Using Acceptance and Commitment Therapy to Assist Adults with Mental Health Disorders Increase Coping Strategies and Psychological Flexibility

By

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Dedication

This entire thesis is dedicated to my three wonderful daughters—Ryeley, Zoë, and Sadie. In the grand scheme of things, you three are my greatest therapy of all.

To my husband Jason—thank you for encouraging me to continue with my goals and supporting me through the process.
Abstract

Individuals struggling with mental illness experience many challenges and symptoms that can interfere in their day-to-day functioning and thus need support to assist with managing their symptoms of mental illness. Third Wave Behavioural Therapies address these issues differently than traditional therapies. Acceptance and Commitment Therapy (ACT) focuses on changing the individual’s response to an experience, rather than attempting to challenge or alter that thinking. The aim of the pilot study was to examine if ACT in a group setting could 1) increase participants’ psychological flexibility and mindfulness, 2) decrease mental health symptomology, and 3) increase participants’ coping strategies. The group contained eight participants and the inclusion criteria for participation were: current client at the agency, diagnosis of a mental health disorder, 18 years or older, willing to attend group meetings, able to understand verbal material, and can read and write. The group had eight sessions over an eight week period and the sessions were an hour and a half in length. All six components of ACT were covered. Participants completed three questionnaires at pre-treatment, post-treatment, and follow-up. These questionnaires were: Acceptance and Action Questionnaire II (AAQ-II) to measure the level of experiential avoidance, Depression and Anxiety Stress Scale (DASS) to measure mental health symptoms, and Five Facet Mindfulness Questionnaire (FFMQ) to measure mindfulness. Homework completion and attendance were also collected on a weekly basis. The results of the study indicated that the participants made statistically significant gains. The participants in the group increased psychological flexibility, decreased mental health symptomology, and increased mindfulness as a group.
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Chapter I—Introduction

Individuals struggling with mental illness experience many challenges and symptoms that can interfere in their quality of life and day-to-day functioning. Individuals with these symptoms can experience isolation, stigmatization, eating and sleeping problems, social and relationship issues, suicidal ideation, and lack of motivation to complete daily tasks or to participate in activities that would increase their well-being. Knowing that these individuals are essentially suffering, a therapy that addresses mental health symptoms, coping strategies, mindfulness, and psychological flexibility is important to the well-being and success of these individuals. These individuals need support and therapy to assist with managing their mental health.

Traditional evidenced-based therapeutic methods, such as Cognitive Behavioural Therapy (CBT), have been utilized for several years, but more recent, evidenced-based therapies have been on the rise. Third wave therapies, such as Acceptance and Commitment Therapy (ACT), focus on changing individuals’ responses to their thinking instead of trying to alter their thinking (Broley, 2013). At this level, thoughts, referred to as private events, are viewed as not an absolute truth, and thus the main focus is to change the individual’s perceptions and functions of the private event (Hayes, Pistorello, & Levin, 2012). Similarly, Hayes, Levin, Plumb-Vilardaga, Villatte, and Pistorello (2013), suggested that the emphasis when conducting ACT must be on changing the relationship one has to their thoughts. CBT and ACT should not be viewed entirely as different forms of therapy, but rather ACT may be referenced as a close relative to the cognitive and behavioural therapies that do exist (Hayes et al., 2013).

ACT is viewed as a scientific approach utilizing functional contextualism (Hayes et al., 2013). Functional contextualism, rooted in Skinner’s radical behaviourism, addresses the fact that actions are not solely events that occur, but rather only truly mean something when referenced to their context (Hayes et al., 2013). ACT encourages change and action; Sharp (2012) introduced that ACT teaches acceptance, but also change, simultaneously, in therapy. ACT not only targets behavioural changes in the individual, but also encourages and increases personal development (Hayes et al., 2012). Tending to the individual’s personal development and behavioural changes can assist in achieving the client’s desired goals. ACT accomplishes this by incorporating six unique processes into the therapy (Hayes et al., 2012). These components focus on acceptance, defusion, self-as-context, present moment, values, and committed action (Hayes et al., 2012).

Harris (2009) discussed these six components thoroughly in his guide to ACT. Acceptance meant that one was willing to open up and give room to painful emotions and thoughts without resistance. Defusion involves one separating oneself from internal experiences and viewing thoughts as simply words and not necessarily reality. Self-as-context is viewed as two specific elements: 1) the thinking self, which is the part that is responsible for all cognitive processing, and 2) the observing self, which is the part that is aware of all the cognitions. Values addresses an individual’s behaviours in connection to that individual’s desired qualities; he continued to say that when one is living consistent with one’s values, a valued-directed life can lead to a more meaningful life. Mindfulness is being psychologically and physically aware of one’s surroundings simultaneously, better known as the here-and-now. Lastly, Harris described committed action as making the necessary changes in one’s life to live a value-oriented life, even if in doing so one has to endure and give room to painful and uncomfortable internal experiences.
These processes do not stand individually like that of a pragmatic purpose, but rather are all connected in what Harris (2009) called “six facets of one diamond” (p.11). A psychological flexibility hexaflex diagram was developed in order to demonstrate the connection of the processes (Harris, 2009). At the other end of the spectrum, psychological inflexibility exists featuring components such as: experiential avoidance, cognitive fusion, dominance of the conceptualized past and future, conceptualized self, lack of values, and unworkable action (Harris, 2009). This hexaflex essentially acts as opposite to psychological flexibility.

ACT’s effectiveness was examined in many research and literature articles for many different aspects of mental health diagnoses and chronic pain. Results remain consistent in that ACT appears to be a useful therapeutic intervention for many different issues for many different diagnoses. Due to ACT being able to target a broad range of symptoms and disorders by addressing the six common processes (Hayes et al., 2012), it is important to further examine the effectiveness of ACT to build on the current research and utilize this evidence-based therapy to help individuals manage symptoms and increase psychological flexibility in a group based therapy. The objective of this study was to create an ACT group therapy to help adults with mental health symptoms increase their coping strategies and psychological flexibility. It is hypothesized that the participants in the ACT group will increase coping strategies, increase psychological flexibility, increase mindfulness, and consequently, decrease symptoms.

The current thesis includes a comprehensive overview and evaluation of the most current literature and research on ACT including peer-reviewed articles pertaining to ACT and ACT group therapy. The literature review will also address mental health, symptomology, psychological flexibility, and the connection to ACT and other current therapies. The methods section will include information on the participants, the design, setting, measures, and procedures implemented for the group therapy. The intervention results, presented with figures and tables, will be provided for the group and for each individual participant. Visual analysis and statistical analysis will be discussed. The strengths and limitations, multilevel challenges, and conclusions of the study will also be addressed. Recommendations will be made for future research and how this study may influence the behavioural psychology field.
Acceptance and Commitment Therapy (ACT)

Acceptance and Commitment Therapy (ACT) is a third wave behavioural therapy deeply rooted in behaviourism that address antecedents and consequences of behaviour (Batten, 2011; Ciarrochi & Bailey, 2008; Larmar, Wiatrowski, & Lewis-Driver, 2014). While ACT also incorporates components derived from cognitive therapies (Ciarrochi & Bailey, 2008; Larmar et al., 2014), in uniquely focuses on psychological and behavioural changes linked to functional contextualism. It is believed that actions are not solely events that occur, but rather only truly mean something when referenced to their context (Hayes, Levin, Plumb-Vilardaga, Villatte, & Pistorello, 2013). Functional contextualism is a theory of language that Hayes and Barnes-Holmes developed better known as Relational Frame Theory (RFT). ACT is the therapeutic approach that addresses the core principles of RFT. ACT’s focus is to accept challenging and uncomfortable internal experiences with willingness and understanding that behaviours can be independent of emotions (Batten, 2011; Larmar et al., 2014). Another key component of ACT is to eliminate the desire or need to control one’s internal experiences (Larmar et al., 2014).

ACT is comprised of six core processes: acceptance, defusion, self-as-context, mindfulness, values, and committed action; which create a foundation for behavioural change and potential improvement in quality of life. ACT extends even further than traditional therapeutic methods by addressing psychological flexibility. By actively participating in ACT and focusing on the core six processes, an individual may increase psychological flexibility. Luoma, Hayes, and Walser (2007) state that the six core components of ACT make up the psychological flexibility hexaflex; these components enforce commitment and behavioural change, as well as mindfulness and willingness in the present moment. A psychologically flexible individual may not experience as much psychological distress as an un-psychologically flexible person (Fledderus, Bohlmeijer, Fox, Schreurs, & Spinhoven, 2013). Examining Eifert and Forsyth’s stages of ACT, (as cited in Larmar et al., 2014) which take on the acronym A.C.T., one can 1) (a)cept internal experiences instead of challenging or controlling them, 2) (c)hoose a future path consistent with one’s values and goals, and 3) (t)ake action, commit to the values and goals, and change.

Larmar et al. (2014) stated that ACT can treat a range of problems and diverse clientele and is able to address different diagnoses and symptoms. ACT is seen as an efficacious therapy for mental illness, and extensive research revealed ACT to be an effective intervention not only with mental health symptomology but also in addressing chronic pain, physical disabilities, and addictive behaviours (Larmar et al., 2014). Several sources (Batten, 2011; Ciarrochi & Bailey, 2008; Harris, 2009; Luoma, Hayes, & Walser, 2007) agree that ACT is individualized to the individual and based on the client achieving a valued-directed life.

Individual ACT Treatment

Most traditional forms of therapy have had successes on a one-to-one basis with the client, and ACT is no different.

Obsessive Compulsive Disorder.

A study conducted by Dehlin, Morrison, and Twohig (2013) examined the efficacy of ACT with participants who were diagnosed with Obsessive Compulsive Disorder (OCD). Dehlin et al. evaluated the therapy while examining scrupulosity in the individuals with OCD. Dehlin et al. state that ACT is an appropriate intervention procedure with these individuals because of the processes that address acceptance, mindfulness, values, and committed action. Dehlin et al. state
that ACT addresses thoughts in a way that does not focus on details or ‘correct’ ways of thinking but rather ACT focuses on values and the life that the individual wants to live.

Five individuals were involved in the study from beginning to the end; Dehlin et al. utilized many measures, such as the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), the Acceptance and Action Questionnaire-II (AAQ-II), Treatment Evaluation Inventory—Short Form (TEI-SF), and self-monitoring procedures.

Dehlin et al. adopted a multiple baseline across participants design to track compulsion frequency and avoidance of valued actions. A valued action is a behaviour that brings an individual closer to the things that matter most in life. After the sessions were completed and follow-up data collected, Dehlin et al. revealed that a reduction of 74% was observed at post-treatment for self-reported compulsions, and a reduction of 79% was self-documented for avoidance of valued activities. Decreases in scores were noted in all the self-report measures (Dehlin et al.). Scrupulosity scores had a 7% reduction by follow-up; however the treatment was a whole was supported in reducing scores and symptoms and increasing quality of life scores (Dehlin et al.). Scores decreased by 43% for the AAQ-II from pre-treatment to follow-up; however Dehlin et al. suggest that a larger reduction would have been made at the group level, but one participant had unexpected and disruptive events occurring during the time that the assessments were conducted.

The study contained some limitations. Dehlin et al. state that additional gains could have been made if the protocol extended further than eight sessions. Participants had many similarities, including: same ethnicity, level of education, and religious affiliation; which can impact generalizability to other individuals (Dehlin et al.). Regardless of the limitations, it is apparent that ACT can address concerns with OCD and psychological flexibility.

**Social Phobia.**

In another study still examining ACT, but with a different form of anxiety, Popick, Brady, and Whitman (2011) revealed a significant increasing score from pre-to-post intervention on the Global Assessment of Functioning (GAF) measure. An increase in GAF scores mean that an individual is adapting and better functioning with psychological, social, and occupational areas in life. Popick Brady and Whitman conducted a case study with a 20-year-old individual diagnosed with Social Phobia. Popick, Brady, and Whitman developed an ACT protocol, including all the six processes of ACT, into an 18-session treatment; the treatment lasted for five months. The individual scored a 65 on the GAF at pre-treatment and made significant gains by post-treatment, scoring an 85. Popick, Brady, and Whitman noted that the individual became highly motivated by the end of treatment to make changes to his life and managed to begin relationships with other individuals, which he was unable to do prior to treatment.

**Posttraumatic Stress Disorder.**

Similarly, a study conducted by Thompson, Luoma, and LeJeune (2013) evaluated ACT with two clients diagnosed with Posttraumatic Stress Disorder (PTSD). Thompson et al. also incorporated exposure into the sessions. Thompson et al.’s goal in this study was to use ACT to help guide the exposure-based therapy. They utilized the psychological flexibility model to guide the treatment. The researchers suggested the use of ACT with exposure therapy because not many clients are willing to go through exposure after a traumatic event, and ACT can help support that client into becoming willing and accepting, particularly when addressing exposure. Thompson et al. suggested that because ACT is a more process-oriented therapy, it addresses current presenting problems, whereas exposure-based therapies are more procedural and thus take the client through a step-by-step process.
Two clients participated in the study. Client 1’s sessions were focused mainly on acceptance, willingness, the present moment, values, and committed action. They stated that Client 1 had many positive changes from pre-to-post treatment. At post-treatment, Client 1’s main concern was that she was unable to maintain employment, particularly if she was working with male colleagues; however, after treatment, Client 1 found and retained employment for 4-months (Thompson et al., 2013). Client 2’s sessions focused on self-as-context and defusion processes of ACT. At post-treatment Client 2 was no longer classified as having PTSD, according to the DSM-IV diagnostic criteria, and no longer needed the prescription sleeping medication she was prescribed (Thompson et al., 2013); Client 2 was able to view herself as a “person who had been sexually assaulted” (Thompson et al., 2013, p.138), rather than a sexual assault victim.

Although this article revealed positive results for the clients, a few limitations are evident. The study did not contain measures to justify any changes in the clients’ psychological flexibility, acceptance, and mindfulness, and thus relied solely upon self-reports and clinical judgements. Also, by only having two clients, the generalizability may not occur to other individuals with PTSD. However, this study did reveal that ACT is a flexible treatment that can be combined with other interventions, such as exposure to reduce PTSD symptomology.

Another ACT study, that featured a client who had PTSD, was conducted in 2013 by Burrows. Burrows (2013) used ACT with an 18-year-old woman who had experienced sexual assault. The client had been using experiential avoidance and thus limiting her exposure not only to stimuli that reminded her of the event that took place, but to other things that she once did not have any issues with (Burrows, 2013). In addition, Burrows measured her experiential avoidance, willingness, committed action, and quality of life. Eighteen ACT sessions were conducted over a 10-month period. Significant results were presented by Burrows. The client’s AAQ-II score decreased from a high level of avoidance and psychological inflexibility indicating a moderate reduction; and, the client maintained that score 8 months past post-treatment. The client’s Trauma Symptom Checklist-40 (TSC-40) score reduced significantly from pre-treatment to follow-up which indicated that the client significantly reduced her trauma symptomology (Burrows). It was noted that the client’s scores on the Valued Living Questionnaire (VLQ) measurement did not indicate the significant changes that the author noticed from pre-to-post treatment; the scores did not reflect the progress that the client made on valued-directed living (Burrows). Overall, the client had made significant and moderate changes over the 18 ACT sessions, and the author noted that the client had become visibly more confident, relaxed, and mindful (Burrows).

Unlike the previous study that combined ACT with exposure-based treatments, Burrows demonstrated that ACT alone can potentially yield significant results for clients with PTSD or trauma-related symptomology. This finding should be examined further in order to see if exposure-based therapy is still the gold-standard in treating individuals with PTSD; perhaps ACT can be utilized in replacement of other traditional therapies for these types of disorders. The study did have limitations however, such as the client began medication for anxiety throughout the sessions, which could have been responsible for the changes demonstrated by the client (Burrows).

**Depression.**

Although it appears ACT is quite successful with anxiety symptomology, significant results have been reported in clients with depressive symptoms as well. A study conducted by Petkus and Loebach Wetherell in 2013 evaluated ACT with older adults diagnosed with
depression and anxiety. Petkus and Loebach Wetherell (2013) created a protocol that addressed all the components typically found in ACT; the therapy was conducted for 12 sessions, utilizing mindfulness and experiential activities and metaphors to teach the clients. Petkus and Loebach Wetherell’s client was a 69-year-old man with depression and anxiety. Joe was experiencing depressed mood, anhedonia, fatigue, sleeping problems, worthlessness, and could not concentrate (Petkus & Loebach Wetherell, 2013). At post-treatment, Joe’s Beck Depression Inventory (BDI) score had a reduction of 42% from pre-treatment (Petkus & Loebach Wetherell). The authors noted that Joe was making an effort to live a valued life; he contacted his son more frequently and obtained a job that he maintained. Petkus and Loebach Wetherell discussed the appropriateness of ACT with this population. In the case study, Joe made significant gains in his life and was responsive to ACT. The authors suggested that ACT should be implemented with older adults. They continued to suggest that incorporating it into pre-existing health care facilities and by introducing it into home-based visits from the client’s health provider, one can easily and effectively introduce the ACT components to the clients to assist in reducing mental health symptoms and increase appropriate coping strategies.

In another study, White et al. (2011) examined ACT with individuals who were experiencing depression following psychosis. White et al. designed an ACT protocol and developed a clinical trial titled “Prospective Randomised Open Blind Evaluation (PROBE)” (p. 902). Two groups were designed in a blind-rated control study, a randomised group to ACT and a randomised group to treatment as usual (TAU). All the participants had a diagnosis of a psychotic disorder or a depressive disorder. Many assessments were conducted in order to measure depression, positive and negative symptoms of psychosis, acceptance, experiential avoidance, mindfulness, and therapeutic alliance (White et al.). The treatment was delivered to each individual client in 10 sessions and addressed all the core processes of ACT (White et al.). The TAU group continued with their current means of therapy, which included psychotherapy, psychopharmacological, and case management. White et al. noted that during the ACT sessions, participants had free access to psychopharmacological therapy and case management support. The participants come in monthly to complete the self-reported measures. White et al. stated that the ACT participants responded very well to the treatment and that when compared to the TAU, ACT participants had a diagnosis of depression pre-therapy to then having no depression by the 3-month assessment. Results otherwise were not significant when compared to the TAU; however, it is important to note that the follow-up time in this study was shorter than other studies, and thus could be why the effects were not the same.

**ACT in Group Treatment**

Results on an individual basis have shown significant improvements in symptoms, and on a group therapy level, ACT has shown similar results. Group therapy is on the rise due to the cost-effective and time-saving properties that groups can offer. By treating more individuals at once, more people can get the assistance that they need to be able to function in their day-to-day lives appropriately and thus not be placed on waitlists for months or even years. Eilenberg, Kronstrand, and Frostholm (2013) conducted a study using a group-based ACT intervention involving participants with health anxiety; health anxiety is described as a constant worry about having a serious illness, as well as preoccupation with health (Eilenberg et al., 2013). Health anxiety is distinguished by emotional and cognitive symptoms that can be misinterpreted by the individual as signs of a serious health issue. The increase in anxiety can then create more physiological arousal and worsen the individual’s anxiety (Eilenberg et al.). Eilenberg et al. stated that unlike treatments that focus on challenging thoughts and examining dysfunctional
beliefs, ACT seeks to encourage the individual to experience oneself entirely, including accepting thoughts and emotions.

For the study, Eilenberg et al. (2013) hypothesized that the participants would have a self-reported decrease in symptoms related to health anxiety and a reduction in emotional distress and an improvement in the participants’ views of illness 6 months post treatment when compared to pre-treatment assessments. Participants completed pre-and-post measures and completed the same measures 3-and-6 months afterwards (Eilenberg et al.). They used the Whiteley-7 Index, Symptom Checklist-8 Scale (SCL-8 Scale), the Symptom Checklist-90-Revised (SCL-90-R) Somatization Subscale, and the Illness Perception Questionnaire (IPQ). These questionnaires measure symptoms of health anxiety, anxiety and depression symptoms, and illness perceptions (Eilenberg et al.). Participants attended 9 group sessions, once a week, for 3.5 hours in length per session and participants were required to complete homework in-between sessions (Eilenberg et al.).

Post-measure data for thirty-two participants was collected and results of the Whiteley-7 Index yielded significant results (Eilenberg et al.). The participants’ mean score at post-therapy decreased by 26.6 and a 49% change in scores from pre-measure to 6-month follow-up occurred; results of the SCL-8 demonstrated a similar score with a decrease of 16.0 and a 47% change in scores from pre-group measures to 6-month follow-up occurred; results of the SCL-90-R had a 40% change in scores from pre-measure to 6-month follow-up; the IPQ had a decrease in scores on all categories of the questionnaire, including significant results regarding to the emotional representations and consequences portion (Eilenberg et al.).

According to Eilenberg et al. (2013), statistically significant reductions in health anxiety symptoms were reported, and thus conducting ACT in a group appears to be an appropriate choice for individuals with health anxiety. It should be noted that this study is a single-group design (no control group) that did not control for confounding variables, because of this the participants’ reductions in scores may not be solely the work of the ACT intervention (Eilenberg et al.).

Clarke, Kingston, Wilson, Bolderston, and Remington (2012) had similar results as Eilenberg et al.’s study. Clarke et al. (2012) studied a group of treatment-resistant clients in order to examine the effects of ACT. The participants had a vast range of diagnoses, including Personality Disorders (PD), depression, history of eating disorders, and substance use (Clarke et al., 2012). Clarke et al. developed a group-based therapy protocol specifically to address individuals who may be a challenge to typically treat. A treatment-resistant client is described as someone who has not been able “to obtain clinically meaningful improvements following such interventions, continue to experience persistent symptoms, and thus remain resistant to treatment” (p.560, Clarke et al., 2012). Clarke et al.’s study contained 10 participants recruited from a local health service provider; participants were chosen if they were on a waitlist, members at a community service facility for mental health, or from a specialist service for Borderline Personality Disorder (BPD).

Clarke et al. used seven measures: Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II), The Symptoms Checklist-90 Revised (SCL-90-R), The World Health Organization (WHO), Quality of Life (QuOL-BREF), Beck Depression Inventory-II (BDI-II), The Acceptance and Action Questionnaire-9 (AAQ 9-item), The Mindful Attention Awareness Scale (MAAS), and the Automatic Thoughts Questionnaire (ATQ).

Two groups were formulated with the 10 participants (group 1=6, group 2=4). The groups were conducted for 16 weeks and included all the processes of ACT; each session was
2.5 hours in length. Clarke et al.’s sessions involved Psychoeducation, mindfulness exercises, review of material, and homework. Clarke et al. introduced exercises that were not previously planned into the protocol if participants were struggling; these exercises were primarily focused on valuing or committed action.

Participants completed the post-assessments by mail; 6-month follow-up assessments were also sent by mail. A booster session was conducted at 12-month follow-up and participants filled out the assessments again. Due to the size of the sample, Clarke et al. analyzed the individuals and the groups separately.

Clarke et al. (2012) discovered that from the five participants that demonstrated diagnostic criteria for a PD, only two participants continued to meet the criteria at the 6-month follow-up, and zero participants met the criteria 12 months later. Paired sample t-tests were utilized to compare the scores. ACT group therapy for treatment-resistant clients showed significant reductions according to the assessment scores and as a group, significant improvements were achieved when comparing pre-assessment scores to the 6-month follow-up (Clarke et al.). Some improved areas include the quality of life and the depressive and other psychological symptoms categories (Clarke et al.). Individually, approximately half the participants had a significant decrease in symptoms (Clarke et al.).

A limitation to this study, as proposed by the authors, can be that all the participants had previously attended other forms of therapy, which may have been responsible for the current changes in scores. Another limitation can be the use of self-report measures. The authors noted that this ACT protocol was practical, successful as a whole, and cost-effective; this leads to the overall conclusion that ACT in a group format has promise with this particular population.

Very little empirical support has been investigated for the use of ACT and individuals with eating disorders. Juarascio et al. (2013) examined ACT with patients living in a residential house who had an eating disorder. Treatment as usual group (TAU), which involved a number of differing psychotherapeutic techniques, was used to compare to the ACT group (Juarascio et al., 2013). Juarascio et al. stated that the main outcomes of the study revealed a consistent pattern in that the participants in ACT had greater improvements in eating pathology. Participants in the ACT revealed greater increases in their psychological flexibility according to the AAQ-II. Juarascio et al. stated that participants in the ACT group had less hospitalizations after treatment when compared to the TAU group. According to this research, ACT appears to be a useful and appropriate treatment for women diagnosed with an eating disorder (Juarascio et al.), and although ACT may have promise to the eating disorder population, clearly more research is needed to address the gap in the literature.

ACT Versus Cognitive Behavioural Therapy (CBT)

Throughout the years therapy has been forever evolving, beginning with Freud’s “talk therapy” and going through phases of Skinner’s behaviourism, Rogers’ humanistic therapy, and the traditional cognitive behavioural therapies and although some of these therapies are still utilized to this day, examining newer therapies allows for the potential for more efficacious interventions. When evaluating ACT, one must compare it to the current “gold standard” of therapies—Cognitive Behavioural Therapy (CBT). ACT and CBT have similar components that classify the therapies into a behavioural treatment, such as that internal experiences are not necessarily reality and that both therapies address goal setting in some way (Avdagic, Morrisey, & Boschen, 2014); however, there are differences to both treatments. ACT focuses on psychological flexibility and emphasizes experiential avoidance as being the reason that individuals have psychopathology (Avdagic et al., 2014); CBT views an individual’s
psychopathology as dysfunctional internal experiences “arising from flawed information processing” (p.111).

Researchers, Avdagic, Morrissey, and Boschen (2014) conducted a randomized controlled trial, comparing ACT and CBT with 51 participants. All participants had a diagnosis of generalized anxiety disorder (GAD) and were recruited through flyers, newspapers, and emails (Avdagic et al., 2014). According to Avdagic et al., participants were randomly assigned to a therapy group; ACT and CBT both had 19 participants. Avdagic et al. used nine measures: one diagnostic measure, three outcome measures, one ratings measure, and four process measures. Participants completed the assessments pre-and-post therapy and at a 3-month follow-up. ACT and CBT groups lasted 6 weeks and each session lasted 2 hours in length (Avdagic et al.).

In the study by Avdagic et al., session one presented the topics of creative hopelessness, workability, and control; whereas CBT focused on what GAD is, recognize one’s own anxiety, triggers of anxiety, and what may be maintaining it. Session two for ACT emphasized how control is the problem and acceptance; whereas CBT examined GAD more thoroughly, relaxation techniques, and an introduction to altering anxious thoughts. ACT focused on acceptance, defusion, and values in session three; CBT focused on controlling thoughts, overestimation of risks, overthinking, and cognitive restructuring. Session four for ACT emphasized acceptance, self-as-context, and values; CBT examined worry control, exposure, behavioural experiments, and interoceptive exposure. In session five, ACT focused on values and direct action; whereas CBT emphasized worry prevention, safety behaviours, examining real life problems. Lastly, the final session for ACT examined committed action and values; CBT group focused on one’s accomplishments and the future.

Avdegic et al. (2014) discussed the results of the comparison study. According to the research, both ACT and CBT yielded significant results at post-treatment and at follow-up (Avdegic et al.). Although both therapies had similar results, ACT did show more significant results in some assessments (Avdegic et al.). The authors stated that ACT had steeper gains when compared to CBT and in turn revealed greater improvements in symptom reduction in the ACT participants well before the CBT group. Furthermore it was noted that the CBT group needed more allotted time to understand the CBT skills versus the ACT group. Avdegic et al. summarized the study by confirming that ACT, just like CBT, should also be considered the ‘gold-standard’ in treatment efficacy. In fact, the authors stated that this is evidenced by the quick clinical improvements achieved by participants in the ACT group; the CBT appeared to have needed more time to potentially reach the same improvements as the ACT group. Avdegic et al. suggested that this cost-effective therapy should be utilized more when treating GAD.

A 2012 study conducted by Arch, Wolitzky-Taylor, Eifert, and Craske had similar results as the Avdegic et al. research. Arch et al.’s (2012) study contained 77 participants that met the diagnostic criteria for an anxiety disorder. Arch et al. randomly divided the participants into two groups, 35 participants in the CBT group and 32 participants in the ACT group. The authors used the Anxiety Sensitivity Index (ASI) and the Believability of Anxious Feelings and Thoughts (BAFT) measurements pre-and-post treatment. Arch et al. also assessed the participants by the Anxiety Sensitivity Index (ASI), the Penn State Worry Questionnaire (PSWQ), the Fear Questionnaire (FQ), the Quality of Life Inventory, and the General Depression Scale.

Participants were required to attend 12 sessions, an hour long in length per session, for 12 weeks (Arch et al.). The ACT sessions focused on psychoeducation, creative hopelessness,
addressed control tactics, mindfulness, acceptance, defusion, values, goals, committed action, and exposure (Arch et al.). The CBT sessions emphasized psychoeducation, self-monitoring, cognitive restructuring, breathing exercises, exposure, hypothesis testing, and anxiety reduction (Arch et al.). Although both therapies offered similar components, they were delivered in different ways according to the treatment guidelines.

Comparable to Avdegic et al.’s study, Arch et al. also affirmed that both the ACT and CBT treatments resulted in significant improvements; however, ACT had more significant gains with the participants than CBT did in both the cognitive defusion and the anxiety sensitivity categories. ACT therapy results indicated a steeper improvement in cognitive defusion and anxiety coping strategies compared to CBT’s more gradual improvements, but with ACT reaching higher magnitudes than CBT (Arch et al.). Arch et al. noted that the cognitive defusion component of ACT played an important role in the reduction of worrying for the participants when compared to CBT’s components addressing worry. Arch et al. suggested that the cognitive defusion process of ACT is what makes ACT a successful behavioural-based therapy for individuals with anxiety disorders. Arch et al. continued stating that ACT’s view of a more detached perspective of internal experiences was well received by the participants indicating a more rapid reduction in anxiety and depressive symptoms.

As many studies, a limitation to this research was the self-reporting measures (Arch et al.). The authors noted that the therapists used to conduct ACT and CBT were new and thus unexperienced; perhaps with more experienced therapists, more gains could have been made by the participants across both treatments. It should be noted however, that this study had a good representation of diverse anxiety diagnoses, indicating that in an ACT group format, a heterogeneous group of individuals can see significant results.

Another study, evaluating ACT and CBT, was conducted by Niles, Burklund, Arch, Lieberman, Saxbe, and Craske in 2014. Niles et al. (2014) collected data on 71 participants with social anxiety on a session-to-session basis. Thirty-four participants were in the ACT group and thirty-seven participants were in the CBT group. Pre-post and two follow-ups were conducted for assessment. The ACT and CBT sessions resembled the sessions from the Arch study targeting the main components of what ACT and CBT generally provide in treatment. According to the results, ACT had more significant improvements in experiential avoidance when compared to the CBT group (Niles et al.). The authors noted that ACT’s decrease in experiential avoidance began sooner than CBT, but that CBT did begin to decrease later on in the treatment sessions. As in both the Avdegic et al. and Arch et al. studies, ACT revealed a quicker improvement than CBT. ACT resulted in a greater reduction of negative cognitions, and as noted by Arch et al., Niles also suggested that the defusion component in ACT is responsible for the decrease in negative cognitions and thus a more behaviourally-based process of ACT.

In addition, a study conducted by Arch, Eifert et al. in 2012 examined different anxiety disorders with ACT and CBT. This study contained 143 participants, separated into 65 individuals for the ACT group and 78 individuals for the CBT group (Arch, Eifert, et al., 2012). A pre-post-and-follow-up design was utilized (Arch, Eifert, et al.). Results indicated that although the overall findings revealed no long-term differences between ACT and CBT, greater psychological flexibility and a lower anxiety symptom severity was recorded at follow-up for ACT (Arch, Eifert, et al.). Arch, Eifert et al. stated that ACT is an applicable and feasible alternative to the traditional ‘gold standard’ method of CBT.

In a systematic review and meta-analysis conducted by Öst (2014), ACT did not surpass CBT when examining 10 studies pre-2008 and 10 studies post-2008. Öst stated that at post-
intervention and at follow-up no significance was reported, which indicates that a conclusion cannot be made regarding ACT as a better treatment compared to CBT when examined and compared in randomized studies.

**Psychological Flexibility and ACT**

Psychological flexibility is the ability for an individual to accept and be willing to experience uncomfortable and painful internal events, as oppose to avoiding or controlling those experiences (Fledderus, Bohlmeijer, Fox, Schreurs, & Spinhoven, 2013) and be willing to commit to a valued-directed life and make the appropriate changes in order to do so. Fledderus et al. (2013) studied the role of psychological flexibility and ACT with participants who were experiencing psychological distress. Two hundred and fifty participants received guided self-help ACT and one hundred and twenty-six individuals were put on a waitlist. A pre-post design was utilized and the Center of Epidemiological Studies-Depression Scale (CES-D), the Hospital Anxiety and Depression Scale-Anxiety Subscale (HADS-A), and the Acceptance and Action Questionnaire-II (AAQ-II) assessments were conducted (Fledderus et al.). According to Fledderus et al., both anxiety and depression symptoms decreased over the course of ACT. Fledderus et al. also stated that the participants who at baseline indicated anxiety symptoms, due to increased psychological flexibility, saw further reductions of their symptoms after the intervention was completed. Although individuals with depression symptoms did not have the same sustainability as the individuals with anxiety, those participants did remain stable over time (Fledderus et al.). Regardless, the authors noted that psychological flexibility is important to develop more long-term effects on reducing participants’ psychological distress. This study’s results indicated that individuals with higher levels of psychological flexibility tend to make more gains with their symptomology; however it is important to acknowledge that even individuals with lower levels of psychological flexibility could benefit from ACT (Fledderus et al.). Fledderus et al. stated that improvements in psychological flexibility occurred almost instantly when ACT began, which in turn had a positive correlation to a reduction in psychological distress. Lastly, Fledderus et al. noted that over time, psychological flexibility can be an integral and protective factor for mental health. Because ACT bases its 6 processes from the psychological flexibility hexaflex, an individual can infer that ACT would be the best treatment for individuals experiencing psychological distress.

**Summary**

The literature on ACT and mental health disorders is diverse when directed at anxiety, mood, and psychotic disorders. Literature on eating disorders were not as in abundance as other disorders. Research has evaluated the short and long term effects of this treatment through a variety of measurements, including acceptance and mindfulness scales, quality of life scales, symptomology assessments, and diagnostic criteria interviews. The literature is convincing and encouraging, suggesting ACT to be a viable and efficacious therapy for individuals in both an individual and group setting (Burrows, 2013; Clarke, Kingston, Wilson, Bolderston, & Remington, 2012; Eilenberg, Kronstrand, & Frostholm, 2013; Petkus & Loebach Wetherell, 2013; Popick Brady & Whitman, 2011; Thompson, Luoma, & LeJeune, 2013). ACT, even when combined with other treatments (e.g., exposure therapy), resulted in significant improvements in the client’s measurement scores. ACT and CBT were compared, and although results were somewhat equal, ACT continually resulted in quicker results and more magnitude than the latter (Arch, Eifert, Davies, Plumb-Vilardaga, Rose, & Craske, 2012; Arch, Wolitzky-Taylor, Eifert, & Craske, 2012; Avdegic, Morrissey, & Boschen, 2012; Niles, Burklund, Arch, Lieberman, Saxbe, & Craske, 2014). A meta-analysis found no difference between treatments, but individuals
studies revealed that (Öst, 2014) ACT has shown to be a strong competitor for the “gold standard” for efficacious and viable treatment for therapeutic interventions for individuals with mental health challenges.

**Relationship Between Literature and Current Study**

The research has shown that when an individual increases psychological flexibility, cognitive defusion, avoidance, and mental health symptoms change for the better. Increased psychological flexibility may be the key answer to client’s awareness and acceptance into having a value-directed life, based on mindfulness and committed action. Studies have found success when focusing on the psychological flexibility hexaflex and incorporating all six processes of ACT in a therapeutic protocol (Flederus, Bohlmeijer, Fox, Schreurs, & Spinhoven, 2013). By increasing psychological flexibility, appropriate coping strategies occur both by skill building in session and by natural consequences to the client’s new found awareness. The current study’s aim is to increase psychological flexibility and increase coping strategies using ACT with a group of adults with mental health disorders. The literature is supportive of an ACT protocol based on increasing psychological flexibility and developing coping strategies, and thus it is hypothesized that clients with mental health symptoms could increase both psychological flexibility and coping strategies in an ACT intervention.
Chapter III: Method

Participants

Participants and recruitment procedure.
Prior to commencing, the study was approved by the Research Ethics Board (REB) of St. Lawrence College on September 30, 2014 (see Appendix A). Fifteen individuals were referred to the ACT group by mental health rehabilitation workers at Frontenac Community Mental Health and Addiction Services (FCMHAS). An ACT flyer was created outlining a brief synopsis of what ACT is, the group session schedule, and information on how to refer the client. All individuals were interviewed by the facilitator to determine eligibility. Ten individuals met the inclusion criteria (see below) and were offered a place in the group. Nine individuals agreed to participate in the group, four male participants and five female participants. All participants met the diagnostic criteria for a mental health disorder; all participants had different diagnoses.

Inclusion/exclusion criteria.
Inclusion criteria included that the individual had to have a mental health diagnosis, be over the age of 18, be a current client at the agency, have the ability to read and write, have a history of attendance at the agency, and participate voluntarily. Exclusion criteria included: active suicidality and/or psychosis, or a learning disability (LD) that would hinder learning the material.

Participant characteristics.

Participant 1.
Participant 1 is a transgendered group member, who identifies as a male, diagnosed with Major Depressive Disorder (MDD), Borderline Personality Disorder (BPD), Gender Identity Disorder (GID), and potential Fetal Alcohol Spectrum Disorder (FASD). Participant 1 received Art Therapy at the same agency. He is 34 years old and is a college graduate.

Participant 2.
Participant 2 is a male group member diagnosed with MDD and Attention Deficit Hyperactivity Disorder (ADHD). Participant 2 received no therapy at the time of the ACT group. He is 30 years old and has completed high school.

Participant 3.
Participant 3 is a male group member diagnosed with Social Anxiety. Participant 3 has received ACT treatment in the past through another agency. He is 43 years old and has obtained a Doctorate (Ph.D.) degree.

Participant 4.
Participant 4 is a male group member diagnosed with Posttraumatic Stress Disorder (PTSD) and has a gambling addiction. He received addiction treatment via an addiction counsellor at the same agency and attends an addictions group weekly. Participant 4 is 63 years old and has completed some college.

Participant 5.
Participant 5 is a female group member diagnosed with an Eating Disorder Not Otherwise Specified (NOS). Participant 5 also self-reported that she gets addicted to things easily and has sought treatment in the recent past for substance abuse. Participant 5 has attended counselling and group therapy services through the Eating Disorders Clinic at a local hospital in the past. She did not attend any other treatments during the ACT group intervention. Participant 5 is 42 years old and is a university graduate.

Participant 6.
Participant 6 is a female group member diagnosed with Unipolar Depression, BPD, with major depressive episodes. She completed a cognitive behaviourally-based skill building program at the same agency prior to beginning the ACT therapy, and a few years prior was receiving Dialectical Behavioural Therapy at an agency that specializes in BPD. Participant 6 is 57 years old and has completed college.

Participant 7.
Participant 7 is a female group member diagnosed with PTSD, Panic Disorder with Agoraphobia. Participant 7 has been experiencing chronic pain for a few years, and at times cannot complete her day-to-day tasks. She has received treatment in the past for an opiate addiction and did not receive any other substance abuse treatment during the ACT group therapy. She is 46 years old and has completed some college.

Participant 8.
Participant 8 is a female group member diagnosed with BPD. Participant 8 did not receive treatment in the past or during the ACT group therapy. She is 54 years old and has partially completed high school.

Participant 9.
Participant 9 is a female group member diagnosed with a variety of anxiety disorders, but formal documentation does not specify which one is the primary condition. Participant 9 is 49 years old and has completed some college. Participant 9 decided to exit the group after session 4 to seek more intensive care at the local hospital and thus none of her pre-data results were analyzed.

All participant characteristics can be seen in Table 1.

<table>
<thead>
<tr>
<th>Participants</th>
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<td>PTSD</td>
<td>Eating disorder (NOS)</td>
<td>Unipolar disorder, MD episodes</td>
<td>PTSD, Panic disorder, Agoraphobia</td>
<td>BPD</td>
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Participants’ criteria for group.
The participants completed a pre-interview prior to the start of the ACT group. The researcher gathered information on the individual’s current symptomology, readiness for change, and examined if the individual met the inclusion criteria through an unstructured interview. Of the 15 individuals interviewed, 10 individuals met the criteria, and 9 individuals agreed to partake in the group therapy.

Informed consent procedure.
Informed consent (Appendix B) was obtained from all participants previous to the first group session. The facilitator read the consent form out loud to the participants, then the participants were encouraged to re-read the document and ask any questions for clarification.
Participants then signed and dated the document and a copy of the signed consent was given to the participants at the following session for them to keep. The document contained contact information for the facilitators, the agency supervisor overlooking the group, and the Research Ethics Board (REB). The consent also described any risks and benefits to taking part in the study, plans in place for emergency situations, and how the information collected will be used and stored.

**Design**

A one-group pre-and post-test design was utilized for this study. Comparisons of scores on assessment measures pre-treatment were compared to the post-treatment scores and again at a 7-week follow-up for one group of individuals. Ongoing data collection of attendance and homework completion were conducted. The data was analyzed using the Wilcoxon Signed Rank test on SPSS Statistics 21.

**Independent variable.**

The independent variable is the ACT group therapy. The ACT group therapy was a modified version of Boone and Myler’s 2012 Acceptance and Commitment Group Therapy protocol conducted at Cornell University Counseling and Psychological Services. Boone and Myler conducted ACT in a group setting over 10 sessions addressing depression and anxiety. The six processes of ACT were introduced and a focus on psychological flexibility encompassed the direction for the entire protocol. Permission for use and modifications to the protocol was received via email by Mr. Boone on 07/09/2014. Modifications were necessary due to the level of cognitive functioning of the clients in this study. The current clients were lower functioning in comparison to Boone and Myler’s study. Due to time restraints, the current protocol addressed all the processes into 8 sessions, rather than 10. Minor changes were completed to Boone and Myler’s PowerPoint presentations, exercises, and the order of the introductions of the processes. This study protocol focused more heavily on the behavioural components of ACT by targeting the Values and Committed Action processes into every session.

Session 1 focused on what ACT is, the present moment, willingness, and control as the issue. Session 2 addressed personal values. Session 3 focused on values and committed action. Session 4 and 5 entailed the process of defusion. Session 6 discussed self-as-context. Session 7 focused on psychological flexibility, by examining present moment, acceptance, and defusion. The concepts were covered in small and big group discussions, previous activities and metaphors that were completed in sessions 1-6 were discussed, and tailoring the information to pertain to the participants’ daily lives was established. The final session focused on the remaining processes of the Psychological Flexibility Hexaflex. Self-as-context, values, and committed action were the focus and similar to session 7, the components were discussed in detail. Each session incorporated mindfulness exercises, experiential exercises, group discussions, didactic learning material, and homework assignment. Weekly homework for each week involved an assigned reading, mindfulness exercise, and goal-oriented exercises.

Participants were required to attend all group sessions; however, participants who could not attend a session, met individually with the facilitator to cover the information that was missed.

The researcher and co-facilitator was a Behavioural Psychology student in her fourth year of an undergraduate program. The sessions were conducted in collaboration and under the supervision of a Psychological Associate, member of the Ontario College of Psychologists who
had attended several ACT professional training events. The group was monitored every session by a Vocational Rehabilitation Specialist at the agency.

**Dependent variables.**

The dependent variables are the scores retrieved from the assessment measures. The pre-and post-assessment scores and the follow-up were examined. The scores post-treatment are an indication on whether or not the independent variable manipulation made a difference in the participants’ lives when compared to the pre-treatment scores. The follow-up scores are indicative of maintenance of the acquired skills and coping strategies. The scores are an indication of the participants’ acceptance, symptomology, and mindfulness.

**Acceptance and Action Questionnaire-II (AAQ-II).**

The AAQ-II (Appendix C) is a self-report questionnaire that measures an individual’s willingness. The questionnaire has 7-items, and according to Fledderus, Oude Voshaar, ten Klooster, and Bohlmeijer (2012), the measure has good psychometric consistency. The individual inserts a number between 1 and 7 that best describes the truth of the statement in regards to that individual’s life. The likert-type scale begins at 1-never true to 7-always true, and options in between that indicate: very seldom not true, seldom not true, sometimes true, frequently true, to almost always true.

**Depression Anxiety Stress Scale (DASS).**

The DASS (Appendix D), as stated in the online DASS manual by the Psychology Foundation of Australia, is a questionnaire that examines “the process of defining, understanding, and measuring the ubiquitous and clinically significant emotional states usually described as depression, anxiety and stress” (para. 1). The DASS is a questionnaire that contains 42-items rated along a likert-type scale. The options include: 0-did not apply to me at all, all the way to 3-applied to me very much or most of the time. According to the Psychology Foundation of Australia, the measure has high internal consistency and works well in a many different settings. Due to the DASS being more dimensional, rather than categorical, the questionnaire is not meant to be used as a diagnostic tool, but can determine the degree to which the individual is experiencing symptomologies (Lovibond & Lovibond, 1995).

**Five Facet Mindfulness Questionnaire (FFMQ).**

The FFMQ (Appendix E) is a self-report questionnaire that measures an individual’s mindfulness. The questionnaire has 39-items, and contains five mindfulness sub scales. Williams, Dalgleish, Karl, and Kuyken (2014) describe the subscales as follows: “Non-Reactivity to Inner Experience, Observing/Noticing, Acting with Awareness, Describing, and Non-Judging of Experience” (p. 408). Baer et al. conducted a 4-part examination of the FFMQ. The first section investigated the psychometric characteristics of a variety of mindfulness questionnaires. Six hundred and thirteen individuals participated in the study by completing a variety of questionnaires. The second part of the study examined the facets of mindfulness. The third section used confirmatory factor analysis (CFA) “to investigate the replicability of the five-factor structure derived in Part 2 in an independent sample” (p. 36, Baer et al., 2006) and lastly, Baer et al. examined if the variables from the first section were differentially related to the facets of mindfulness. Results of the study indicated the FFMQ is one of the only mindfulness-based questionnaires that targets five facets and has relatively good psychometric properties. The researchers stated that the FFMQ is psychometrically promising, and that the questionnaire has
good internal consistency. Three of the five facets had incremental validity, which can be useful in predicting psychological symptomology (Baer et al.).

**Setting and apparatus.**

The ACT group therapy sessions took place in a designated room in the Frontenac Community Mental Health and Addiction Services (FCMHAS) agency. A flipchart with markers was utilized during the sessions. A duotang was provided to the participants prior to the group commencing. Handouts were provided to the participants every session that included the activities of that day and the homework handouts. A mindfulness CD was given to all the participants at the first session. The CD included four mindfulness exercises that the participants could take home and use; a computer laboratory at the agency was open during business hours for participants to use if they could not play the CD at home.

**Procedures**

Workers at the agency filled out referral forms for their clients that they believed could benefit from the ACT group. The referral forms were given to the researcher and the clients were called to come to an intake interview. Each client met individually with the researcher and the Vocational Rehabilitation Specialist worker from the agency. An assessment interview was conducted and an explanation of the group was presented to the clients. After all the interviews were completed, the researcher called all the clients who met the inclusion criteria to formally invite them to join the group.

Written consent forms were given to each participant; the researcher read the content out loud to the participants. The participants then re-read the form over and signed and dated the forms before commencing the group therapy. Copies of the consent form were given to all the participants.

The pre-assessment questionnaires were given to each participant to fill out. Assistance was given to individuals who could not understand the items. The researcher read the items out loud, and the participants inserted the answer that best suited them at that time on their own copy of the assessments.

Participants were expected to attend all the eight sessions of ACT, unless due to an illness or more serious circumstance. If a participant missed a session, a make-up one-to-one meeting was scheduled with the facilitator. Participants were informed that homework was to be assigned at every session, and that they were encouraged to complete the homework, but that the decision to complete the homework was up to them.

Session 1 began on October 7, 2014. The focus of the session was addressing that control is the problem and contact with the present moment. The group began by introducing the two co-facilitators and an introduction to the group’s commonalities and symptomologies was discussed. A mindfulness exercise was conducted and then the group as a whole worked together to make a list of guidelines and considerations to follow specific to the ACT group. A copy of the guidelines was given to the participants before leaving the session. Participant introductions were then made through an ice-breaker exercise, facilitating discussion amongst the peers in the group. After the introductions, the psychoeducation component was conducted through a PowerPoint presentation and oral presentation by the facilitators. The didactic learning consisted of acceptance, present moment, and control. In between the PowerPoint slides, an experiential exercise was completed. Another mindfulness exercise was completed before assigning the week’s homework. The homework consisted of a reading and a mindfulness CD exercise to listen to daily.
Session 2 began on October 14, 2014. The process of values was the focus of this session. The session consisted of a mindfulness exercise followed by discussing the previous week’s homework. An experiential exercise was conducted and psychoeducation was presented in the form of a PowerPoint and oral presentation. Another experiential exercise was conducted that focused on value-directed goals. Homework was then assigned, which consisted of a reading, mindfulness CD exercise, a values road map exercise, a "Bulls Eye" exercise that focused on values and value-directed living, and to accomplish one step to their goal.

Session 3 occurred on October 21, 2014. Values and committed action were presented through experiential exercises, such as a Values and Goals Worksheet and a Bulls Eye exercise. A brief PowerPoint was presented after a mindfulness exercise and the experiential activities. Homework was assigned, which consisted of a reading, mindfulness CD exercise, a bold move activity that asks the participant to engage in a behaviour that is consistent with one’s values that they want to do, but that they would not typically do, and to complete another step in their valued-goal.

Session 4 took place on October 28, 2014. The process of defusion was separated into two sessions, with session 4 being the first part. The session began with a mindfulness exercise, followed by reviewing the previous week’s homework. Psychoeducation and many experiential exercises followed. The participants were required to do a lot of activities that involved a lot of moving and discussion. Some exercises involved using props (e.g., sunglasses) to illustrate the concept of defusing unhelpful thoughts and feelings without challenging them. The session ended with assigning homework.

Session 5 occurred on November 4, 2014. The second part of defusion was presented, beginning with a mindfulness exercise. Experiential exercises focusing on defusing unhelpful thoughts and feelings were introduced throughout the session along with didactic learning through a PowerPoint presentation. The session ended with a brief mindfulness exercise and homework assignment.

Session 6 began on November 11, 2014. Session 6 presented the process of self-as-context. The session began with a mindfulness exercise and reviewing the homework from last week. A Psychological Flexibility hexaflex was introduced to the groups and the facilitators discussed how as a group we have completed almost all the core processes of ACT, and that at this session, the last component will be presented. A PowerPoint presentation was delivered and experiential exercises were completed. A mindfulness activity was conducted in which participants were asked to observe themselves from the observer self. Many metaphors were used to help the participants understand the material. Homework was then assigned.

Session 7 occurred on November 18, 2014. The six processes of ACT have been completely taught by this session, and so session 7 focused on 3 processes to teach more in-depth and relate the information, metaphors, and exercises to the participants’ daily lives. Present moment, acceptance, and defusion were discussed more thoroughly. Group work and discussion were heavily encouraged during this session. A mindfulness exercise and homework review and assignment also occurred.

Session 8 took place on November 25, 2014. The same outline from session 7 was utilized in session 8. The other 3 processes: self-as-context, values, and committed action, were presented. The session ended with a certificate ceremony for the participants and snacks were provided. Post-assessments and group surveys were then given to participants to complete privately at the agency. Participants who had difficulty with the pre-assessments were kept back and worked with one-on-one. The facilitator read the items out loud and the participant inserted
the appropriate answer that was suitable to them at the time. All participants received certificates of completion at the end of the session (see Table 2 for the ACT processes examined in group).

A question and answer session was completed on January 13, 2014, 7 weeks post treatment. During this time, the participants met with the facilitator one-on-one in a designated office room to fill out the assessments again.

Table 2
*ACT Processes Examined in the Group*

<table>
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<tr>
<th>Sessions</th>
<th>ACT Process Examined</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Present Moment and Acceptance</td>
</tr>
<tr>
<td>2</td>
<td>Values</td>
</tr>
<tr>
<td>3</td>
<td>Values and Committed Action</td>
</tr>
<tr>
<td>4</td>
<td>Defusion I</td>
</tr>
<tr>
<td>5</td>
<td>Defusion II</td>
</tr>
<tr>
<td>6</td>
<td>Self-as-context</td>
</tr>
<tr>
<td>7</td>
<td>Psychological Flexibility I: Present Moment, Acceptance, and Defusion</td>
</tr>
<tr>
<td>8</td>
<td>Psychological Flexibility II: Self-as-context, Values, and Committed Action</td>
</tr>
</tbody>
</table>

*Note.* Present moment, values, and committed action were addressed in all sessions through mindfulness and experiential exercises.

**Facilitator Manual**

A facilitator manual (Appendix F) with all the session outlines, description of the outlines, list of materials, list of the exercises, PowerPoint slides, list of the readings, and list of the worksheets were provided. The manual is organized by sessions and has all the information that a new facilitator would need to facilitate the group again (see Table 3 for the Facilitator manual for the ACT group therapy).
Table 3  
*Facilitator Manual for the ACT Group Therapy*

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Letter to future facilitators</td>
</tr>
<tr>
<td>2</td>
<td>Introduction</td>
</tr>
<tr>
<td>3</td>
<td>Materials needed for implementation</td>
</tr>
<tr>
<td>4</td>
<td>Sessions 1-8 (outline, PowerPoint, experiential and mindfulness exercises, homework)</td>
</tr>
<tr>
<td>5</td>
<td>References</td>
</tr>
</tbody>
</table>
Chapter IV: Results

The hypothesis of the study was that participants of the ACT group would increase psychological flexibility, increase mindfulness, and consequently increase coping strategies and decrease symptoms. The three assessment measures that were utilized assessed these areas of interest. Below are the results of the study.

Descriptive Statistics for the Group

**AAQ-II.**

A decrease in the mean AAQ-II score of 6.75 occurred between pre-and post-assessments (see Table 4 for the Mean Assessment Scores of the AAQ-II, DASS, and FFMQ).

**DASS.**

A decrease in the mean DASS score of 30.5 occurred between pre-and-post assessments and the standard deviation increased by 3.67 from pre-to-post assessments. The mean score of the depression category of the DASS revealed a decrease of 12.13 from pre-to-post assessments and the standard deviation increased to 3.18 from pre-to-post assessments. The depression category began in the severe range of depression at pre-assessment and was in the mild range at post-assessment. The mean score of the anxiety category of the DASS revealed a decrease of 6.63 from pre-to-post assessments and the standard deviation decreased by 0.44 from pre-to-post assessment. The anxiety category was in the severe range at pre-assessment decreasing to the moderate range at post-assessment. The mean score of the stress category of the DASS revealed a decrease of 12.25 from pre-to-post assessments and an increase in standard deviation by 0.67. The stress category at pre-assessment was in the moderate range decreasing to the normal range at post-assessment (Table 4 for the Mean Assessment Scores of the AAQ-II, DASS, and FFMQ).

**FFMQ.**

An increase of 0.64 occurred for the mean FFMQ score from pre-to-post assessments and an increase of 0.28 occurred for the standard deviation. An increase of 0.52 occurred for the category of observe on the FFMQ with a decrease in standard deviation by 0.12. An increase of 0.63 occurred for the describe category on the FFMQ with an increase of 0.3 for the standard deviation. An increase of 0.54 occurred for the acting with awareness category on the FFMQ and an increase of 0.23 for the standard deviation from pre-to-post assessment. The nonjudging category had a mean increase in score by 0.54 and an increase in the standard deviation by 0.05. Lastly, the nonreacting category of the FFMQ had a mean score increase of 0.7 from pre-to-post assessment with a 0.49 increase in standard deviation (Table 4 for the Mean Assessment Scores of the AAQ-II, DASS, and FFMQ).
Table 4
The Mean Assessment Scores of the AAQ-II, DASS, and FFMQ

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Pre-Test (n=8)</th>
<th>Post-Test (n=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>AAQ-II</td>
<td>33.00</td>
<td>5.26</td>
</tr>
<tr>
<td>DASS</td>
<td>66.88</td>
<td>27.78</td>
</tr>
<tr>
<td>(Depression)</td>
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<td></td>
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<tr>
<td>DASS</td>
<td>24.88</td>
<td>10.13</td>
</tr>
<tr>
<td>(Anxiety)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DASS</td>
<td>17.63</td>
<td>10.94</td>
</tr>
<tr>
<td>(Stress)</td>
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<td></td>
</tr>
<tr>
<td>FFMQ</td>
<td>2.54</td>
<td>0.24</td>
</tr>
<tr>
<td>(Observe)</td>
<td>3.05</td>
<td>0.69</td>
</tr>
<tr>
<td>FFMQ</td>
<td>2.38</td>
<td>0.38</td>
</tr>
<tr>
<td>(Describe)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFMQ</td>
<td>2.19</td>
<td>0.58</td>
</tr>
<tr>
<td>(Act/Aware)</td>
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<td></td>
</tr>
<tr>
<td>FFMQ</td>
<td>2.74</td>
<td>0.68</td>
</tr>
<tr>
<td>(Nonjudging)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFMQ</td>
<td>2.46</td>
<td>0.37</td>
</tr>
<tr>
<td>(Nonreacting)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Statistical Analysis Results**

A Wilcoxon Signed Rank test was used to analyze the statistics. This test was used because the sample size was small, otherwise a t-test would have been conducted. Also, the participants were tested pre-treatment and post-treatment and at follow-up, and thus repeated measures was assessed. The Wilcoxon Signed Rank test fit the assumption criteria best to assess these measures. A two-tailed test was conducted using a significance level of .05 for all three assessments.

**AAQ-II.**

The results of the AAQ-II questionnaire revealed a statistically significant effect from pre-to-post assessment ($Z= -2.527, p= 0.012$). These results indicate a significant reduction in experiential avoidance as a group mean from pre-to-post intervention; which indicates a substantial increase in psychological flexibility.

**DASS.**

The results of the DASS questionnaire indicated a statistically significant effect from pre-to-post assessment ($Z= -2.103, p= 0.035$). These results indicate a significant reduction in depression, anxiety, and stress symptoms as a group mean.

Separately, the depression component of the DASS showed a decrease in the mean score ($Z= -1.820, p= 0.069$). Overall the ACT group showed a decrease in depression symptomology score from pre-to-post assessment, but the scores were not statistically significant.

The anxiety component of the DASS revealed a statistically significant decrease in the mean score ($Z= -2.032, p= 0.042$). Overall the ACT group significantly decreased their anxiety symptomology from pre-to-post assessment and from pre-to-follow-up.

The pre-assessment score of the stress component resulted in a statistically significant decrease ($Z= -2.524, p= 0.012$). Overall the ACT group significantly decreased their stress symptomology from pre-to-post assessment.

**FFMQ.**

The results of the FFMQ questionnaire revealed a statistically significant effect from pre-to-post assessment ($Z= -2.527, p= 0.012$). These results indicate a significant increase in mindfulness as a group mean.

The results of the FFMQ describe category revealed a statistically significant effect from pre-to-post assessment ($Z= -2.201, p= 0.028$). The results of the FFMQ acting with awareness category revealed a statistically significant effect from pre-to-post assessment ($Z= -2.366, p= 0.018$). The results of the FFMQ nonreacting category revealed a statistically significant effect from pre-to-post assessment ($Z= -2.375, p= 0.018$). The results of the FFMQ observe category revealed an effect from pre-to-post assessment ($Z= -1.893, p= 0.058$). The results of the FFMQ nonjudging category revealed an effect from pre-to-post assessment ($Z= -1.947, p= 0.051$). It appears that the participants increased their mindfulness from pre-to-post assessment.

**Follow-up Results**

Four participants attended the follow-up session 7 weeks after the post-assessment. Participants 1, 2, 3, and 4 completed the assessment measures. Due to the smaller number of participants, no statistical analysis was conducted, but descriptive statistics and visual analysis are presented.

**AAQ-II.**

The mean results at the post-assessment were maintained at follow-up. The post-assessment and follow-up scores were both 26.25 with a standard deviation of 9.22.

**DASS.**
The follow-up results for the DASS assessment revealed a further decrease at post-assessment from 36.38 to 34.5. A decrease of 1.88 with a standard deviation of 9.41. The depression category increased from post-assessment to follow-up, increasing to the moderate range by 3.5 (12.75, 16.25). The anxiety category decreased even further at follow-up from 11 to 6.25, decreasing by 4.75 to the normal range. The stress category decreased even further at follow-up from 12.38 to 12, remaining in the normal range.

**FFMQ.**

The follow-up results for the FFMQ assessment revealed that the four participants continued to make gains on all the categories of the FFMQ to the follow-up session. An increase occurred from post-assessment (3.18) to follow-up (3.58) by 0.4 with a standard deviation of 0.68. The observe category increased by 0.34 from post-assessment (3.59) to follow-up (3.93). The standard deviation was 0.83. The describe category increased by 0.29 from post-assessment (3.01) to follow-up (3.3). The standard deviation was 0.44. The acting with awareness category increased by 1 from post-assessment (2.73) to follow-up (3.73). The standard deviation was 0.61. The nonjudging category increased by 0.52 from post-assessment (3.28) to follow-up (3.8). The standard deviation was 0.59. The nonreacting category increased by 0.42 from post-assessment (3.16) to follow-up (3.58). The standard deviation was 1.01.

**Intervention Results for Each Individual Participant**

**Participant 1**

Participant 1’s AAQ-II results revealed that his experiential avoidance decreased from pre-to-post assessment and subsequently increased from post-assessment to follow-up (see Figure 1 for the AAQ-II graph; see Appendix G for the assessment table). These results reveal that Participant 1’s psychological flexibility decreased over the 7-week gap from post-treatment to the follow-up assessment.

![Figure 1](attachment:AAQ-II_scores.png)

*Figure 1.* The pre, post, and follow-up AAQ-II assessment scores for Participant 1.

Participant 1’s DASS results indicated that his depression and anxiety scores increased from pre-therapy to post-therapy, but decreased on the stress component. Participant 1 depression symptomology increased at post-assessment and then decreased at follow-up. These results indicate that by follow-up he had a lower depression score than at pre-assessment. Participant 1 increased in the anxiety category at post-assessment, later decreasing at follow-up remaining at his pre-assessment score. Participant 1 decreased his stress symptomology at post-assessment decreasing further at follow-up (see Figure 2 for the DASS graph; see Appendix G
for the assessment table). Participant 1 was in the normal range at follow-up for all three categories of the DASS.

![DASS Scores for Participant 1](image)

*Figure 2. The pre, post, and follow-up DASS assessment scores for Participant 1.*

Participant 1’s FFMQ results indicated that his mindfulness increased from pre-to-post assessment and decreased at follow-up. Participant 1’s scores increased on all of the five FFMQ categories from pre-to-post assessment and subsequently continued to make gains on some categories at follow-up (see Figure 3 for the FFMQ graph; see Appendix G for the assessment table).

![FFMQ Scores for Participant 1](image)

*Figure 3. The pre, post, and follow-up FFMQ assessment scores for Participant 1.*

Participant 1 attended 8 out of the 8 ACT sessions and attended the follow-up session. He completed 29 of the 49 required mindfulness homework exercises (see Appendix H for the mindfulness homework graph).

**Participant 2**
Participant 2’s AAQ-II results revealed that his experiential avoidance decreased from pre-to-post assessment and subsequently decreased even further at follow-up. (see Figure 4 for the AAQ-II graph; see Appendix I for the assessment table).

![Graph](image1)

**Figure 4.** The pre, post, and follow-up AAQ-II assessment scores for Participant 2.

Participant 2’s DASS results indicated that he decreased in all three categories from pre-assessment to post-assessment and subsequently decreased even further on the anxiety and stress categories at follow-up. At follow-up, Participant 2 was in the normal range for all three categories (see Figure 5 for the DASS graph; see Appendix I for the assessment table).

![Graph](image2)

**Figure 5.** The pre, post, and follow-up DASS assessment scores for Participant 2.

Participant 2’s FFMQ results indicated that his mindfulness increased from pre-to-post assessment and continued to increase at follow-up. Participant 2’s scores increased on all of the five FFMQ categories (see Figure 6 for the FFMQ graph; see Appendix H for the assessment table).
Participant 2 attended 8 out of the 8 ACT sessions and attended the follow-up session. He completed 25 of the 49 required mindfulness homework exercises (see Appendix J for the mindfulness homework graph).

**Participant 3**

Participant 3’s AAQ-II results revealed that his experiential avoidance decreased from pre-to-post assessment and subsequently decreased even further at follow-up (see Figure 7 for the AAQ-II graph; see Appendix K for the assessment table).

Participant 3’s DASS results indicated that his depression, anxiety, and stress scores decreased from pre-to-post assessment, but increased at follow-up for the depression and stress categories. Participant 3 depression symptomology was in the severe range, decreased to the moderate range at post-assessment, and further increased to the extremely severe range at follow-up. Participant 2 anxiety symptomology was in the normal range at pre-post-and-follow-up. His stress symptomology was in the normal range at pre-assessment increasing to the mild range at follow-up (see Figure 8 for the DASS graph; see Appendix K for the assessment table).
Participant 3’s FFMQ results indicated that his mindfulness increased from pre-to-post assessment on almost all of the categories and continued to increase at follow-up on some categories (see Figure 9 for the FFMQ graph; see Appendix K for the assessment table).

Participant 3 attended 7 out of the 8 ACT sessions and attended the follow-up session. Participant 3 made the researcher aware a week prior to his absence that he would be away and asked for the session’s materials prior to his absence in order to complete it. Participant 3 missed session 6. He met with the researcher individually prior to the next session to go over the missed material. He completed 28 out of 49 required mindfulness homework exercises (see Appendix L for the mindfulness homework graph).

Participant 4’s AAQ-II results revealed that his experiential avoidance decreased from pre-to-post assessment and subsequently increased at follow-up, but not to the original pre-
assessment score (see Figure 10 for the AAQ-II graph; see Appendix M for the assessment table).

![AAQ-II Scores for Participant 4](image1)

*Figure 10. The pre, post, and follow-up AAQ-II assessment scores for Participant 4.*

Participant 4’s DASS results indicated that his depression, anxiety, and stress scores decreased from pre-to-post assessment. Participant 4 depression symptomology was in the severe category at pre-assessment, decreasing to the moderate range at post-assessment, increasing to severe at follow-up. Participant 4 anxiety symptomology was in the moderate range at pre-assessment, decreasing to the normal range at post-assessment, increasing to the mild range at follow-up. His stress symptomology was in the normal range at pre- and post-assessment, increasing to the moderate range at follow-up (see Figure 11 for the DASS graph; see Appendix M for the assessment table).

![DASS Scores for Participant 4](image2)

*Figure 11. The pre, post, and follow-up DASS assessment scores for Participant 4.*

Participant 4’s FFMQ results indicated that his mindfulness increased from pre-to-post assessment on all the categories and subsequently decreased on most categories at follow-up (see Figure 12 for the FFMQ graph; see Appendix M for the assessment table).
Participant 4 attended 7 out of the 8 ACT sessions and attended the follow-up assessment session. Participant 4 missed the first session, but met with the researcher individually before the following session to go over the missed material. He completed 28 out of the 49 required mindfulness homework exercises (see Appendix N for the mindfulness homework graph).

**Participant 5**

Participant 5’s AAQ-II results revealed that her experiential avoidance decreased from pre-to-post assessment (see Figure 13 for the AAQ-II graph; see Appendix O for the assessment table).

![Figure 12. The pre, post, and follow-up FFMQ assessment scores for Participant 4.](image)

![Figure 13. The pre-and-post AAQ-II assessment scores for Participant 5.](image)

Participant 5’s DASS results indicated that her depression, anxiety, and stress scores decreased from pre-to-post-assessment. Participant 5 depression symptomology was at the mild range and decreased to normal at post-assessment. Participant 5 anxiety symptomology was in the moderate range and decreased to the normal range at post-assessment. Her stress
symptomology was in the moderate range and decreased to the normal range at post-assessment (see Figure 14 for the DASS graph; see Appendix O for the assessment table).

![Figure 14. The pre-and-post DASS assessment scores for Participant 5.](image)

Participant 5’s FFMQ results indicated that her mindfulness increased from pre-to-post assessment on 4 categories (see Figure 15 for the FFMQ graph; see Appendix O for the assessment table).

![Figure 15. The pre-and-post FFMQ assessment scores for Participant 5.](image)

Participant 5 attended 8 out of the 8 ACT sessions and did not attend the follow-up assessment. She completed 30 out of the 49 required mindfulness homework exercises (see Appendix P for the mindfulness homework graph).

Participant 5 was struggling with a sleep condition during the ACT group timeframe and she found it difficult to do the mindfulness exercises because she would fall asleep and have
difficulty sleeping at night. This researcher suggested she do the mindfulness activities as part of her sleep hygiene routine and the data collected reveals a correlation between when participant 5 began using the activities as part of her bedtime routine.

**Participant 6**

Participant 6’s AAQ-II results revealed that her experiential avoidance decreased from pre-to-post assessment (see Figure 16 for the AAQ-II graph; see Appendix Q for the assessment table).

![Figure 16. The pre-and-post AAQ-II assessment scores for Participant 6.](image)

Participant 6’s DASS results indicated that her depression score increased, her stress score decreased and her anxiety score remained the same from pre-to-post assessment. Participant 6 depression symptomology was in the extremely severe category at pre-and post-assessments. Participant 6 anxiety symptomology remained in the extremely severe range at pre- and post-assessments. Her stress symptomology also remained in the extremely severe range from pre-to-post assessments (see Figure 17 for the DASS graph; see Appendix Q for the assessment table).

![Figure 17. The pre-and-post DASS assessment scores for Participant 6.](image)
Participant 6’s FFMQ results indicated that her mindfulness increased on half of the categories and remained at the same score for the other half of the categories from pre-to-post assessment (see Figure 18 for the FFMQ graph; see Appendix Q for the assessment table).

![FFMQ Scores for Participant 6](image)

*Figure 18.* The pre-and-post FFMQ assessment scores for Participant 6.

Participant 6 attended 8 out of the 8 ACT sessions and did not attend the follow-up session. She completed 35 out of the 49 required mindfulness homework exercises (see Appendix R for the mindfulness homework graph).

Participant 6 had a dramatic change to her depression medication half way through the ACT group as suggested by her psychiatrist to aid in smoking cessation; as well Participant 6 lost a close pet prior to completing the post assessments. This may have altered the scores in such a way that the true post-scores were not depicted.

**Participant 7**

Participant 7’s AAQ-II results revealed that her experiential avoidance decreased from pre-to-post assessment (see Figure 19 for the AAQ-II graph; see Appendix S for the assessment table).

![AAQ-II Scores for Participant 7](image)

*Figure 19.* The pre-and-post AAQ-II assessment scores for Participant 7.
Participant 7’s DASS results indicated that her depression, anxiety, and stress scores decreased from pre-to-post assessment. Participant 7 depression symptomology was in the extremely severe range and decreased to the normal range. Participant 7 anxiety symptomology was in the extremely severe range and decreased to the moderate range. Her stress symptomology was in the severe range and decreased to the normal range (see Figure 20 for the DASS graph; see Appendix S for the assessment table).

![Figure 20. The pre-and-post DASS assessment scores for Participant 7.](image)

Participant 7’s FFMQ results indicated that her mindfulness increased from pre-to-post assessment on almost all the categories (see Figure 21 for the FFMQ graph; see Appendix S for the assessment table).

![Figure 21. The pre-and-post FFMQ assessment scores for Participant 7.](image)

Participant 7 attended 7 out of the 8 ACT sessions and did not attend the follow-up session. Participant 7 missed session 2, but met individually with the researcher before the
following session to go over missed material. She completed 34 out of the 49 required mindfulness homework exercises (see Appendix T for the mindfulness homework graph).

**Participant 8**

Participant 8’s AAQ-II results revealed that her experiential avoidance decreased from pre-to-post assessment (see Figure 22 for the AAQ-II graph; see Appendix U for the assessment table).

![Figure 22. The pre-and-post AAQ-II assessment scores for Participant 8.](image)

Participant 8’s DASS results indicated that her depression, anxiety, and stress decreased from pre-to-post assessment. Participant 8 depression symptomology was in the extremely severe range and decreased to the normal range at post-assessment. Participant 8 anxiety symptomology was extremely severe and decreased to normal at post-assessment. Her stress symptomology was in the severe range and decreased to the normal range at post-assessment (see Figure 23 for the DASS graph; see Appendix U for the assessment table).

![Figure 23. The pre-and-post DASS assessment scores for Participant 8.](image)

Participant 8’s FFMQ results indicated that her mindfulness increased from pre-to-post assessment on all the categories (see Figure 24 for the FFMQ graph; see Appendix U for the assessment table).
Participant 8 attended 7 out of the 8 ACT sessions and did not attend the follow-up session. Participant 8 missed session 6 and met individually with the researcher prior to the following session to cover any missed material. She completed 17 out of the 49 required mindfulness homework exercises (see Appendix V for the mindfulness homework graph).
Chapter V: Conclusion and Discussion

It was originally hypothesized that the participants of the group would increase psychological flexibility; decrease experiential avoidance; decrease depression, anxiety, and stress symptomology; and increase mindfulness. These items were measured using three self-report measures—the AAQ-II, DASS, and FFMQ.

The hypothesis was supported as a group from pre-to-post assessment. The group mean at post-assessment showed statistical significant change indicating that as a group the participants increased psychological flexibility and decreased experiential avoidance, decreased symptomology, and increased mindfulness. The results at follow-up were mixed showing that some participants continued to gain successes by further increasing psychological flexibility and mindfulness, as well as further decreasing symptomology. Some participants showed a reversed effect from post-assessment to follow-up showing that although gains were made from pre-to-post treatment, the 7-week gap from post-treatment to follow-up showed the participants had actually decreased psychological flexibility, increased symptomology, and decreased in mindfulness. Only four participants completed the follow-up assessments however.

Interpretation of Findings

According to the literature, ACT appears to be a viable and efficacious treatment for individuals with a mental health disorder experiencing unhelpful symptomology. This study is on par with the growing evidence to support ACT as a good treatment option; however the results in this study show significant gains from pre-to-post assessment on most questionnaires but results appear inconsistent at follow-up. The follow-up group of four participants had difficulty maintaining the benefits of the group content according to the depression category of the DASS; however Participants 1 and 4 explained that during the 7-week gap from post-treatment to follow-up Christmas occurred which has always been a difficult time of year for them.

Furthermore, the assessments utilized at pre, post, and follow-up examined the increases and decreases experienced by the participants. The AAQ-II revealed statistically significant decreases in experiential avoidance and thus resulted in an increase in psychological flexibility for the eight participants from pre-to-post assessment. The follow-up AAQ-II score indicated that four participants maintained the same score as post-treatment. This result indicates that the participants were able to continue exercising the learned material after group had ended and continued reaping the benefits of the group. The DASS assessment had statistically significant results as a group mean from pre-to-post assessment indicating a reduction in depression, anxiety, and stress. The DASS depression category at pre-assessment was in the severe range, decreasing to the mild range at post-assessment for the eight participants, on average. The follow-up indicated that the four participants increased to the moderate category; however it should be noted that they did not increase to the original pre-assessment score and, in comparison, the follow-up maintained a decrease in their depression symptomology. The DASS anxiety category had a score in the severe range at pre-assessment, decreasing to the moderate category at post-assessment, and the four participants’ scores continued to decrease by follow-up into the normal range. The DASS stress category began in the moderate range for the eight participants decreasing to the normal range by post-assessment. The four participants’ scores at follow-up continued to decrease slightly, remaining in the normal range. These results reveal that significant reductions were made in regards to the participants’ symptomology; the follow-up scores for anxiety and stress continued to decrease over the 7-week period of no ACT group whereas the depression category initial reduced at post-assessment, and increased at follow-up.
Although the initial goal of this study was not to singlehandedly reduce symptomology, it appears that the group did decrease symptomology from pre-assessment to post-assessment. The FFMQ scores revealed significant increases from pre-to-post assessment and the four participants at follow-up continued to make gains, on average, in all the categories.

These findings suggest that ACT can be a useful and beneficial treatment for adults with mental health disorders increase psychological flexibility, decrease symptomology, and increase mindfulness during the group process. Also, follow-up needs to be further researched with the entirety of the group in order to determine if the gains made actually maintain at follow-up. Due to this study only having four participants attend the follow-up, the findings should not be interpreted in such a way to generalize to the entirety of the original group, nor to the general population.

Interpretation of Results and Relevance to the Literature Review

The results of this study revealed similarities across methodologies and results in comparison to the literature review. Fledderus, Bohlmeijer, Fox, Schreurs, and Spinhoven (2013) stated that individuals with higher psychological flexibility make more gains with symptomology. This study revealed similar results. The results of the current study indicated that participants who decreased in experiential avoidance and thus increasing in psychological flexibility, according to the AAQ-II, had more decreases in DASS scores of their depression, anxiety, and stress symptomology. Participants who remained consistent with their AAQ-II scores and remained high in experiential avoidance did not make as many gains in symptomology as their peers. Participants who had significant gains on the AAQ-II, similarly had significant gains on the DASS.

The study conducted by Dehlin, Morrison, and Twohig (2013) revealed a 43% decrease in participant scores on the AAQ-II at follow-up. If put into a percentage as the authors did, this study had similar results. A limitation to the study was that of only an eight week study—similar to the current study. Qualitative data suggested that the participants of the ACT group became more motivated to make changes in their lives as evidenced by goal setting and achieving valued-directed goals, just as Popick Brady and Whitman (2011) discovered in their sessions.

Many studies discussed in the literature review revealed decreased scores on psychological flexibility questionnaires and symptomology assessments. This study was on par with the results of many, including Burrows (2013), Clarke, Kingston, Wilson, Bolderston, and Remington (2012), and White et al. (2011) on evidenced symptom reduction in participants.

The literature review and the current study revealed similar results that appear to add consistency to the overall results of ACT. The literature suggests a strong correlation to ACT and increased psychological flexibility, increased mindfulness, and decreased symptomology.

Strengths

The pilot study had many strengths that made the group more successful. The group was conducted in a mental health facility which allowed the participants to easily access the treatment. The researcher was unable to obtain local information on any ACT procedures being conducted in the Kingston area, as only one other agency conducts ACT techniques and that agency works solely with individuals with eating disorders, which allows for two more strengths for this pilot study—this ACT group is one of the first of its kind in the Kingston area and that this study had a heterogeneous group of individuals participating with a variety of diagnoses. The participants in the group not only had differing disorders, but many had varying characteristics that allowed for a diverse grouping of people. Even with these varying differences, another strength was the low rate of attrition. Only one member exited group before
the completion of the group. Also, members of the group who had severe range anxiety at pre-assessment eventually shared and participated in the group making the group more engaging. The participants took the theory presented in the sessions and applied it in group discussions and group work, as well as bridged the gap in between sessions by engaging in mindfulness exercises, experiential exercises, attaining goals, and completing required readings. The participants were punctual and attended the sessions regularly. In addition, the researcher met with participants one-on-one if a session was missed. This allowed for the participants to learn the didactic information of all the core processes. The participants of the study expressed sincere appreciation for the content of this group. The participants completed satisfaction surveys post group which indicated that they liked the group therapy, enjoyed coming to group, learned a lot from group, enjoyed the atmosphere and facilitators, and would recommend the group to their friends and family. Although participant satisfaction is not necessarily the forefront of a successful group, the feedback indicated that the participants were happy with the level of treatment that they were given which made their learning experience more comfortable and added to their success. And lastly, another strength to this study was the assessments used. Measurement of more than one ACT process allowed for the researcher to examine ACT more in depth and determine what process taught made the most gains with the participants. A facilitator’s manual was created for the agency to use in order to continue group as it was intended to be conducted. The manual ensures that the processes of ACT will be taught effectively with the next groups’ participants. The manual contains a letter to future facilitators, materials needed to run group, activities, and resources to find activities. The treatment protocol was a modified version of an already existing protocol from Cornell University.

Limitations

The study did have limitations worth noting; firstly, the length of the group was eight sessions which is not supported by the literature. In compiling the literature, it appeared as though 10 to 12 sessions were the normative. The group only had eight sessions due to time constraints for the study. This may not have allowed for enough time for the participants to practice the implementation or use of the skills taught in day-to-day activities. Secondly, all the assessments were self-report measures. The data was solely dependent on what the participants believed their ratings should be. And lastly, the follow-up session only had half of the original participants making follow-up results not representative of the eight participants. The follow-up scores should not be used to make inference about the entire group.

Multilevel Challenges

Many challenges and issues can arise when running a group treatment intervention, participants can lack attendance and motivation to change, they may not participate, and they may not understand the symptoms of their mental health and how it effects them in their day-to-day lives. Sometimes assessments can be challenging because participants may answer in ways they expect the researcher would want them to answer, or if they have a learning disability or have trouble maintaining attention, the answers may not reflect truly what the individual is experiencing, particularly if self-report measures are utilized, and building rapport for the therapeutic relationship can take time—time that may not be available. In this study, there are four levels of challenges: client, program, agency, and societal.

Client Level.

During this study, the participants were required to complete homework in between sessions. The homework consisted of exercises and readings. Many of the clients had difficulty
completing the homework because of personal issues. Some participants had their mental health issues interfering, such as depressive symptoms, making completing the homework tasks an impossibility because of their mood state. Participant 5 had a sleeping disorder that interfered with her ability to complete the mindfulness exercises in the first few weeks until this researcher discussed with the participant how to incorporate the exercise into her sleep hygiene routine.

**Program Level.**
Although no challenges occurred at the program level, it is worth noting that the delivery of the protocol was modified by introducing the ACT processes at different times than had been originally planned. Values was introduced sooner than Boone and Myler’s protocol because the facilitators felt a need to introduce that process earlier in order to work towards a valued-directed life through every session.

**Agency Level.**
Two challenges occurred at the agency level, 1) the ability to get a room that was set up therapeutically was not an option due to other groups running that needed those rooms. The room used for the ACT group was a boardroom that had a long narrow table that made it difficult to facilitate group style conversation; 2) follow-up became an issue because some participants could not be reached.

**Societal Level.**
From a societal viewpoint, mental health is still viewed as bad or wrong. A lot of stigma is still attached to these individuals who suffer from mental health problems. Many of these individuals do not seek any assistance from mental health agencies solely because they do not want to be identified as having a mental health diagnosis or experiencing the stigma.

There are numerous challenges when working in a field with adults with mental health disorders. In order to be successful, it is important to recognize the challenges and limitations and work within them creatively and conservatively.

**Implication for the Behavioural Psychology Field**
The completion of the ACT group pilot study is pivotal to the behavioural psychology field because ACT is an up-and-coming therapy currently growing in North America and the literature is supporting the efficacy of the treatment. By conducting the group therapy at a local mental health and addictions agency, behavioural analysts and professionals in the field can utilize the information and results of the study to conduct future ACT studies and groups. The ACT group protocol will continue to be offered at the agency to better service the clients who could use the ACT coping strategies.

**Recommendation for Future Research**
Although ACT has grown in popularity recently with many resources to aid in supporting individuals, the recommendation for future research would be to continue conducting ACT groups assessing pre, post, and follow-up results to track progress. Assessing for psychological flexibility, experiential avoidance, symptomology, and mindfulness can help add to the ACT literature. Future research may benefit the field by collecting more quantitative data. This study kept track of attendance and homework completion, but future studies may want to collect more quantitative data such as the participants’ frequency of unhelpful thoughts or their symptoms. I encourage future research to continue examining participants with different diagnoses or examine more specified populations for better generalizability to continue adding to the current literature. New studies should allow for more sessions because eight sessions in this study may not have allowed for complete comprehension of the material by the participants. Many studies, such as Arch, Eifert, Davies, Vilardaga, Rose, and Craske (2012) and Wicksell et al. (as cited by
Öst, 2014) have the groups set at 10 to 12 sessions which seem to be the set norm for an ACT group. Perhaps by extending the time line to incorporate a few more sessions, the participants can understand the material better and make longer-lasting changes to their lives. By duplicating this study and adding more sessions, a researcher can examine if more sessions can make more gains and better maintenance at follow-up. Another potential area for further recommendation would be to examine the processes of ACT separately and examine if one process is linked to better outcome results. This type of research can answer the question on whether or not a researcher can teach a few of the processes and still get the same results at post-treatment and follow-up.

**Conclusion**

The study had many successes from pre-to-post assessment, as well as some successes from pre-to-follow-up. Participants as a whole felt as though they benefited from the treatment and qualitative data suggests that the participants have made substantial changes in their lives. Continued support should be in place for these individuals in order to continue aiding in their success and growth.

The group was well-received by the agency and will continue to be offered. Materials and a facilitator manual were left for the agency to utilize in order to run the group again as it was structured to be conducted.
References


Appendix A

REB Letter of Approval

SLC REB Reference Number: 2014-REC03

Project Title: Using Acceptance and Commitment Therapy to Assist Adults with Mental Health Disorders Increase Coping Strategies and Psychological Flexibility

Dear Tracy:

I am writing to advise you that the Research Ethics Committee – Psychology (REC-P), a subcommittee of the Research Ethics Board (REB) of St. Lawrence College, has granted Approval to the above-named research study. Your research may now begin.

You have one year to complete the project from the time of approval. Should you require more time to complete your project, you will be required to submit a request for ongoing ethics approval for your project. This must be submitted prior to REB approval expiry.

Please review St. Lawrence College’s Policy on Research Integrity, which is attached for your convenience. You are obligated to keep your files up to date and inform the REB of any changes to your study. Any changes to the approved protocol or consent materials must be reviewed and approved through the amendment process prior to its implementation. Both a Request for Amendment of an Approved Project form and a revised application must be submitted to the research office for review by the REB.

Any adverse or unanticipated events during the course of your research must be reported to the REB as soon as possible. The REB reserves the right to review your file at any time to ensure that research is being conducted in accordance with all SLC policies.

Once your project is complete, you are required to complete a Project Termination form (included with REC-P approval documents). This form must be submitted as a final report about your research to the REB.

Best wishes for the successful completion of your project.

Best Regards,

Alison Tucker
Chair, Research Ethics Board
Appendix B

Informed Consent

**Project Title:** Using Acceptance and Commitment Therapy to Assist Adults with Mental Health Disorders Increase Coping Strategies and Psychological Flexibility

**Principal Investigator:** Tracy Rouleau

**Name of Supervisor:** Marie-Line Jobin

**Name of Institution:** St. Lawrence College

**Name of Agency:** Frontenac Community Mental Health and Addiction Services

**Invitation**
You are being asked to join Frontenac Community Mental Health and Addiction Services (FCMHAS) to take part in a research study by Tracy Rouleau. I am a 4th year student in the Behavioural Psychology program at St. Lawrence College. I am completing my placement opportunity at FCMHAS as part of my applied thesis. Please continue reading this document if you are interested in participating in this therapy group. If you have any questions please ask me for assistance and I will help.

**Why is this study being done?**
This study is being done in order to help people with mental health disorders cope with their symptoms and help them move forward in life to how they want to live. This group therapy focuses on values and goals in order to help participants live the best life they want to live. By targeting these areas, we hope to help increase your awareness of your thoughts and emotions, and increase coping skills to achieve your goals.

**What will you need to do if you take part?**
If you choose to take part in this study you will be asked to come to group once a week for eight weeks. Each group session lasts an hour and a half. The sessions will be every Tuesday from October 7th, 2014 to November 25th, 2014. We will ask you to complete three questionnaires after signing this form. The questions will cover symptoms you may be experiencing and coping strategies you may be using. The questionnaires will take approximately 30 minutes to complete and will also be completed again after group on the 25th of November. Your responses will allow us to examine whether or not a difference has been made in the eight weeks of group therapy. A follow-up will be done 1 month after the group has ended (approximate week of January 5 to 9, 2015). The follow-up is just a quick meeting with Brooke and me to do the questionnaires again at the agency. This should take about 20 minutes to complete. We will contact you to make an appointment that is convenient to you at the agency.

The sessions will be run by myself, Tracy Rouleau and co-facilitated by a Psychological Associate, Marie-Line Jobin from St. Lawrence College. Brooke Solc from Vocational Services at the agency will be present at every session as well. Each session will have different exercises to complete, as well as didactic learning and experiential activities. There will be reading materials provided and worksheets related to the group therapy to complete in between sessions.
**What are the potential benefits of taking part?**
Benefits of taking part in this research study include being able to learn some useful skills to help you cope with current symptoms of your disorder. This group therapy will also allow you to ask questions on symptom management in an open group with a Behavioural Psychology student, a Psychological Associate, and a Vocational Rehabilitation Specialist. This group can help you evaluate your values and goals and determine the best course of action. This group can allow you to learn how you think about things in your life and show you some options to live a more value-directed life.

**What are the potential disadvantages or risks of taking part?**
Risks from taking part in this research study are minimal but may include having to allow yourself to be mindful and sit with your current thoughts, emotions, and symptoms with your whole self and not avoid them. This may make you experience an increase in emotions, like anger, sadness, frustration, or fear, for a period of time, but we will provide techniques that will help you cope with this.

**What happens if something goes wrong?**
If something goes wrong, like you have a strong reaction to an activity, you can at any time tell me or the co-facilitator, Marie-Line, about your worry. We will be able to help you. I will also be available 30 minutes before sessions and 30 minutes after sessions for questions or discussion.

**Will my information you collect from me in this project be kept private?**
The information that you share with me will be kept confidential. That means that I will not share your assessment scores with anyone else except my supervisor, Marie-Line and the agency, FCMHAS. I will use a coded name for you so that no identifying information can be linked back to you. I will also keep your information locked up at the agency. The agency rule is that all information is to be locked in a filing cabinet in a locked room, and I will make sure that happens. None of your information will be given to others to use. The information that I collect from you will be destroyed after seven years.

**Do you have to take part?**
Taking part in this process is voluntary and you can decide to take part in this research project if you want to, but by joining the group you must understand that it is a closed group, which means you cannot join part way through. If you do decide to join this group and decide to leave the group, you cannot re-join this group at this time. We ask that if you join this group that you commit to attend all eight sessions, unless due to exceptional circumstances, such as being sick. By saying yes to participating, you will be asked to sign this consent form. You are always free to withdraw at any time, even if you sign this form. By withdrawing you will not incur any negative effect from me or from FCMHAS.

**Contact for further information**
This project has been approved by the Research Ethics Board at St. Lawrence College. The project will be developed under the supervision of Brooke Solc, my Agency Supervisor, Kim Fraser, and my College Supervisor and co-facilitator, from St. Lawrence College, Marie-Line Jobin. I really appreciate your cooperation and if you have any additional questions or concerns,
feel free to ask me, trouleau03@student.sl.on.ca or by contacting FCMHAS Vocational Services. You can also contact my College Supervisor mjobin@sl.on.ca or you may also contact the Research Ethics Board at reb@sl.on.ca.

**Consent**

Please complete the following form and return it to me as soon as possible once you decide if you want to take part in this research study. A copy of the consent form will be given to you to keep. An additional copy of your consent will be kept at the agency, in a secure area. By signing this form, I agree that:

- The study has been explained to me.
- All my questions were answered.
- Possible harm and discomforts and possible benefits (if any) of this study have been explained to me.
- I understand that I have the right not to participate and the right to stop at any time.
- I am free now, and in the future, to ask any questions I have about the study.
- I have been told that my personal information will be kept confidential.
- I understand that no information that would identify me will be released or printed without asking me first.
- I understand that I will receive a signed copy of this consent form.

I hereby consent to take part.

<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Signature of Participant</th>
<th>Date</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Student Printed Name</th>
<th>Signature of Student</th>
<th>Date</th>
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Appendix C

AAQ-II Assessment

Below you will find a list of statements. Please rate how true each statement is for you by circling a number next to it. Use the scale below to make your choice.

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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td></td>
<td>never true</td>
<td>very seldom true</td>
<td>seldom true</td>
<td>sometimes true</td>
<td>frequently true</td>
<td>almost always true</td>
<td>always true</td>
</tr>
</tbody>
</table>

1. My painful experiences and memories make it difficult for me to live a life that I would value.  
   1 2 3 4 5 6 7

2. I’m afraid of my feelings.  
   1 2 3 4 5 6 7

3. I worry about not being able to control my worries and feelings.  
   1 2 3 4 5 6 7

4. My painful memories prevent me from having a fulfilling life.  
   1 2 3 4 5 6 7

5. Emotions cause problems in my life.  
   1 2 3 4 5 6 7

6. It seems like most people are handling their lives better than I am.  
   1 2 3 4 5 6 7

7. Worries get in the way of my success.  
   1 2 3 4 5 6 7
Appendix D

DASS Assessment
**Reminder of rating scale:**
0  Did not apply to me at all
1  Applied to me to some degree, or some of the time
2  Applied to me to a considerable degree, or a good part of time
3  Applied to me very much, or most of the time

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>22</td>
<td>I found it hard to wind down</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>23</td>
<td>I had difficulty in swallowing</td>
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<tr>
<td>24</td>
<td>I couldn't seem to get any enjoyment out of the things I did</td>
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<tr>
<td>25</td>
<td>I was aware of the action of my heart in the absence of physical exertion</td>
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<tr>
<td></td>
<td>(eg, sense of heart rate increase, heart missing a beat)</td>
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<td></td>
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<tr>
<td>26</td>
<td>I felt down-hearted and blue</td>
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<td>27</td>
<td>I found that I was very irritable</td>
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<tr>
<td>28</td>
<td>I felt I was close to panic</td>
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<tr>
<td>29</td>
<td>I found it hard to calm down after something upset me</td>
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<td></td>
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<tr>
<td>30</td>
<td>I feared that I would be &quot;thrown&quot; by some trivial but unfamiliar task</td>
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<tr>
<td>31</td>
<td>I was unable to become enthusiastic about anything</td>
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<tr>
<td>32</td>
<td>I found it difficult to tolerate interruptions to what I was doing</td>
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<tr>
<td>33</td>
<td>I was in a state of nervous tension</td>
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<tr>
<td>34</td>
<td>I felt I was pretty worthless</td>
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<tr>
<td>35</td>
<td>I was intolerant of anything that kept me from getting on with what I was</td>
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<tr>
<td></td>
<td>doing</td>
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<tr>
<td>36</td>
<td>I felt terrified</td>
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<tr>
<td>37</td>
<td>I could see nothing in the future to be hopeful about</td>
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<tr>
<td>38</td>
<td>I felt that life was meaningless</td>
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<td></td>
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<tr>
<td>39</td>
<td>I found myself getting agitated</td>
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<tr>
<td>40</td>
<td>I was worried about situations in which I might panic and</td>
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<tr>
<td></td>
<td>make a fool of myself</td>
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<tr>
<td>41</td>
<td>I experienced trembling (eg, in the hands)</td>
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<tr>
<td>42</td>
<td>I found it difficult to work up the initiative to do things</td>
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Appendix E

FFMQ Assessment

Subject number_________         Date________

5-FACET M QUESTIONNAIRE

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

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<th>1</th>
<th>2</th>
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<th>5</th>
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<tbody>
<tr>
<td>never or very rarely true</td>
<td>rarely true</td>
<td>sometimes true</td>
<td>often true</td>
<td>very often or always true</td>
</tr>
</tbody>
</table>

1. When I’m walking, I deliberately notice the sensations of my body moving.
2. I’m good at finding words to describe my feelings.
3. I criticize myself for having irrational or inappropriate emotions.
4. I perceive my feelings and emotions without having to react to them.
5. When I do things, my mind wanders off and I’m easily distracted.
6. When I take a shower or bath, I stay alert to the sensations of water on my body.
7. I can easily put my beliefs, opinions, and expectations into words.
8. I don’t pay attention to what I’m doing because I’m daydreaming, worrying, or otherwise distracted.
9. I watch my feelings without getting lost in them.
10. I tell myself I shouldn’t be feeling the way I’m feeling.
11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
12. It’s hard for me to find the words to describe what I’m thinking.
13. I am easily distracted.
14. I believe some of my thoughts are abnormal or bad and I shouldn’t think that way.
15. I pay attention to sensations, such as the wind in my hair or sun on my face.
16. I have trouble thinking of the right words to express how I feel about things.
17. I make judgments about whether my thoughts are good or bad.
18. I find it difficult to stay focused on what’s happening in the present.
19. When I have distressing thoughts or images, I “step back” and am aware of the thought or image without getting taken over by it.
20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
21. In difficult situations, I can pause without immediately reacting.

22. When I have a sensation in my body, it’s difficult for me to describe it because I can’t find the right words.

PLEASE TURN OVER  

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<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>never or very rarely true</td>
<td>rarely true</td>
<td>sometimes true</td>
<td>often true</td>
<td>very often or always true</td>
</tr>
</tbody>
</table>

23. It seems I am “running on automatic” without much awareness of what I’m doing.

24. When I have distressing thoughts or images, I feel calm soon after.

25. I tell myself that I shouldn’t be thinking the way I’m thinking.

26. I notice the smells and aromas of things.

27. Even when I’m feeling terribly upset, I can find a way to put it into words.

28. I rush through activities without being really attentive to them.

29. When I have distressing thoughts or images I am able just to notice them without reacting.

30. I think some of my emotions are bad or inappropriate and I shouldn’t feel them.

31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.

32. My natural tendency is to put my experiences into words.

33. When I have distressing thoughts or images, I just notice them and let them go.

34. I do jobs or tasks automatically without being aware of what I’m doing.

35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.

36. I pay attention to how my emotions affect my thoughts and behavior.

37. I can usually describe how I feel at the moment in considerable detail.

38. I find myself doing things without paying attention.

39. I disapprove of myself when I have irrational ideas.
Appendix F
Facilitator Manual

Acceptance and Commitment Therapy (ACT)

Group Counselling Manual

Manual created by: Tracy Rouleau & Marie-Line Jobin (2014)
Adapted from: Matt Boone & Cory Myler (2012)

The procedures in this staff training manual are meant to be used by agency staff, as part of the broader services they provide, or under supervision of agency staff.
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Letter to Future Facilitators

Dear Facilitator(s):

This group protocol was designed with depression and anxiety as the forefront for participant recruitment; however, the sessions complement any diagnosis. The key importance to this group is that diagnoses are not what we consider important to participate, but rather symptomology. If an individual is experiencing pain, suffering, negative self-talk, overwhelming emotions, guilt, stress, unawareness, lacking motivation, or are experiencing difficulty in their day-to-day lives, ACT can assist with helping these individuals increase their psychological flexibility and coping strategies.

The sessions were designed through a pilot study that was approved by the Research Ethics Board. Changes were made on a week-to-week basis to meet the needs of the participants at the time. The exercises and didactic information can be altered according to the needs of the participants. I strongly encourage that the more you stick to the material in the manual, the more likely you are to ensure that you teach the six core processes of ACT. The core processes include: Acceptance, Present Moment, Defusion, Self-as-context, Values, and Committed Action. ACT also incorporates a lot of Mindfulness-based exercises. This is important for the clients to do in order to recognize and be able to live in the present moment. This protocol also involves many experiential exercises in order to help individuals understand the material and connect it to their everyday lives. Homework is also an essential component of this protocol because by providing readings and work in between sessions, the participants bridge the gap and can more easily generalize the material to their day-to-day tasks.

There are many useful resources that can assist you in learning what ACT is and how one can use ACT effectively. I strongly encourage you to seek out these resources in order to better meet your clients’ needs while staying true to the goals of ACT. Although currently there is no criteria set in place to facilitate ACT therapeutically, I do recommend that you join the Association for Contextual Behavioral Science (ACBS) in order to keep up-to-date with ACT and the related therapies. Please feel free to contact me with any questions at t.rouleau@outlook.com and best of luck on your ACT journey.

Regards,

Tracy Rouleau, BAA Behavioural Psychology
**Introduction**

Individuals struggling with mental illness experience many challenges and symptoms that can interfere in one’s quality of life and day-to-day functioning, including finding and maintaining employment. These individuals need support and therapy to assist with managing the symptoms correlated to their mental illness. In most cases, creating and achieving goals is an important aspect of therapy. By incorporating a valued-directed therapy, one can increase the likelihood that a realistic and personal goal can be achieved. Traditional methods, such as Cognitive Behavioural Therapy (CBT) have been used in the past, but newer, evidenced-based therapies have been on the rise. Third wave behavioural interventions, such as Acceptance and Commitment Therapy (ACT), focus on changing individual’s responses to their thinking instead of trying to alter their thinking (Broley, 2013). Sharp (2012) suggests that ACT teaches acceptance, but also change, simultaneously, in therapy. ACT not only targets behavioural changes in the individual, but also encourages and increases personal development (Hayes, Pistorello, & Levin, 2012). Tending to the individual’s personal development and behavioural changes can assist in achieving one’s desired goals. ACT does this by incorporating six unique processes into the therapy (Hayes et al., 2012). These components focus on acceptance, defusion, individual’s self now, personal values, mindfulness, and committed action (Hayes et al.). Due to ACT being able to target a broad range of symptoms and disorders by addressing the six common processes (Hayes et al.), it is important to examine and utilize this evidence-based therapy to help individuals manage symptoms and increase psychological flexibility.


Materials Needed for Implementation

Session 1:
- Computer and projector for the PowerPoint presentation
- Flipchart and markers (mountain metaphor illustration and group guidelines/considerations)
- A rope or a scarf (Tug-of-war metaphor exercise)
- Grapes (or raisins) (Eating Grapes exercise)

Session 2:
- Computer and projector for the PowerPoint presentation
- Paper and Pens for the participants to use (Imagine you are 80 years old exercise)

Session 3:
- Computer and projector for the PowerPoint presentation
- Flipchart and markers (Bulls Eye exercise)

Session 4:
- Computer and projector for the PowerPoint presentation
- Slips of paper that have the words “You cannot walk” printed/written on them (Walking exercise)
- Bag or hat to put the slips of paper into
- Sunglasses (Green Glasses metaphor)

Session 5:
- Computer and projector for the PowerPoint presentation
- Large cue cards (or a sheet of paper) and markers (Paper-in-face exercise)

Session 6:
- Computer and projector for the PowerPoint presentation
- Flipchart and markers (House metaphor)

Session 7:
- Flipchart and markers, paper for participants (writing information)
- Rope or a scarf (Tug-of-war exercise)
- Sunglasses (Green Glasses metaphor)

Session 8:
- Flipchart and markers, paper for participants (writing information)
- Celebratory food (cupcakes) and drinks (pop or juice)
Session 1

Control is the Problem

Contact with the Present Moment
1. **Facilitator Introductions (Name, background) & Mountain Metaphor**

   a. **Facilitator**: Discuss and draw on board how we are all the same in that we can experience the same processes. (Draw a mountain with a stick figure in the center). “This is life’s mountain. This stick figure represents you right now, at this time. We can help you, not because we are at the top of the mountain looking down at you trying to climb it, but rather because we are on our own mountain” (draw second mountain and a stick figure in the center) “and we can see what you are going through and help you choose your best path to reach the top. Everyone is on their own mountain of life. The goal is that we can try to help each other notice how the techniques we learn in this group can play out in positives ways in our lives to live a life of values and happiness.”

2. **Discuss Group symptoms and commonalities.**

   a. **Facilitator**: Discuss “Often groups are geared towards Depression and Anxiety, and that’s okay. The key to ACT though is finding the same processes, the same symptoms that cause human suffering, so although Depression and Anxiety and Substance abuse, and so on are all different in their own way on the surface, what keeps them going is often pretty similar. All these disorders go hand-in-hand with other problems, like low self-esteem, eating problems, sleeping problems, substance problems, relationship problems, and so on—so let’s focus on things we can change, like the symptoms. All issues are welcome in this group even if it isn’t strictly a Depression or Anxiety issue.

   b. **Discuss facilitator anxiety at the moment in first meeting everybody and running group; focus on how everyone can feel symptoms.**

3. **Mindfulness Exercise—Brief Mindfulness**
4. Group Considerations and Guidelines

   a. Have participants create their own rules. Use a whiteboard paper and create group rules together. (Brooke to make copies for all participants on break).

   Ensure that the following rules are put in somehow:

   i. Confidentiality: What happens in group stays in group when it is about personal information and peer stories; however the experience of group, such as exercises and Psychoeducation can be shared.

   ii. Attendance: The expectation of this group is that you attend all eight session, including the pre-assessment meeting. Even if you have other appointments it is a priority, especially since it is only once a week for a hour and a half. If you really, really, really must miss a session please contact Tracy or Brooke as soon as possible so we can meet prior to the following meeting to go over information that was missed.

   iii. Confusion: You might get confused during group and that is okay. We will be discussion some complex and complicated material that is probably very different than what you have ever learned before. The beginning session may be confusing to you, but try to accept that with openness and willingness because you will understand everything soon enough. This is all part of the process. You will benefit from this. I will always be available 30 minutes prior to each session and 30 minutes after each session for questions, clarification, or to talk. Please come and
see me during those times or call the office and leave me a message and I can get back to you.

iv. Patience: Most of what is being taught in each session builds off of the session before that. Benefits may not start to appear until maybe session 3, or 4, or 5 and so on. That’s okay. Improvement will occur at one’s own pace, and participants who engaged in ACT have reaped benefits long after their ACT sessions ended. So, be patient and expect that perhaps there will be confusion in the beginning, and perhaps results won’t show right away, but all will be well in the end.

v. Participation: This group will do so many different types of things in session and outside of session. We’ll be doing activities in class that we will be calling exercises. Marie-Line and I will be teaching new concepts. We will do so many different things. Some exercises might seem silly, but if you engage and participate then you will reap the benefits. Try to put your entire self into the experience. The more you put in, the more you are likely to get out of it.

vi. Homework: Yep. Homework. Homework will not be hours and hours of time consuming, challenging work. When I say homework I mean life exercises. This is very important to the process and the expectation is that you will do some homework in between sessions. Some things will include, some readings,
worksheets, maybe to practice an exercise we completed in session, things like that.

vii. Facilitator Commitment: Marie-Line and I have rules too. We abide by the same ones as you, but we also commit to being present in the group as well and giving our whole selves. We will be hardworking and compassionate to your needs, and we commit to helping you all move into the direction of the life that you want to live.

5. Participant Introductions

a. In pairs of two or three, participants will introduce themselves to others by saying their name and talking about what they wanted to be when they grew up, and if that has changed now, and why and simply chat as much, or as little as they want to each other. After the introductions are made, someone from the group will then introduce another participant by saying that participant’s name and something that they thought was cool about them. (Example: “This is Jim and he wanted to be a firefighter.”)

6. Psychoeducation—

a. Facilitator: Explain that all this didactic learning is great, but that the most important parts of group are the exercises that we do in class. It is important to learn acceptance by living it and not just reading about it. Learning ACT is like riding a bicycle. If I were to just verbally tell you how to ride it, like sit your bottom on the seat, put your feet on the pedals, oh and keep your balance, and so on and so on, you might look at me like “what on earth is she talking about?”, that’s why we believe the best way is to go out and try it yourself. That’s what
we hope you will all do. Practice, practice, practice. Practice doesn’t mean perfect. No one is perfect at acceptance and mindfulness and always being in the present moment. But practice does make progress, and progress helps you be your best. And that is what we want from you.

7. Psychoeducation—
    a. Control—refer to PowerPoint

8. Tug-of-War Metaphor—
    a. Facilitator: Use a scarf or a rope for this exercise. Have a volunteer or a co-facilitator help. Explain to the group that the volunteer is a monster, and that this monster is whatever that is bothering you (e.g., anxiety, depression, eating disorder...). Have the volunteer grab one end of the rope and you grab the other end. Play the tug-of-war game with the volunteer. Explain the fight and struggle one has with their monster. Now have the group imagine a pit between you and the volunteer, and that the more you pull the more it pulls and you get nowhere. A good example to use is that you desire visiting your friend over there (another volunteer may help, and this volunteer can be sitting across the room or in their regular seat). Keep trying to pull the monster towards your desire. You can’t because the monster is stronger. Ask the group for help and suggestions to beat this monster. In the end, drop the rope and walk to a different destination. To make this even more empowering, have the volunteer follow you anyways. Let the group know that, even if the monster follows, you can still do what you want to do. The monster and you were stuck together at home, but now you’re doing what you want to do, and if the monster tags along, so be it, you’re still doing what you want to do.
9. Brief Mindfulness Exercise—Eating Grapes

   a. Group discussion

10. Homework Assignment


      i. The Mindfulness and Acceptance Workbook for Anxiety by John Forsyth
          and Georg Eifert

       a) Mindfulness CD Track 1—daily, record on Mindfulness Practice recording Sheet
Power Point

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Brief Mindfulness

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Mindfulness Exercise: Eating Raisins

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive

*Modified version: Eating Grapes
Weekly Mindfulness Chart

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Reading—Part 1—Preparing the Way for Something New

Can be retrieved from:
Session 2

Values
1. Mindfulness Exercise—Brief Mindfulness and Leaves on a Stream

2. Homework Take-up—
   a. Clients to get into groups of two or three to discuss homework and personal experiences win regards to the homework.
   b. Group discussion.

3. Experiential Exercise—Imagine you are 80 years old
   a. Refer to PowerPoint for questions.
   b. Discuss and share in groups of two or three.
   c. Discuss and share as a whole group.

4. Psychoeducation—
   a. Refer to PowerPoint for presenting material.
   b. Compass Metaphor:
      i. Facilitator: Explain that the compass acts as a tool that always points North, North represents our values. The needle of the compass represents one’s behaviours. No matter what we do, or think, or feel, we can always go towards North (aka our values) (e.g., If one values being a hard-worker—the alarm clock goes off at 5:30am and you have to be at work for 6:30am, would pressing snooze ten times signal someone who is hard working? No, the needle on the compass would not be pointing North, but if that individual got up and dressed and went to work on time, the needle would be pointing North and thus that individual would be moving towards his/her value).

5. Exercise—Value and Goals Worksheet
   a. Facilitator: Introduce the exercise, and walk around the room to assist clients with the work.
6. Homework Assignment—
   a. Reading: Chapter 5 (p. 46-54) True Blues
      i. The Happiness Trap by Russ Harris (2008)
   b. Mindfulness CD Track 2—daily, record on Mindfulness Practice Recording Sheet
   c. Worksheets: Values Road Map & Bulls Eye
Power Point

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Brief Mindfulness + Leaves on a Stream

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Value and Goals Worksheet

Can be retrieved from:
Weekly Mindfulness Chart

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
LIFE
Bulls Eye Exercise

Can be retrieved from:
Can be retrieved from:
Session 3

Values and Committed Action
Power Point

Can be retrieved from:
1. **Mindfulness Exercise—Brief Mindfulness and Leaves on a Stream**

2. **Homework Take-up—**
   a. Discuss as a group any successes, challenges, areas to improve on.
   b. Remind clients that “falling off the wagon” with the mindfulness exercises can happen, and if it has that they need to be gentle with themselves, realize that this can happen and will happen in life, and all they can do at this point is move on and continue with their commitment to do the practices. Much like breathing during mindfulness exercises, just come back.
   c. Facilitator: Hand out a new Bulls Eye Sheet to the clients (if they were not successful with their Bulls Eye homework). Have clients work on the sheet while providing assistance and walking around the room to help. Once it appears that everyone’s paper is completed, draw a bulls eye on a large piece of paper or on the whiteboard. Put the four titles: Work/Education, Leisure, Personal Growth/Health, and Relationships. Under each title, put one of your goals (or make up goals). Put the marker (just a circle, or an X) where you believe/want it to be for each category. Have the clients describe and explain how your behaviours and goals match up, and what you can do to be closer to the middle of the bulls eye (e.g., if the facilitator’s goal is to go to the gym to be healthy and her marker is far away from the centre, it would appear that she is not living in a valued-directed way since she is not behaving in ways that would bring her closer to her value of healthy living).
   d. Group discussion.

3. **Experiential Exercise—Values and Goals Worksheet**
   a. Facilitator: Explain the worksheet to the group. Assist clients by walking around the room to help fill out the information.
4. Psychoeducation—Committed Action slide (refer to PowerPoint).

5. Homework Assignment—
   a. Reading: Chapter 26 (p. 180-182) Troubleshooting Values
      i. The Happiness Trap by Russ Harris
   b. Mindfulness CD Track 3—daily, record on Mindfulness Practice Recording Sheet
   c. Worksheets: Bold Move sheet
   d. Complete the goal worked on in session, and if comfortable, share with the group next week.
Committed Action

• “Beginning to live in accordance with your true values takes the willingness to engage in committed action”

• “The best of intentions mean very little without behaviors to back them up”

Brief Mindfulness + Leaves on a Stream

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Bulls Eye Exercise

Can be retrieved from:
Value and Goals Worksheet

Can be retrieved from:
guide to breaking free from anxiety, phobias, and worry using Acceptance and
Commitment Therapy. New Harbinger Publication, Inc: Oakland, CA.
Weekly Mindfulness Chart

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
A Bold Move

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Reading—Chapter 26—Troubleshooting Values

Can be retrieved from:
Session 4

Defusion I

2. Homework Take-up—
   a. Participants to get into groups of two or three and discuss the homework.
   b. Discuss challenges, successes, and thoughts as a whole group.
   c. Problem-solve together, if challenges did occur.
   d. Discuss goal from last week and create a new objective to the original goal, or create a new goal (assigned as homework for the current week—restate that it is homework during the homework assigning stage at the end of group).

3. Psychoeducation—Pervasive Thoughts
   a. What are the numbers?
      i. Facilitator: Come up with three numbers (e.g., 123). Tell the participants to recite the three numbers. Then, ask them if they could remember the three numbers in a couple of hours if they were to receive $100 to do so (please note to the clients that no monetary prize will actually be awarded). Ask them to repeat the numbers again. Then, ask them if they could remember the numbers in two days, if the prize was $1000. Have them repeat the number one more time to you.
      ii. Take-home message: The clients only recited those three numbers a couple of times and yet they remembered those numbers. Thoughts are like this as well. We may tell ourselves certain thoughts in our heads, and it may take only a few times for it to stick and fuse to our more permanent/every day thoughts and thinking.
   b. Finish the sentence.
      i. There is no place like home.
ii. Facilitator: We may have seen the movie ‘The Wizard of Oz’ a few times, but still remember the ending to the sentence.

iii. Take-home message: Same as the number exercise above; that message/thought has fused to our memory and thinking, and thus more readily available in our minds.

c. I’m so sad I think I will just...

i. Facilitator: We may all fall back on certain thoughts, emotions, activities, and so on that we are used to (e.g., I’m so sad I think I will just go to bed and cry).

d. Voice in your head.

i. Refer to PowerPoint for instruction.

e. Road Signs.

i. Facilitator: Our minds are like road signs almost. Our voices and thoughts that run through our head, might tell us what to do (e.g., Don’t walk that way because you might see someone that you know and you’ll have to talk to them).

So, our minds, in some ways, act like roads signs, telling us when to stop or go, or be cautious. Often, these road signs may not actually be the reality of the situation, and might try to over-protect you and not give you any opportunities to try new things, or do activities that are moving you towards your valued-life direction.

f. Cell Phone.

i. Same message as road signs—tells you what to do.

4. Experiential Exercise—Bus Metaphor

a. Facilitator: Ask for two volunteers to assist with the exercise. Secretly explain to the volunteers (now considered passengers on the bus) that when the exercise begins to
stand behind you and say statements such as “You can’t do it”, “Turn right”, “This is too stressful”, “Stop now”, “Go back, it was easier there”, and so on. Facilitator, pretend to be driving a bus. Explain to the group that the bus is your life and you are trying to drive yourself to your values. Point to an area in the room and say that that’s your value (e.g., being a good mother). Note that you are well aware that you see where you need to be driving to in order to behave in your value-directed ways and so on. The volunteers will now begin stating the above example statements. When they do so, you will start to visibly have difficulty steering the bus. You will follow the directions of the volunteers, so if a volunteer says to stop the bus, you will stop the bus. After a moment of demonstrating the struggle, make a suggestion to fight the passengers. Carefully pretend to fight the passengers, but note that by doing this, you are still not getting any closer to your values. Attempt to kick one of the passengers out, but make note that the passenger just jumps back into the bus, and thus you are still not closer to your values. Ask the group what you should do.

b. If the suggestion to just drive with the passengers and make the decision to continue on your route is stated. Demonstrate that in a visible way, and relate that to how we can do that every day with the thoughts in our heads, and how that brings us closer to our values. If other suggestions occur, you can demonstrate them as well, as long as if it is poor coping strategies, that comes out in the activity and the clients understand that.

5. Experiential Exercise—Walking

a. Facilitator: Create slips of paper that say “You cannot walk”. Have clients pick a piece of paper out of a hat/bag, but to not read the slip of paper yet. Once everyone obtains a paper, tell them to slowly and safely walk around the room. Explain to them that no matter what, they need to continue walking around the room. At this point, clients do
not know what the paper says, nor do they know that everyone has the same information on their papers. Now, have the clients read the slip of paper while still walking. Allow a moment to pass, and then have the clients read their message out loud continually. Clients should still be walking, but some may not because some may have listened to the message on the paper.

b. Take-home message: You and your mind can act independently from one another, these thoughts are not in charge of your behaviours, and although it may be difficult or impossible to turn off your thoughts—you can relate to the thoughts differently.

6. Psychoeducation—describing thoughts and what they can be (refer to PowerPoint)

7. Psychoeducation—Fusion
   a. Green Glasses Metaphor
   b. Facilitator: Put on a pair of glasses, or if possible have enough pairs of glasses for all members of the group. Explain that our thoughts can cause a film/fog over ourselves, and that we begin to believe and only see things from that perspective. The glasses become our thoughts and expectations. But, what if we simply move the glasses a little bit off of our eyes. You can demonstrate this by flipping the glasses on the top of your head and wear them like that, or to remove them slightly, the key is to have them no longer over the eyes. Explain that the thoughts, aka the glasses, are still there, but that they are not running the show, and you may hear them from time to time, and they might get louder and closer here and there, but that you can always move them aside and continue doing what you were doing.

8. Psychoeducation—Introduction to: Thoughts that Hook Us

9. Homework Assignment
   a. Reading: Chapter 8 (p. 70-75) Scary Pictures
i. The Happiness Trap by Russ Harris (2008).

b. Mindfulness CD Track 4—daily, record on Mindfulness Practice Recording Sheet

c. Worksheets: Getting Hooked (first row) & Values and Goals Worksheet from the beginning of the session.
Power Point

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive

Modified by author.
Brief Mindfulness and “Clouds in the Sky”

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive

Modified to Clouds in the Sky instead of Leaves on a Stream by author
Value and Goals Worksheet

Can be retrieved from:
Weekly Mindfulness Chart

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Getting Hooked

Can be retrieved from:
Adapted from "Getting Hooked" in Harris (2009) ACT Made Simple
Reading—Chapter 8—Scary Pictures

Can be retrieved from:
Session 5

Defusion II
1. Mindfulness Exercise—Brief Mindfulness and Leaves on a Stream

2. Homework Take-up—
   a. Facilitator: Ask the clients what the three numbers were from last week. Re-illiterate the message from last week that we tend to hold-on to/fuse thoughts, messages, and so on easily, and it does not mean that what we hear or think is reality.
   b. Facilitators: Have clients get into groups of two or three to discuss homework.
   c. Facilitator: Discuss as a group.

3. Experiential Exercise—Defusion—Paper-in-face Exercise
   a. Facilitator: Give each client a cue card and a marker. Have the client write down something that bothers them (e.g., the thought that “I can’t do it”, or my anxiety, or feeling of worthlessness). Now, have the clients put the cue card right in front of their faces so to cover their eyes. With the cue card covering the eyes, tell the clients to engage in a conversation with their peers, they cannot remove the cue card from their view. Let this go for a moment. Now, ask the clients how their thought/feeling/anxiety got in the way from their conversation. Most likely, some will say that it was difficult, that they could not relate to their peer, could not tell if the peer was talking to them, and so on. Now, ask the clients to place the cue cards with the words up on their lap. Now have them engage in a conversation with their peers. Let that go for a moment. Now, ask the clients to describe that scenario.
   b. Take-home message: The thoughts, feelings, diagnoses, will probably always be there, but instead of letting it take the lead and cover you and shade you from what you want out of life, put it off to the side. As you noticed, the cue card was still there, it was on your lap, but you were able to do it. You were able to have a conversation with your peers and not let it affect you or your actions.
4. **Psychoeducation**—
   a. Refer to the PowerPoint

5. **Experiential Exercise**—Milk, Milk, Milk
   a. Facilitator: Have participants repeatedly say “Milk, milk, milk”
   b. Take-home Message: By repeating the word milk, it lost a lot of its meaning.

6. **Psychoeducation**—
   a. Refer to PowerPoint

7. **Mindfulness Exercise**—Notice Five Things
   a. Refer to the exercise at the back.

8. **Homework Assignment**—
   a. Reading: Chapter 6 (p. 56-62) Troubleshooting Defusion
   b. Mindfulness CD Track of choice—daily, record on Mindfulness Practice Recording Sheet
   c. Worksheets: Getting Hooked & Values and Goals Worksheet
   d. Answer the questions at the back of their reading.
   e. Practice a defusion technique with a recurring thought this week.
Power Point

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http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive

Modified by Author.
Brief Mindfulness and “Clouds in the Sky”

Can be retrieved from:
   http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive

Modified by author.
Notice Five Things

Can be retrieved from:
Weekly Mindfulness Chart

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Getting Hooked

Can be retrieved from:
Adapted from "Getting Hooked" in Harris (2009) *ACT Made Simple*
Value and Goals Worksheet

Can be retrieved from:
Reading—Chapter 9—Demons on the Boat

Can be retrieved from:
Session 6

Self-as-context
1. Mindfulness Exercise—Mindfulness Plus Relational Values Exercise

2. Homework Take-up—
   a. Have participants discuss the homework as a group. Remind participants to not discuss their experiences to the facilitator, but rather ask each other questions and lead the conversation together. The facilitator can add comments and questions here and there, but allow the participants to take the lead.
   b. Participants are to come up with a new objective/goal.

3. Psychological Flexibility Hexaflex Picture drawn on Paper—hand out for all participants.

4. Psychoeducation—PowerPoint

5. Experiential Exercise—Brief Observing Self with Values Exercise

6. Psychoeducation—use the same principle as the Sky PowerPoint, but use a house metaphor.
   a. Facilitator: Explain that the individual is like an old house. The house is always there, it stands the same as it always did, but the furniture inside might change over time. New visitors may come and go. The paint colours on the walls may change every once in a while. These things change over time, but the house is still the same house that stood tall all those years.
   b. Take home message: Same as PowerPoint.


8. Homework assignment—
   a. Reading: Chapter 23 (p.157-164) You’re Not Who You Think You Are (Russ Harris, The Happiness Trap, 2007).
b. Mindfulness CD Track of choice—daily, record on Mindfulness Practice Recording Sheet
c. Worksheets: Values and Goals Worksheet (Come up with a new objective/goal prior to leaving the session)
Power Point

Can be retrieved from:
Retrieved from:
www.contextualpsychology.com
Brief Observing Self with Values Exercise

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Weekly Mindfulness Chart

Retrieved from:
Value and Goals Worksheet

Can be retrieved from:
guide to breaking free from anxiety, phobias, and worry using Acceptance and
Commitment Therapy. New Harbinger Publication, Inc: Oakland, CA.
Reading—Chapter 7—Look Who’s Talking

Can be retrieved from:
Session 7

Psychological Flexibility I

![Diagram of Psychological Flexibility]

Picture retrieved from:
www.contextualpsychology.com
1. Mindfulness Exercise—Notice Yourself Noticing

2. Homework Take-up—
   a. Discuss in smaller groups.
   b. Discuss as a group.

3. Psychoeducation—Psychological Flexibility Hexaflex

4. Psychoeducation—Acceptance
   a. Discuss the concept and main idea of Acceptance.
      i. Separate into small groups and have participants come up with what Acceptance is and give a brief description.
      ii. Discuss as a large group.
      iii. Facilitator: Use flipchart and markers to scribe the ideas. Participants should be provided with paper to write down the information.
   b. Use a metaphor and/or an experiential exercise.
      i. Tug-of-War Metaphor from Session 1.
   c. Discuss how the process can be used in day-to-day life.
      i. Group Discussion.

5. Psychoeducation—Defusion
   a. Discuss the concept and main idea of Defusion.
      i. Separate into small groups and have participants come up with what Defusion is and give a brief description.
      ii. Discuss as a large group.
      iii. Facilitator: Use flipchart and markers to scribe the ideas. Participants should be provided with paper to write down the information.
b. Use a metaphor and/or an experiential exercise.
   i. Green Glasses Metaphor from Session 4.

c. Discuss how the process can be used in day-to-day life.
   i. Group Discussion.

6. Psychoeducation—Present Moment

   a. Discuss the concept and main idea of Present Moment.
      i. Separate into small groups and have the participants come up with what
         Present Moment is and give a brief description.
      ii. Discuss as a large group.
      iii. Facilitator: Use flipchart and markers to scribe the ideas. Participants
           should be provided with paper to write down the information.

   b. Use a metaphor and/or a mindfulness exercise.
      i. Brief Mindfulness and Leaves on a Stream exercise from previous
         sessions.
      ii. Facilitator: Make the connection that this mindfulness exercise, although
         used for the Present Moment concept, also incorporates Acceptance and
         Defusion. (If a participant mentions that it is also connected to self-as-
         context, that can still be considered an appropriate connection that works
         for this question).

   c. Discuss how the process can be used in day-to-day life.
      i. Group Discussion.

7. Homework Assignment—
a. Reading: Chapter 29—A Life of Plenty (p. 199-202) (The Happiness Trap by Russ Harris).

b. Mindfulness CD any Track—daily, record on Mindfulness Practice Recording Sheet.

c. Worksheet: Values and Goals Worksheet. Ask participants to come up with the goal on their own at home, if some participants need the extra assistance, have those participants stay behind and help them create the goal.
Notice Yourself Noticing

Can be retrieved from:
Brief Mindfulness + Leaves on a Stream

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Weekly Mindfulness Chart

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Value and Goals Worksheet

Can be retrieved from:
Reading—Chapter 29—A Life of Plenty

Can be retrieved from:
Session 8

Psychological Flexibility II
1. Mindfulness Exercise—Brief Mindfulness & Leaves on a Stream

2. Homework Take-up—
   a. Discuss as a group.

3. Psychoeducation—Self-as-context
   a. Discuss the concept and main idea of Self-as-context.
      i. Separate into small groups and have the participants come up with what Self-as-context is and give a brief description.
      ii. Discuss as a large group.
      iii. Facilitator: Use flipchart and markers to scribe the ideas. Participants should be provided with paper to write down the information.
   b. Use a metaphor and/or an experiential exercise.
      i. Talk about Power Point from Session 6 with the sky and weather metaphor.
   c. Discuss how the process can be used in day-to-day life.
      i. Group discussion.

4. Psychoeducation—Values
   a. Discuss the concept and main idea of Values.
      i. Separate into small groups and have participants come up with what Values is and give a brief description.
      ii. Discuss as a large group.
      iii. Facilitator: Use flipchart and markers to scribe the ideas. Participants should be provided with paper to write down the information.
   b. Use a metaphor and/or an experiential exercise.
i. Bulls Eye Worksheet.

c. Discuss how the process can be used in day-to-day life.

i. Group Discussion.

5. Psychoeducation—Committed Action

a. Discuss the concept and main idea of Committed Action.

i. Separate into small groups and have participants come up with what Committed Action is and give a brief description.

ii. Discuss as a large group.

iii. Facilitator: Use flipchart and markers to scribe the ideas. Participants should be provided with paper to write down the information.

b. Use a metaphor and/or an experiential exercise.

i. Values and Goal Setting Worksheet.

c. Discuss how the process can be used in day-to-day life.

6. Celebrate successful completion of the group.

a. Cake and Gingerale.

7. Fill out Surveys.

8. Fill out assessments.

a. Some participants may want to stay back and fill out the assessments one-on-one.
Brief Mindfulness + Leaves on a Stream

Can be retrieved from:
http://contextualscience.org/act_for_depression_and_anxiety_group_cornell_unive
Bulls Eye Exercise

Can be retrieved from:
Value and Goals Worksheet

Can be retrieved from:
Readings—Chapter 33—A Meaningful Life; Chapter 32—Onward and Upward;

Suggestions for Crisis Times

Can be retrieved from:


All photos (unless otherwise specified) were retrieved from http://openphoto.net/
Appendix G

Participant 1 Assessment Table

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Appendix H

Participant 1 Mindfulness Homework Graph

![Participant 1 Mindfulness Homework Graph](image_url)
### Appendix I

#### Participant 2 Assessment Table

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Participant 2 Mindfulness Homework Graph
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Participant Mindfulness Homework Graph
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Participant 4 Mindfulness Homework Graph

Expected Homework Completions

Sessions
## Appendix O

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Participant 5 Mindfulness Homework Graph
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Participant 6 Mindfulness Homework Graph

Sessions

Expected Homework Completions

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Participant 7 Mindfulness Homework Graph
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Participant 8 Mindfulness Homework Graph