

Acceptance and Commitment Therapy (ACT) for Addiction : A Systematic Review of Randomized Controlled Trials

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OBJECTIVES

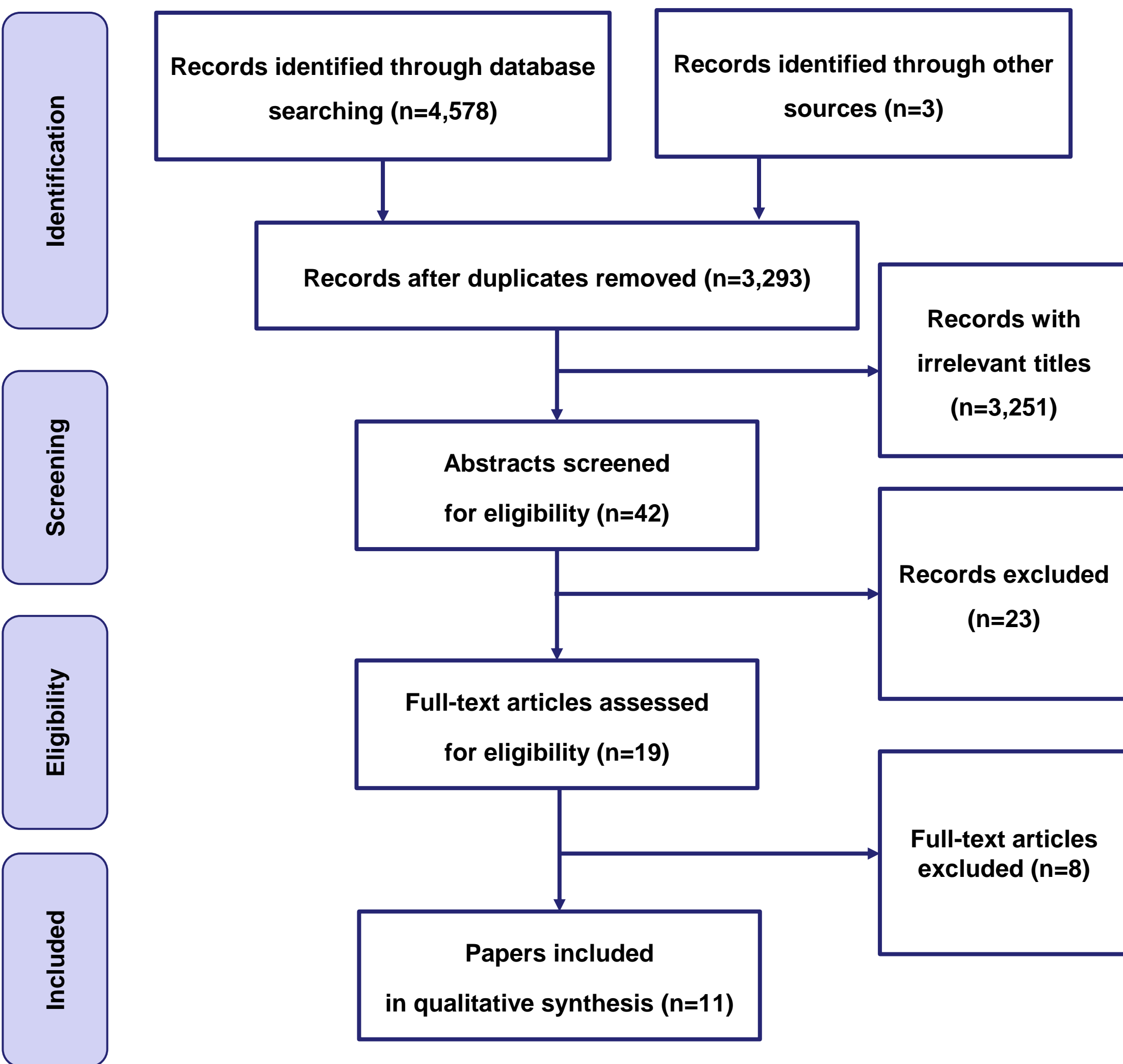
- Addiction is a chronic, relapsing disease that is often driven by experiential avoidance.
- In this context, Acceptance and Commitment Therapy (ACT) is proposed as a novel therapeutic approach with a possible added value over traditional addiction treatments using awareness, acceptance and being in ‘here and now’ instead of arguing and avoiding internal experiences such as thoughts, memories and feelings.
- The objective of this systematic review is to summarize the current evidence for the effectiveness of ACT in patients with addictive disorder, in comparison with traditional therapies for addiction.

METHODS

- We identified relevant articles through electronic searches of the MEDLINE, Embase, Cochrane library, and by hand-searching reference lists. We searched for randomized controlled trials of ACT in people with addiction.
- Two review authors independently extracted and assessed data from studies that corresponded to the predefined inclusion criteria for methodological quality using PRISMA guidelines. A third review author was responsible for conflict resolution when required.

RESULTS & DISCUSSION

I. Systematic Review Flow Diagram



- A meta-analysis was not performed due to the diversity of methodology and outcomes in the studies reviewed.
- In spite of limitations such as small sample size and risk of reporting bias, qualitative data suggest that when measured, ACT showed higher abstinence rate compared to traditionally treated groups or control groups. In addition, ACT alleviated psychological distress induced by withdrawal symptoms and comorbid mood symptoms. Further studies are needed to develop and validate more structured treatment programs, as well as an assessment tools tailored to the effectiveness of ACT for patients suffering from addiction.

II. Summary of Studies included in the Review

Sources	Condition	Intervention	Main Outcomes & Significant Results			
			Abstinence		Mental health assessment	
	Sample Size (Intervention /Control)	Control	Subjective	Objective		ACT process measures
Gifford (2004)	Tobacco (Nicotine)	ACT, individual & group	Smoking cessation rate (%)		STWS (Shiffman Tobacco Withdrawal Scale)	AIS (Avoidance and Inflexibility Scale)
USA	33/43	Nicotine-replacement therapy	- Post-treatment - 24-week f/u - 48-week f/u: ACT>Control		POMS (Profile of Mood States)	
Gifford (2011)	Tobacco (Nicotine)	ACT (FAP), individual & group		Expired CO (%) - Post-treatment: ACT>Control - 24 weeks: ACT>Control - 48 weeks: ACT>Control	STWS: ACT>Control	AIS: Control>ACT
USA	130/173	Bupropion			POMS	AAQ (Acceptance and Action Questionnaire)
Brown (2013)	Tobacco (Nicotine)	Distress tolerance treatment (DT)	Smoking cessation rate (%)		MNWS (Minnesota Nicotine Withdrawal Scale) - Quit day: ST>DT	AIS
USA	27/22	Standard behavioral treatment (ST)	- During treatment: DT>Control - Long-term outcomes		POMS - Quit day: ST>DT	AAQ
Bricker (2014)	Tobacco (Nicotine)	ACT App (SmartQuit)	Smoking cessation rate (%)			Acceptance of cravings (5-points)
USA	98/98	Standard App (QuitGuide)				
Bricker & Bush (2014)	Tobacco (Nicotine)	Telephone-delivered ACT	Smoking cessation rate (%)			Acceptance of cravings (5-points): ACT>Control
USA	59/62	Telephone-delivered CBT				
Jones (2015)	Tobacco (Nicotine) with depressive symptoms	Web-based ACT (WebQuit.org)	Smoking cessation rate (%)		Anxiety and Depression Detector (%)	AIS-27 - Acceptance of physical triggers: ACT>Control
USA	47/47	Web-based standard program (Smokefree.gov)				
Hayes (2004)	Opiates	ACT, individual & group		Urinalysis (%) - Opiate use: ACT>MM - Total drug use: ITSF>ACT	ASI (Addiction Severity Index) - Opiate use: MM>ACT - Total drug use: ITSF>ACT	SAS-SR (Social Adjustment Scale-Self Report)
USA	42/44/48	Intensive 12-Step Facilitation Therapy (ITSF), Methadone Maintenance (MM)			BDI (Beck Depression Inventory) SCL-90-R (Symptom Checklist-90-Revised)	
Azkhosh (2016)	Opiates	ACT, group			Psychological welling scale : ACT>Controls; NA>Controls	AAQ-R: ACT>Controls
Iran	16/17/20	NA, MM				
Smout (2010)	Methamphetamine	ACT, individual		LDQ (Leeds Dependence Questionnaire) scores		
Australia	51/53	CBT, individual	Monthly total methamphetamine use (grams)	Hair positive (%): CBT>ACT	BDI-II	
Luoma (2012)	Heterogeneous	ACT, group therapy targeting shame		SF-12 (Short Form 12 General mental health and physical health and well-being)		
USA	68/65	TAU	Alcohol and drug timeline follow-back interviews		General Health Questionnaire-12	Internalized Shame Scale
Lanza (2014)	Heterogeneous	ACT, group			Quality of Life Scale	
Spain	18/19/13	CBT group therapy, Waitlist			Multidimensional Scale of Perceived Social Support	
					ASI-6 1) Post-treatment - Psychological CS: Waitlist>ACT	
					2) 24-week f/u - Drug CS, Alcohol CS: Waitlist>ACT	AAQ-II 1) Post-treatment: ACT, CBT>Waitlist
					Multidrug urinalysis (%): ACT>Waitlist	2) 24-week f/u: ACT, CBT>Waitlist; ACT>CBT
					Anxiety Sensitivity Index 1) Post-treatment - Total, Somatic, Cognitive: Waitlist, ACT>CBT - Social: ACT>CBT	
					2) 24-week f/u - Cognitive: Waitlist>ACT	

*Abbreviations: ACT=Acceptance and Commitment Therapy; App=Application; CBT=Cognitive and Behavioral Therapy; FAP=Functional Analytic Psychotherapy; MM=Methadone maintenance; NA=Narcotics Anonymous; TAU=Treatment as Usual Condition.