Acceptance and commitment therapy (ACT) as a trans-diagnostic approach to treatment of psychological distress: A concurrent multiple baseline design across participants

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Introduction

Process-based cognitive behavioral therapies (CBTs)

- DSM-influenced paradigms supporting disorder-specific treatment manuals may be less applicable to complex cases and pose significant problems for dissemination and training efforts (Hofmann & Hayes, 2017)
- Theorists have proposed trans-diagnostic, process-based approaches to CBT emphasizing salient mechanisms cutting across diverse forms of psychopathology (Barlow et al., 2004; Hayes & Hofmann, 2017, 2018)
- A process-based approach to treatment may allow for greater emphasis on improving client quality of life and adaptive functioning within relevant contexts (Mennin et al., 2013; Hayes et al., 2012)

Experiential avoidance (EA)

- A growing body of evidence exists supporting a generalized avoidance tendency as a significant pathological process underlying many behavioral health concerns (Hayes et al., 2013)
- EA is defined as an unwillingness to remain in contact with private experiences and taking steps to actively avoid or alter those experiences, even when doing so causes harm, distress, or decreased quality of life (Hayes et al., 1996)

Acceptance and commitment therapy (ACT)

- ACT is exemplary of a process-based approach to treatment (Hayes et al., 2006) and seeks to instantiate psychological flexibility as an alternative to EA while helping clients increase values-based living and effective behavioral repertoires (Hayes et al., 2012)

Current study

- A concurrent multiple baseline design (MBD) across participants was used to examine the process of change throughout a 10-13 week course of ACT. Pre/mid/post-treatment and 3-month follow up data on symptomology, quality of life, and ACT-related process variables were also collected
- Participants tracked daily instances of clinically relevant behavioral excesses and deficits, and completed weekly process measures of EA and values-based living
- It was hypothesized that participants would show improvements in behavioral excesses and deficits and on weekly process measures upon moving from baseline to treatment phases within the MBD. Gains would also be evident in comparison between pre- and post-treatment outcome measures

Methods

Measures

- Weekly process measures included the Engaged Living Scale (ELS; Trompetter et al., 2013), Acceptance and Action Questionnaire-II (AAQ-II; Bond et al., 2011), and Brief Experiential Avoidance Questionnaire (BEAQ; Gamez et al., 2014)
- Pre/post measures included the General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988), Beck Anxiety Inventory (BAI; Beck & Steer, 1993), Beck Depression Inventory; Beck et al., 1996), World Health Organization Quality of Life Measure (WHOQOL-BREF; Skevington & O-Connell, 2004), the White Bear Suppression Inventory (WBSI; Wegner & Zanakos, 1994), and the Believability of Anxious Thoughts and Feeling Questionnaire (BAFT; Herzberg et al., 2012)

ACT protocol

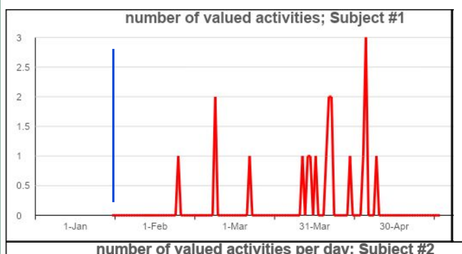
- 10-week protocol based on work of Eifert and Forsyth (2013) and modified to include a transdiagnostic emphasis on EA and culturally-sensitive, functionally-based adaptations
- General phases of creative hopelessness, control as the problem, acceptance as an alternative, and emphasis on values-based behavior change were followed, but clinical judgment and functional analysis were emphasized and used to determine which specific core ACT processes were targeted each session

Participants

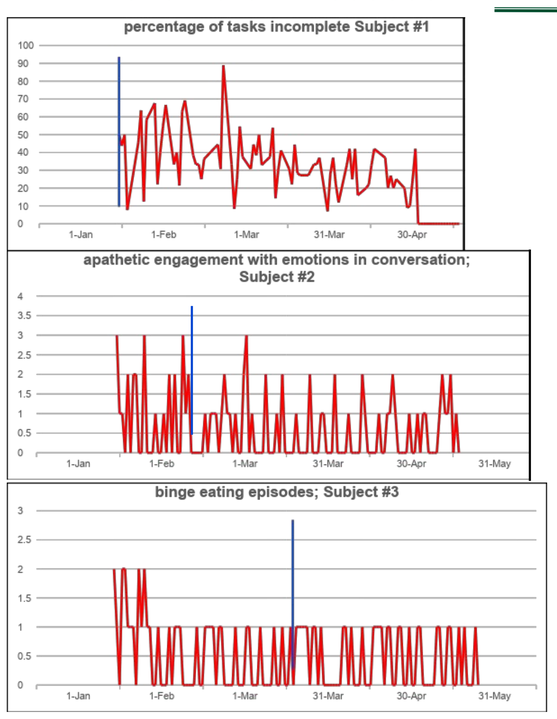
- Participants were recruited at the University of Hawai'i at Mānoa using flyers posted around campus. Inclusion criteria was only a clinically elevated level of EA (AAQ >26)
- **Participant 1**, who was a 26-year old Korean woman with concerns related to generalized anxiety, anger, unassertiveness, and procrastination at work, tracked the behavioral excess of percentage of to-do list incomplete at the end of each workday, and the behavioral deficit of number of valued activities engaged in each day involving active, engaged participation
- **Participant 2**, who was a 24-year old Hispanic woman with concerns related to depressed mood, hopelessness, and emotional numbness, tracked the behavioral excess of engaging in emotionally closed-off/aloof/defensive responses during social interactions each day, and the behavioral deficit of number of valued activities engaged in each day involving mindful, engaged participation
- **Participant 3**, who was a 26-year old Caucasian man with concerns related to anxiety, depression, procrastination, anger, and overeating, tracked the behavioral excess of number of number of binge eating episodes each day, and tracked the behavioral deficit of number of times each day engaged in vigorous physical exercise

Results

Behavioral Deficits



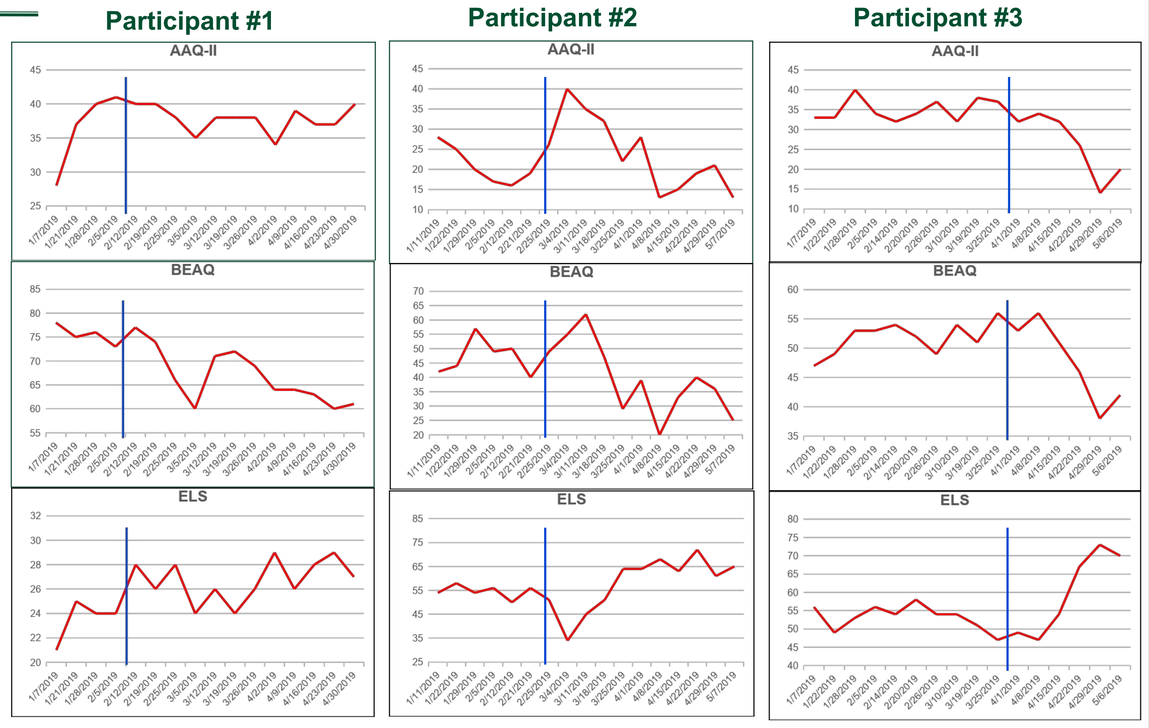
Behavioral Excesses



Measure	Pre-TX	Mid-TX	Post-TX
AAQ			
SS #1	28	38	40
SS #2	28	22	**20**
SS #3	33	**26**	
BEAQ			
SS #1	78	75	**61**
SS #2	42	**29**	**21**
SS #3	47	46	
ELS			
SS #1	21	**26**	**27**
SS #2	54	**64**	**74**
SS #3	56	**67**	
BAFT			
SS #1	80	89	82
SS #2	45	51	**30**
SS #3	80	**64**	

Legend
Blue line = began TX phase
Red #'s indicate improvement from previous assessment point

Weekly Process Measures



Measure	Pre-TX	Mid-TX	Post- TX
GHQ			
SS #1	10	**6**	**1**
SS #2	2	**1**	**0**
SS #3	2	4	
BDI			
SS #1	27	32	**12**
SS #2	17	18	**7**
SS #3	18	**11**	
BAI			
SS #1	15	25	**12**
SS #2	17	**14**	**5**
SS #3	26	**21**	
WBSI			
SS #1	61	67	64
SS #2	70	**55**	**52**
SS #3	60	**57**	

WHO-QOL Domain	Pre-TX	Mid-TX	Post-TX
QOL Physical			
SS #1	56	56	**50**
SS #2	88	88	**94**
SS #3	56	**81**	
QOL Psychological			
SS #1	31	25	31
SS #2	44	44	**75**
SS #3	44	44	
QOL Social			
SS #1	25	25	25
SS #2	56	**75**	**81**
SS #3	31	31	
QOL Environment			
SS #1	63	69	63
SS #2	56	**81**	**88**
SS #3	44	**63**	

Discussion

Relevant findings

- Relevant process measures revealed tentative support for overall efficacy of ACT protocol and effects via the proposed mechanism of action (Hayes et al., 2013)
  - Effects more pronounced for Subjs. 2 and 3, less so for Subj. 1
  - Daily behavioral data were less conclusive
- Successful implementation of research design and ACT protocol by trainee therapist/researcher promising for future dissertation research

Future Directions

- Recruit an ethnically diverse community sample
  - Implement culturally-relevant adaptations to protocol
- Verify diagnosis for inclusion (heterogeneity preferred)
- Select more overt behaviors for daily tracking
- Utilize treatment integrity coding system
- Refine and publish treatment manual based on ACT for EA

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