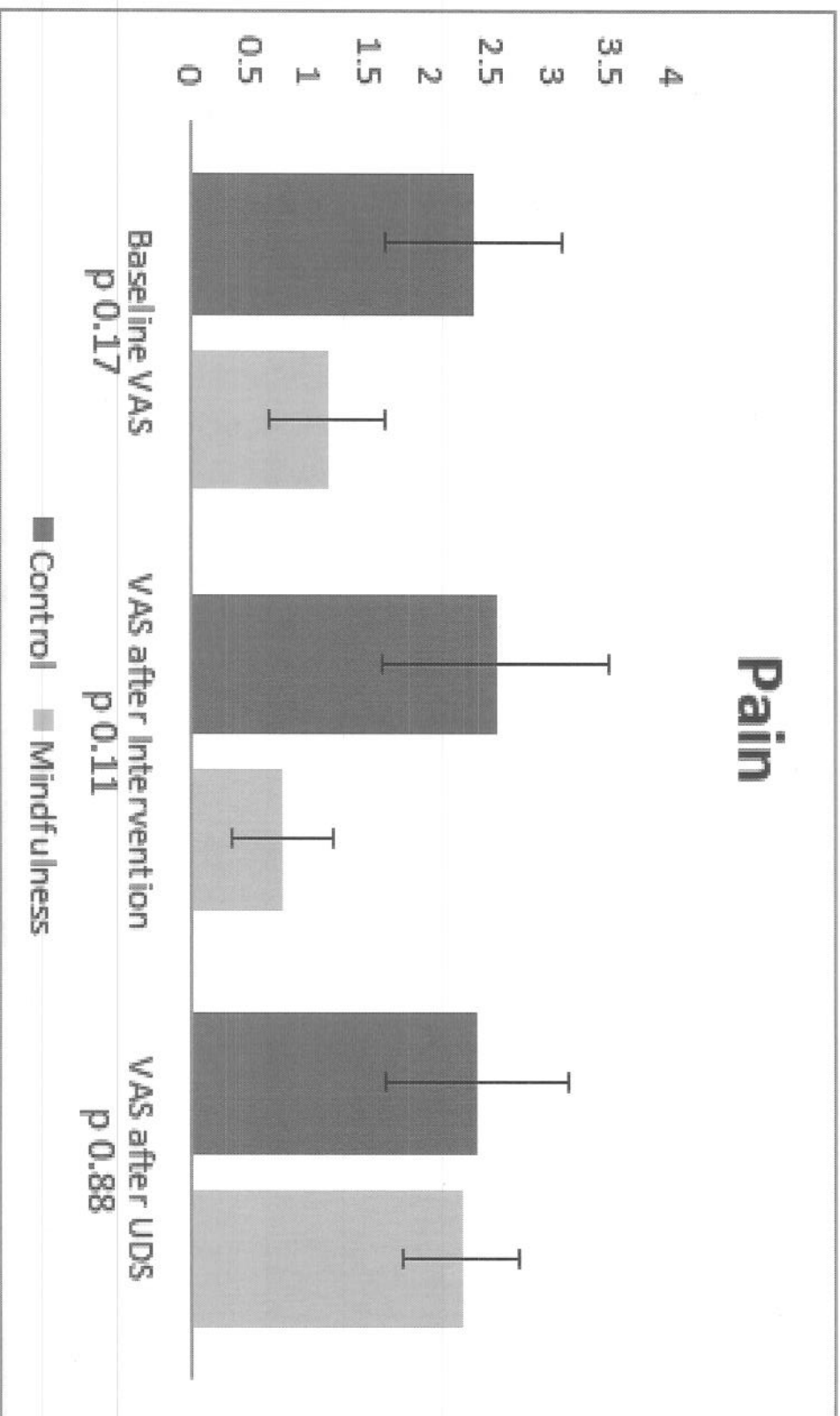
STAI-6



Anxiety

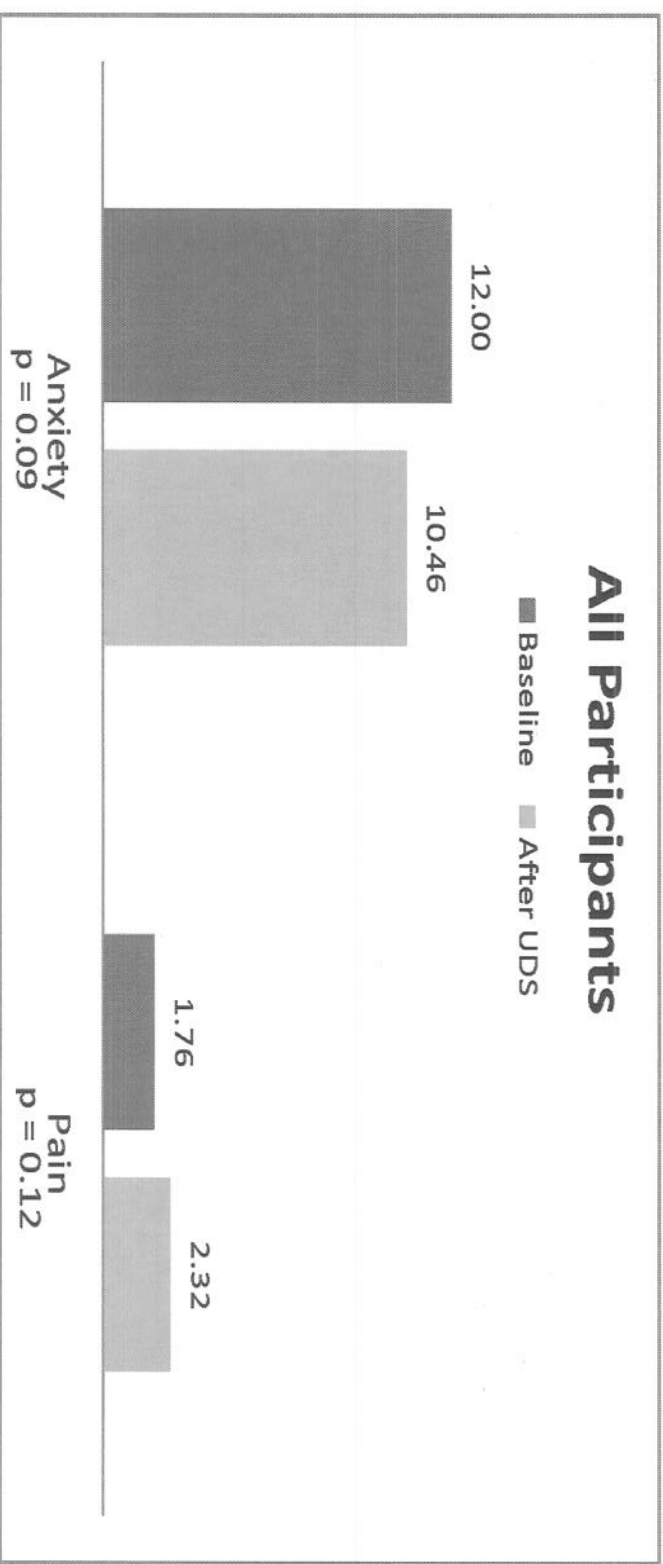


VAS





Pain and Anxiety





Secondary Endpoints

Emotion	Control	Mindfulness	p-value
Anxious	1.31	1	0.45
Afraid	0.84	0.77	0.051
Embarrassed	1.23	0.54	0.07
Uncomfortable	1.23	1.25	0.79
Pain	1.38	0.92	0.55

Expectation	Control	Mindfulness
Same	36%	38%
Better	57%	55%
Worse	7%	7%
p-value	0.31	



Discussion



Strengths

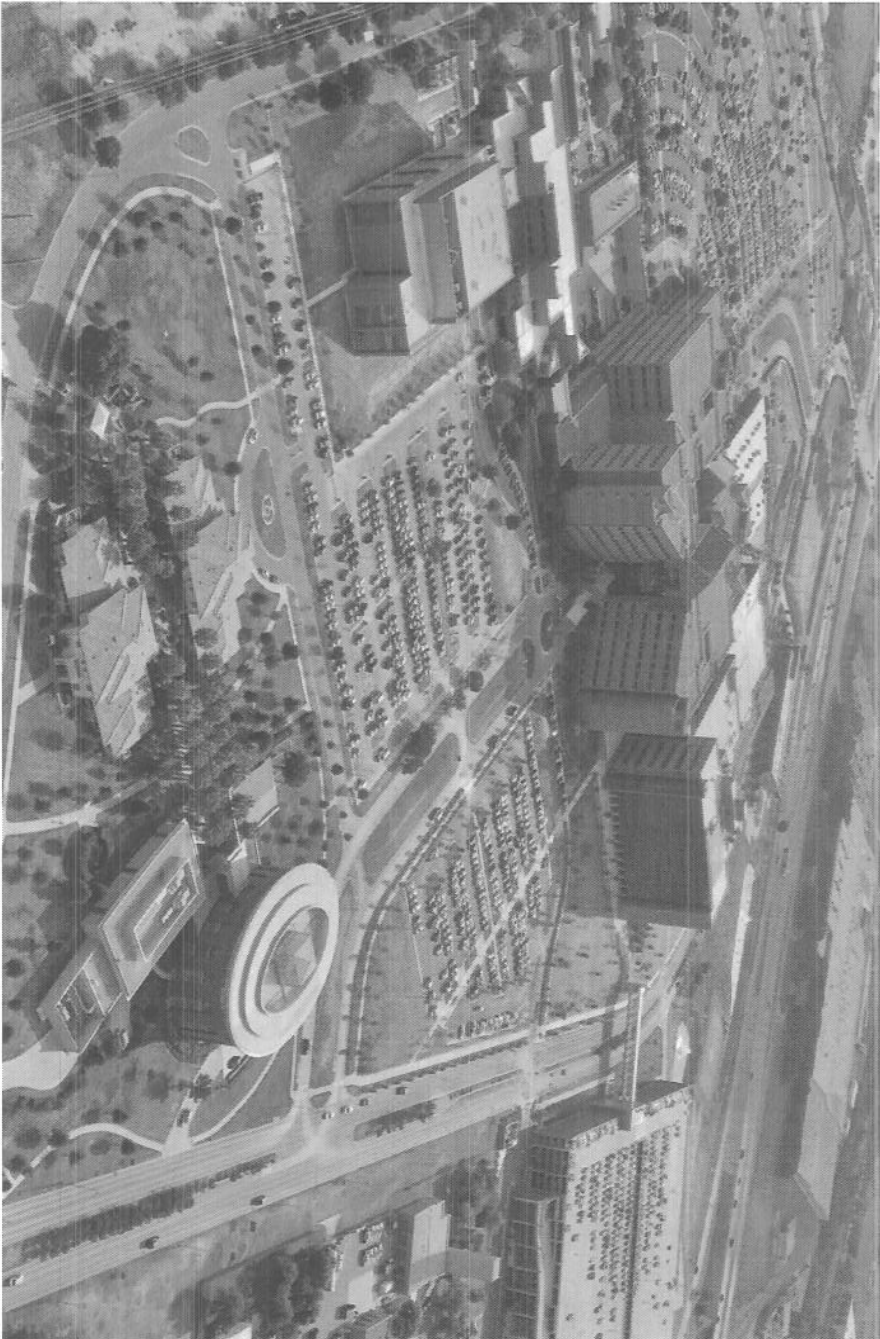
- Single institution
- Single UDS operator
- UDS operator blinded
- Single psychologist

Limitations

- Confounding effect
- Pilot study



Thank You



Script

- Get comfortable and begin by breathing deeply. Inhale and exhale, allowing your breath to find its own rhythm. Listen to my voice in the background, but don't concern yourself with how well you are paying attention to me. Trust your mind to follow the instructions as it needs to.
- To begin meditation, sit with a straight back and head balanced comfortably. Rest your hands in your lap and gently close your eyes. Take a few deep, cleansing breaths. Begin to turn your attention inward. Use the breath to let go of any tension. (Pause for 20 seconds)
- Become aware of the natural rhythm of your breath as it rises and falls. Some breaths may be long, some may be short. Your breathing may be smooth or irregular at times. Notice your breath without judgement, without comment, without trying to change it. Just let it be...as it is. Follow the breath as it enters your nose, travels down the back of your throat, and fills your lungs. Continue to follow it as it leaves your lungs, and travels back out of your body. Notice how it feels at various stages of its journey. As you are mindful of each breath, be open to the moment and accepting of whatever it brings. (Pause for 20 seconds)
- As you continue to be aware of your breath, move your focus to any sensations what may be present in your body. Notice how you are sitting, how it feels where your body and the chair meet. Notice places where you may be holding more tension, or places where you are more relaxed. Notice the feeling of the fabric on your skin, or your feet against the floor. You may become aware of places in your body you have never noticed or paid attention to before. Let go and feel your body become heavier, more relaxed. Be mindful of any shifts in the body without judgement. (Pause for 20 seconds)
-

Script (cont)

- Now focus your awareness on the thoughts in your mind. All kinds of thoughts are continuously arising – worries, fears, hopes, fantasies. This is the mind's natural state. It is doing what it is meant to do. Just watch each thought come and go. Be mindful of the process, simply noticing how thoughts are constantly surfacing, moving and fading away. At some point you may notice that your awareness has drifted with the stream of thoughts. Just notice your mind has wandered, without judgment, and gently return your attention to the breath. (Pause for 20 seconds)
- For the next few minutes, keep your breath in the foreground of your awareness while letting any sensations in your body, any thoughts, and anything else you may experience continue in the background. Let the breath ground you in the present moment. (Pause for 2 minutes)
- As you come to the end of this meditation, appreciate that you have given this quiet time to yourself. You can practice mindfulness of breath, of sensations, of thoughts, and so on, at any time, at any place. The benefits of this practice can expand and move with you throughout your day. It will help your focus your mind and bring balance to your activities and experiences. Now, at your own pace, bring your awareness back to the room. When you are ready, blink open your eyes, feeling refreshed and calm.
-

SELF-EVALUATION QUESTIONNAIRE

Please provide the following information:

Name: _____ Date: _____

DIRECTIONS:		A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings at best.			
	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO	
1. I feel calm.	1	2	3	4	
2. I am tense.	1	2	3	4	
3. I feel upset.	1	2	3	4	
4. I am relaxed.	1	2	3	4	
5. I feel content.	1	2	3	4	
6. I am worried.	1	2	3	4	

You have recently undergone a urodynamic test of your bladder. We are interested in learning more about your thoughts on the actual experience. There are no right or wrong experiences and there are no right or wrong answers to these questions. We are interested in improving the experiences of all patients having these tests in the future. Your honest responses will help us do just that.

1. How many times have you had this test (urodynamics):					
a. Never, this is my first time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. 1 time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. 2 times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. 3 or more times	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I have had a catheter, or urine tube, in my bladder before (at any time in my life):					
a. Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I have had a cystoscopy in the office before (where the doctor looked inside my bladder with a scope while I was awake):					
a. Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I feel that this test (urodynamics) was adequately explained to me:					
a. Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I understand why I had this test (urodynamics).					
a. Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. During the test, a catheter (urine tube) was placed in my rectum/bottom:					
a. Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Please rate how strongly you felt each of the following during the test:					
	Not at all	A little	Some	A moderate amount	A lot
a. Anxious	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Afraid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Embarrassed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Uncomfortable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Pain/discomfort from the catheter (tube) in my bladder, either during placement of the tube or during the study	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Pain/discomfort from the catheter (tube) in my rectum/bottom, either during placement of the tube or during the study (leave blank if you	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

did not have this tube during your study)

- | | | | | | |
|----------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| h. Worried about the use of X-ray | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i. Worried about getting a urinary tract infection (UTI) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j. Worried about the results of the urodynamics study | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k. Nauseated (like I was going to throw up) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l. Light-headed/dizzy | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m. Hot/sweaty | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

8. The worst part of the study in terms of physical discomfort was (please choose only one answer):

- Placement of the catheter (tube) in my bladder/urethra
- Placement of the catheter (tube) in my rectum/bottom
- Filling of the bladder with liquid
- Holding a full bladder
- Urinating
- Nausea
- Light-headedness/dizziness
- Feeling hot/sweaty
- Other
- None of the above (or I had no physical discomfort)

9. The worst part of the study in terms of emotional/non-physical discomfort was (please choose only one answer):

- Anxiety/worry
- Embarrassment
- Fear
- Not understanding what was happening
- Other
- None of the above (or I had no non-physical discomfort)

10. Which was worse for you during the study, the physical or the emotional/non-physical discomfort (as defined in questions 8 and 9 above)?

- Physical
- Emotional/Non-physical
- Both were equally bad
- Neither was bad

11. The study was

- Better than I thought it would be
- Worse than I thought it would be
- The same as I thought it would be