

ACTing on Weight

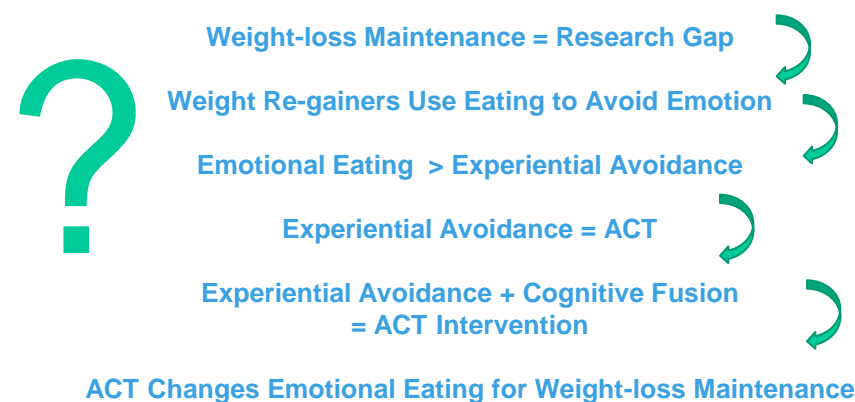
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Background

In Australia overweight and obesity continue to be recognised as factors that increase the risk of developing adverse health conditions (1). Despite weight-loss being achievable, weight-loss maintenance remains elusive.

Significant yet limited research suggests that there is a relationship between weight-loss maintenance and emotional eating. Research suggests that people who are unable to maintain their weight-loss, weight re-gainers, are more likely to eat in response to their emotions as a way of avoiding them (2, 3). Emotional eating can be defined as the tendency to eat in response to emotional distress (4). The function of emotional eating is its ability to reduce negative affect (2), thus emotional eating can be conceptualised in terms of experiential avoidance.

Experiential avoidance is a key process in the development and maintenance of psychological distress within the Acceptance and Commitment Therapy (ACT) model of psychological (in)flexibility. Experiential avoidance paradoxically amplifies the original unwanted internal experiences. Emerging evidence indicates that ACT interventions can assist in weight-loss maintenance, and show that experiential avoidance accounts for significant variance while cognitive fusion has been speculated, but not explored, as predicting maintenance.



Primary Research Aim

To evaluate the efficacy of a 1-day ACT group workshop intervention for people who have recently lost weight targeting emotional eating to facilitate weight-loss maintenance, using a randomised controlled trial design comparing an intervention group to a wait-list control group.

Method

Participants: Participants were recruited from the community and reported a BMI within the healthy weight range or above, having lost at least 5% of their starting weight within the last 6 months; aged 18+; not currently pregnant or recently given birth.

This research constitutes the first intervention study to quantitatively bring together ACT and its key processes of experiential avoidance and cognitive fusion together with emotional eating in the context of weight-loss maintenance.

Procedure: 1. Eligibility was assessed over the phone. 2. Potential participants attended a face-to-face registration session where a registered nurse measured their height and weight and executed the randomisation procedure 3. Participants were given their group workshop dates according to their group allocation 4. Control group participants attended their group workshop three months after intervention group participants 5. Measures were taken at Time 1 - Pre Intervention and Time 2 - Post Intervention for all participants. The intervention group were measured before the intervention and again three months later, the control participants were measured twice before their group workshop three months apart.

The Intervention: Based on Lillis et al. (5) the intervention was modified with inclusions from the books 'ACT Made Simple' (6) and 'Get Out of Your Mind and Into Your Life' (7). The ACTing on Weight 1-day workshop explored all six ACT processes.

Measures: Measures employed were: the Emotional Eating subscale of The Dutch Eating Behaviour Questionnaire (DEBQ) (8); the Emotion and Stress Related Eating subscale of the Eating and Appraisal Due to Emotions and Stress Questionnaire (EADES) (9); the Emotional Eating Scale (ESS) (10); Acceptance and Action Questionnaire for Weight (AAWQ) (11); Acceptance and Action Questionnaire II (AAQII) (12); Cognitive Fusion Questionnaire (CFQ) (13); Positive and Negative Affect Scale (PA & NA) (14); The Satisfaction with Life Scale (SWLS) (15); General Health Questionnaire (GHQ) (16); Obesity Related Well-being (ORWELL) (17); Height & Weight for BMI, and waistline.

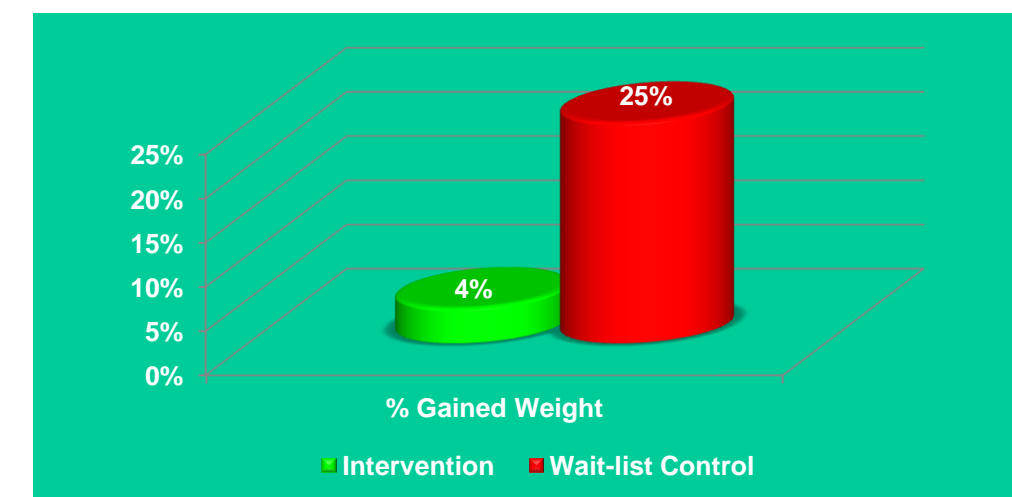
Sample Size: $n = 376$ responded to the recruitment advertisements
 $n = 111$ registered to participate in the group workshops

	Pre	Post
Intervention	$n=43$	$n=28$
Control	$n=56$	$n=32$

Preliminary Results

Pre Intervention data: * There were no significant differences between the intervention and wait-list control groups prior to the intervention.

Post intervention data: * There was a significant difference between the two groups on post-intervention weight scores $F(1, 57) = 4.249, p = .044$, partial eta squared = .069, using ANCOVA. * Participants who attended the ACTing on Weight workshop were significantly more likely to be characterised as maintaining weight, and significantly less likely to be characterised as gaining weight, $p=.029$, using Fisher's Exact Probability Tests (Chi-Square).



* Three MANOVAs were performed to determine the significance of differences between the intervention group and the wait-list control group on each of the Emotional Eating measures and the other 8 main variables of interest: AAQW, AAQII, CFQ, SWLS, PA, NA, GHQ and ORWELL. All three MANOVAs yielded significant results.

EADES: $F(9, 48) = 4.325, p=.000$; Wilks' Lambda=.552; partial eta squared =.448.
DEBQ: $F(9, 46) = 3.958, p=.001$; Wilks' Lambda=.564; partial eta squared =.436.
EES: $F(11, 44) = 2.868, p=.006$; Wilks' Lambda=.582; partial eta squared =.006.
When the results for the dependant variables were considered separately, the same variables reached significance in each MANVOA, they were: AAQW, CFQ, NA, GHQ and ORWELL, $p < .000 - p=.012$.

Conclusion

The results show a statistically significant difference in weight outcomes between the groups with participants who attended the ACTing on Weight workshop more likely to record decreases in weight, compared to increases in the wait-list control group. Further, the results show that participants who attended the workshop were significantly more likely to be categorised as maintaining their weight, with 25% of the wait-list control group being categorised as gaining weight. The results also indicate that the ACTing on Weight workshop produced significant positive changes for the intervention group in Emotional Eating, and also indicate significant differences in five other variables assessed: AAWQ, CFQ, NA, GHQ and ORWELL. Not only are these results statistically significant, they also have theoretical and practical significance as they have the potential to contribute to innovate new ways of improving weight-loss maintenance interventions. **References:** List available from authors.