

Development and Validation of the Drexel University ACT/CBT Therapist Adherence Rating Scale



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Introduction

The Drexel University ACT/CBT Therapist Adherence Rating Scale (DUTARS) was adapted from the Adherence Raters' Manual for the NIDA ACT/Bupropion Smoking Cessation Treatment Study (Gifford, Pierson, Smith, Bunting, & Hayes, 2003) and the Cognitive Therapy Adherence and Competence Scale (CTACS; Liese, Barber, & Beck, 1995). It represents an attempt to combine items relevant to assessing therapist practices specific to Acceptance and Commitment Therapy (ACT) and Cognitive Behavioral Therapy (CBT) with items focusing on more general therapist attributes within a single scale. The CTACS has been found to have acceptable levels of interjudge reliability and criterion validity (Barber, Liese, & Abrams, 2003). However, less is known about the psychometric properties of the Adherence Raters' Manual for the NIDA ACT/Bupropion Smoking Cessation Treatment Study.

The DUTARS is designed to measure the presence or absence of 29 therapist behaviors at five-minute intervals. These behaviors fall into five subscales, with no overlaps among subscales: 1) relationship-building (a two-item subscale); 2) treatment implementation (a four-item subscale); 3) CBT-specific behavior (a six-item subscale); 4) ACT-specific behavior (an 11-item subscale); and 5) miscellaneous therapist behaviors (a six-item subscale). Additionally, a sixth subscale measures therapist competence; it contains four items and is rated on a 5-point scale.

Method

Participants in this study had recently completed a clinical trial at the Drexel University Student Counseling Center in which they were randomized to receive either CBT (n=14) or ACT (n=16). All of these sessions were audiotaped. Thirty of these treatment session tapes were randomly selected for use in the current study. Ratings were made of whole audiotaped therapy sessions ranging from 25 to 70 minutes (mean=48.5 minutes).

The raters (n=6) consisted of psychology students (5 graduate, 1 undergraduate) with variable training (4/6 have formal training in ACT, 3/6 have formal training in CBT) and experience (4/6 have conducted ACT and CBT). All raters were provided with an overview of CBT, ACT, and the rating scale. Most (n=4) rated and received feedback on number of practice sessions.

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Adherence Rating Scale for the Drexel University ACT/CBT Trial

Adapted from the Adherence Raters' Manual for NIDA ACT/Bupropion Smoking Cessation Treatment Study (Gifford, Pierson, Smith, Bunting, & Hayes, 2003) and the Cognitive Therapy Adherence and Competence Scale (CTACS; Liese, Barber, & Beck, 1995)

Subject ID:	Session Date:	Session Number: :	
	Therapist Initials:	Rater Initials:	

Listen to audiotaped therapy session. Every five minutes, pause the audiotape and check ($\sqrt{}$) off all behaviors that occurred within the past 5 minutes. If the session terminates early, write an X at the top of the remaining time interval(s) and strike through the column(s). If the therapist is inaudible for more than half of a time interval (2.5 minutes) write an I at the top of the time interval and strike through the column. At the end of the session, complete the competence items.

		4.5	534	n.r	25.2e	20.25	25.70	36,315	X.00		45.50	Robin	ouship-b	uldeg
	Ed the therapist													
1	Sound warrs, genuine and caring?													
2	Ask for parient feedback (about session in general or specific accuracy of measures)?													
	National (
	Trumment implementation													
	I'd the therapist	4.5	524	26.20	31.24	N.K	26.36	36,36	35.40	20.25	all. No	86.00	SLas.	
1	Provide focus and structure (i.e. identify important areas to be addressed in service, direct the flow of conversation and radioset the client as													
	DECEMBER 17													
2	Raview previous homework?													
3	Assign new homework?													
4	Discuss the client's treatment goals?													
	CHT-specific but for the thoropist At the said Mine half Mine half Mine half Mine half Mine half Mine CHT-specific but At the said Mine half Mine hal										ellar sox			
1	Socialize the client to the CHT model (concents, process and/or structure)?	п	П	п	п	П		п	п	п	п	п		
2	Elicit automatic thoughts and/or relate them to the client's problems?	B		ö	-			Ö	0	Ö		ö		
3	Elicit core beliefs and schemes and/or relate them to the client's problems?													
4	Ask the client to consider evidence supporting or soluting their beliefs													
	and/or consider alternate beliefs? State or confirm that thoughts lead to behavior?	п	п	п	п	п	п	п	п	п	п	п	п	
2	Relate improvement in client's eventoms or replaces to changes to beliefs	H	ä	H	H	H	H	H	H	H	H	H	H	
	or thoughts?	_	_	_	-	_	_	_	_	_	_	_	-	
		44	5.34	20.00	25.2e	26.25	25.70	36,35	15.00	-	45.54	ACT-q	ecitic b	basion
1	E6d the therapiet Socialize the client to the ACT model (concern, process and/or structure)?													
- 2	Discuss language consentions aimed at helping the client to remember that	ö	0		0		<u>-</u>	Ö	ō	ō	0	ö	0	
	thoughts and feelings are not necessarily reality?													
3	Discuss the client's ability to observe thoughts and facilings without acting on them?													
	On Discuss the client's some of self-awareness or identification as the context	п	п		п	п	п	п	п	п				
	in which all of their thoughts, Sodings, and evaluations occur (i.e. the place	_	-	-	_	_	_	_	_	-	-	_	_	
	from which they can observe their thoughts and feelings)?	п												
5	Discuss the client's willingness to contact and accept difficult thoughts,													
6	fedings, memoire and/or bodily sunratione? Encourage the client to asperience-difficult thoughts, fedings, urges, memoires and/or bodily sunrations ofther in or out of session?		0							О	0			
7	Encourage the client to be mindful of current experiences, both in and our-													
	of-nextice? Identify client's efforts to control his or her thoughts or feelings as	п	п	п		п		п		п	0	п		
	problematic?	_	-	-		_		_		-		_		
9	Discuss the client's history of attempts to solve his or her problems and/or													
10	the consequences of this unsuccessful behavior?* Discuss the client's behavior and goals based on stated values?									О				
11	Encourage the client to generate and/or keen-commitments in any area of	ň	ñ	ñ	ň	ñ	ň	ň	ŏ	ñ	ă	ň	ŏ	
	his or her life?	_	_	_	-	_	_	_	_	_	_	_	-	
	I64 the therapiet	44	5.34	20.00	25.2e	26.25	25.70	36,35	15.00	-	45.54	04.00	Miscell	ane out
1	Ask about the client's mood or ongoing problems?													
2	Discuss the client's in-session behavior, past or present (i.e. comment on it,	ö	0		0		0	Ö	ō	ō	0	ö	0	
1	link it to client's experiences in other situations/relationships)?	_	_	_	_	_	_	_	_	_	_	_	_	
	Encourage the client to identify high-risk structions for problem behaviors and/or identify coping skills to manage them?													
4	Link the past to present beliefs, thoughts, emotions or behaviors?													
5	Use open-ended questions, reflective, confrontative, or interpretive	ö	0		0		0	Ö	ō	ō	0	ö	0	
	responses to guide client's understanding? Listen actively?	_	-	_		_	-	_		_	-	_		
	Lister adjivity?													
	Complete the following on	edioas i	Oer the	entire	1006ca	has been	a beard							
	Rate the thermoist's					Peer		hir	ir Good			Competen Ferry Excellent		
											Good	d		
1	Knowledge of treatment Skill in delivering treatment				8		8			8		8		
ŝ	Appropriate application of treatment components within the context of the service				ŏ		ŏ	ă		ă		ŏ		

Results

Interrater Reliability

Strout and Fleiss's (1979) intraclass correlation coefficient (ICC) model 2, a random effects model, was used to measure interrater reliability. The ICC (2,1) coefficient for the full scale was high (.97), as were the coefficients for the relationship-building (.96), treatment-implementation (.96), CBT (.98), ACT (.99), and miscellaneous therapist behavior (.96) subscales. However, the ICC (2,1) coefficient for the therapist competence subscale fell below acceptable levels (.61).

Internal Consistency

Cronbach's alpha was used to measure internal consistency. The alpha coefficients for the full scale (.98), and the relation-building (.98), treatment-implementation (.98), CBT (.99), ACT (.99), and miscellaneous therapist behavior (.96) subscales were high. However, the alpha coefficient for the competence subscale (.76) was significantly lower.

Discriminant Validity

Discriminant validity was examined by correlating the CBT items and subscale scores with the ACT items of subscale scores. The discriminant validity was supported by the low r values (ranging from -.32 to .24), and non-significant correlations found in these analyses.

Discussion

These results demonstrate that raters with variable experience, education, and training can reliably rate adherence for each of the DUTARS subscales. Additionally, they support the internal consistency and construct validity of the five adherence subscales and the full scale of the DUTARS. However, the results of this study also indicate that the psychometric properties of the therapist competence scale were weaker than those of the other scales.

Limitations

The current study had several limitations. First, it was limited by its small sample size. It is also possible that the raters in the current study varied in terms of their willingness to negatively rate the competence of the therapists on the selected tapes, particularly since the therapists and raters are affiliated with the same research institution; this may have increased the variability and decreased the reliability of ratings in this area. Additionally, it should be noted that the therapy sessions rated were conducted by therapists trained in ACT and CBT in the same manner as the raters. Therefore, it is possible that raters trained in these methods via alternate means may have made different judgments regarding the therapists' behaviors. It also should be noted that inter-rater agreement was somewhat higher when both raters evaluating a tape had formal training in ACT and CBT than when only one of those raters had formal training.

Directions for Future Research

Further work to substantiate the reliability and validity of the DUTARS will explore its factor structure, construct validity and predictive validity, and its application to sessions conducted by therapists who have received alternate forms of training than, and different experience levels in implementing the ACT and CBT protocols from, the raters. Additionally, it is hoped that this scale will demonstrate utility in identifying and addressing the training needs of raters without prior exposure to ACT and CBT.

The DUTARS appears to have utility as a measure of treatment integrity and distinctiveness in comparative treatment research. The fact that it measures therapy content sets it apart from other adherence measures and allows it to be used as a measure of process and a predictor of psychotherapeutic outcome. It is hoped that future research efforts will further establish the scale's psychometric properties, as well as to identify areas of practice in which this scale could serve as a useful tool