The Use of Evidence-based Practices to Increase Emotion Recognition and Regulation in Individuals with a Dual Diagnosis using Group Training

by

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DEDICATION

This thesis is dedicated to my inspiring mother. Without her support, I would not have been able to make it through these past four years of college. Her positive attitude and outlook on life is so motivating. Without her, I would have not been able to accomplish what I have. She has taught me many lessons in my life that continue to shape my future. Her love and support has given me the confidence to achieve what ever I set out to do in life.
ABSTRACT

Individuals with a mental illness often have difficulty regulating their emotions. In particular, individuals with a dual diagnosis are less likely to have appropriate coping skills for daily life stressors and emotions. This indicates the need for effective training in assisting these individuals in learning effective emotion regulation skills. At the time of this thesis, no group training programs were organized through the Supported Independent Living Program (SIL). Additionally, there were no training programs about emotion regulation within the agency. Therefore, the goal of this thesis was to evaluate the effectiveness of group training on emotion recognition and emotion regulation for individuals with a dual diagnosis using progressive muscle relaxation, controlled breathing, and mindfulness training. It was hypothesized that developing a group training program for individuals with a dual diagnosis in a SIL Program would be effective at increasing their knowledge of emotions, emotion recognition and emotion regulation. As well, it was anticipated that participation in this group training would lead to better emotional health and an overall increase in quality of life.

The group training program consisted of 15 sessions, occurring three times a week, for approximately 20 minutes per session. The eight study participants had been diagnosed with an intellectual disability and a co-occurring mental health disorder, and had been receiving services from the SIL program for at least one year. The final products of this thesis include: a facilitator manual, a participant manual, pre and post assessment tests, and a post-group feedback survey.

The results of the training group indicated an improvement in participant pre and post assessment scores in progressive muscle relaxation, controlled breathing and mindfulness training. There was an increase in independence and a decrease in the amount of prompts used for each activity. The data is limited due to the small sample size of the study. However, these findings suggest that this pilot study showed that subjects with a Dual Diagnosis could effectively be taught skills know to improve emotion regulation.
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TABLE OF CONTENTS

Dedication .......................................................................................................................... i
Abstract ............................................................................................................................. ii
Acknowledgements ......................................................................................................... iii
Table of Contents ............................................................................................................ v
Chapter I: Introduction ..................................................................................................... 1
Chapter II: Literature Review ......................................................................................... 3
  Overview of Dual Diagnosis ............................................................................................ 3
  Emotion Recognition ....................................................................................................... 3
  Emotion Regulation ......................................................................................................... 4
  Progressive Muscle Relaxation ....................................................................................... 5
  Controlled Breathing ....................................................................................................... 6
  Mindfulness Training ...................................................................................................... 7
  Outcomes of Group Training ........................................................................................... 8
  Summary ........................................................................................................................ 9
Chapter III: Method .......................................................................................................... 10
  Participants ................................................................................................................... 10
  Design ............................................................................................................................ 10
  Setting and Apparatus ................................................................................................... 11
  Measures ....................................................................................................................... 11
    Pre-Assessment ........................................................................................................... 11
    Ongoing Permanent Product Measures ................................................................... 11
    Post-Assessment ........................................................................................................ 12
    Post-group Feedback Survey .................................................................................... 12
  Procedures ..................................................................................................................... 12
Chapter IV: Results ......................................................................................................... 13
Chapter V: Discussion ..................................................................................................... 19
  Thesis Summary .......................................................................................................... 19
  Strengths ....................................................................................................................... 19
  Limitations ..................................................................................................................... 19
  Multilevel Challenges ................................................................................................... 20
  Contributions to Behavioural Psychology Field .......................................................... 21
  Recommendations for Future Research .................................................................... 22
References ......................................................................................................................... 23
Appendices ...................................................................................................................... 25
  Appendix A: Description of Study Participants .......................................................... 25
  Informed Consent Form ............................................................................................... 26
  Group Training Schedule ............................................................................................. 29
  Pre and Post Assessments ............................................................................................ 30
  Feedback Survey .......................................................................................................... 33
  Group Rules ................................................................................................................... 34
  Facilitator Manual ......................................................................................................... 35
  Participant Manual ........................................................................................................ 56
  Additional Feedback Survey Participant Comments .................................................. 65
  Raw Data ....................................................................................................................... 66
Chapter I: Introduction

Psychiatric disorders affect approximately 0.5% to 3.0% of the population, although among people with an intellectual disability, the prevalence is almost double (Werner & Stawski, 2012). This means that 40% of individuals with an intellectual disability have some type of psychiatric disorder. The term Dual Diagnosis is used for children and adults who have an intellectual disability along with a co-occurring mental illness and behavioural difficulties (Tang, Byrne, Friedlander, McKibbin, Riley & Thibeault, 2008). These individuals are less likely to have developed appropriate coping skills for daily life stressors and emotions due to their cognitive and adaptive disabilities. Furthermore, individuals with a Dual Diagnosis can be extremely resistant to traditional treatment approaches, which is often due to the mental health disorders that occur along with their intellectual disability. Group therapy, with the use of task based or behavioural approaches have been found to be effective for this population (Roberts & Corcoran, 2005). Research suggests that due to lack of skills with regards to techniques to regulate with their emotions, skills training is also effective for this population (Kemeny, Foltz, Cullen, Jennings, Gillath, Wallace, Cavanagh, Giese-Davis, Rosenberg, Shaver & Ekman, 2012).

Commonly, individuals with a mental illness have difficulties regulating their emotions (Gootjes, Franken & Van Strien, 2011). Emotion regulation is defined by the use of cognitive or behavioural strategies to influence the occurrence, experience and expression of emotions. Emotion regulation training provides individuals the knowledge needed to take more responsibility for their own behaviours and to understand they have a choice about how they act based on their emotions. In order for individuals to effectively learn techniques to regulate their emotions they must be aware and able to recognize their emotions. This process is referred to as emotion recognition and has been demonstrated to be a skill that is lacking in individuals with an intellectual disability. There are several evidence-based methods that can assist individuals in regulating their emotions. Relaxation techniques have been used for many years to help people cope with their emotions (Davis, Eshelman &McKay, 2008). One very common and effective technique is referred to as Progressive Muscle Relation (PMR) and it involves tensing and relaxing various muscles of the body in a specific sequence. Another method is Controlled Breathing, which can also be used in the process of regulating emotions. This technique involves becoming consciously aware of breathing to ensure enough oxygen is being delivered to the body. As well, Mindfulness-based therapies generally involve focusing attention on the present moment (Roemer & Orsillo, 2009). Rather than aiming to change thoughts and emotions, mindfulness focuses on awareness, acceptance and self-knowledge.

Although these evidence-based practices for emotion regulation demonstrate to be effective independently with a variety of populations, its effectiveness has not yet been evaluated for individuals with a Dual Diagnosis. At the time of this thesis, the Supported Independent Living Program (SIL) was not offering any programs for residents. The SIL program is a service geared to individuals with a Dual Diagnosis. The program takes place in an apartment complex that operates on a rent geared to income model. Tenants involved in the SIL program are encouraged to participate in support planning, goal setting and community involvement. The services available to clients in the program include; activities of daily living, mental/physical health support, assistance with finances, day programs, social/recreational activities, and vocational/educational services.

The purpose of this study was to evaluate the effectiveness of group training on emotions for individuals with a dual diagnosis using emotion recognition, PMR, Controlled Breathing, and Mindfulness training. The present study hypothesized that implementing an emotions training
group for individuals with a Dual Diagnosis in a Supported Independent Living Program would be effective in increasing their knowledge of emotions, emotion recognition and emotion regulation using evidence-based practices. This study also hypothesized that participation in this group would lead to better emotional health and an overall increase in quality of life. It was proposed that one method of accomplishing this would be through the development of a group, which would teach individuals using empirically based techniques for regulating emotions.

The current project sought to design and implement a group for individuals with a Dual Diagnosis that were involved with the SIL program at the time of this thesis. Within the current study, a review of the existing research literature is provided. The topics covered in this review include: overview of Dual Diagnosis, emotion recognition, emotion regulation, evidence-based emotion regulation techniques, and outcomes of group training programs. Furthermore, the method for the development and implementation of the group is described. Additionally, the results of this study were then provided. These results are comprised of a facilitator manual, a participant manual, as well as pre/post assessment results. Included in the participant manual was a post-group satisfaction survey. This survey was intended to assist in determining the relevance of the group to its intended audience. Finally, a discussion was included which involves strengths, limitations and challenges of the study. Also included in the discussion is an interpretation of the results found and recommendations for future research.
Chapter II: Literature Review

The present literature review initially focuses on an overview of dual diagnosis, as well as the emotional and behavioural difficulties involved. The importance of emotion recognition skills for this population of individuals is then examined. Further, evidence-based emotion regulation techniques and their relevance to individuals with a mental health disorder, specifically a dual diagnosis, are reviewed. The effectiveness of a group-training model for individuals with a dual diagnosis is also demonstrated in this review. Overall, this literature review explores past research and provides a rationale for the present study.

Overview of Dual Diagnosis

Dual diagnosis is a term that is used for both children and adults who have an intellectual disability along with a co-occurring mental illness and behavioural difficulties (Tang, Byrne, Friedlander, McKibbin, Riley & Thibeault, 2008). According to The American Association of Intellectual and Developmental Disabilities (2013) an intellectual disability is a generalized disorder that appears before the age of 18. It is characterized by significant impairment to cognitive functioning and deficits of two or more adaptive behaviours. Adaptive behaviour is defined as the conceptual, social and practical skills that are learned and performed by people in their everyday lives. The Public Health Agency of Canada (2013) states that mental illnesses are characterized by alterations in thinking, mood or behaviour associated with significant distress on impaired functioning. Individuals with an intellectual disability generally have an intelligence quotient (IQ) score of 70 or below. The National Coalition on Dual Diagnosis (2011) state that individuals with a dual diagnosis have very complex medical and psychiatric needs. A review by Nugent (1997) concluded that at least one in five, and perhaps as many as one in three, individuals with intellectual disabilities also have a psychiatric disorder (as cited in Litt, Cohen, Miele & Campbell, 2009). Harper, Webb and Rayner (2013) suggest that individuals with a dual diagnosis often face multiple behavioural challenges. One particular challenge would be difficulty with communication, which significantly limits their capacity to express themselves and make others aware of their needs. In addition, they may have physical and sensory disabilities that limit their ability to interact with those around them. Behavioral challenges of this population can include aggression directed at others or self, and sexualized and stereotyped behaviors. These behaviors may make community access problematic and limit access to certain daily activities.

Emotion Recognition

According to Rojahn and Warren (1997), intellectual disability may be correlated with difficulties recognizing emotional cues beyond general cognitive abilities. It has been demonstrated repeatedly that individuals with intellectual disabilities experience significant difficulties in recognizing facial expressions of emotion (Wood & Kroese, 2007). The aim of one meta-analysis was to address whether these skills can be enhanced in individuals with intellectual disabilities. The research study conducted by Wood and Kroese (2007) searched for all published journal articles investigating whether emotion recognition skills could be enhanced amongst these individuals. Overall, the study concluded that individuals with intellectual disabilities have difficulties recognizing expressed emotions compared to the general population and that accuracy in recognizing facial emotion is related to the individual’s degree of intellectual disability. The study claimed that numerous authors have determined that poor emotion recognition ability may account for the poor social skills of many individuals with intellectual disabilities. Wood and Kroese (2007) claimed that if individuals with intellectual disabilities lack skills with regards to identifying facial expressions of emotions, it may result in
them responding inappropriately to others and consequently, experiencing social rejection. Many authors have also suggested that by enhancing emotion recognition skills in individuals with intellectual disabilities, their social functioning would improve and other authors have argued that training in emotion recognition skills is an essential component of social skills training programs for this population of individuals. There is a small sample of evidence that supports that emotion recognition skills can be improved amongst individuals with intellectual disabilities and that the improvements made would be maintained over time. In order for individuals to effectively regulate their emotions they must be able to recognize the presence of those emotions.

**Emotion Regulation**

According to Gootjes, Franken & Van Strien (2011), difficulties regulating emotions is very common in many individuals with a mental illness. Emotion regulation is defined by the use of cognitive or behavioural strategies in order to influence the occurrence, experience and expression of emotions (Gootjes et al., 2011). Litt, Cohen, Miele and Campbell (2009) state that emotion regulation is the processes of an individual influencing which emotions arise and when, and how they experience and express these emotions. The specific process involved in emotion regulation includes: monitoring, evaluating, and modifying internal states of feelings (Eisenberg, Fabes, Guthrie, & Reiser, 2000). There has been a vast amount of information that has been derived from the study of emotions and emotion regulation (Kemeny, Foltz, Cullen, Jennings, Gillath, Wallace, Cavanagh, Giese-Davis, Rosenberg, Shaver & Ekman, 2012). In addition, task-based or behavioural approaches of teaching have been found to be very important for teaching skills. In general, emotion regulation training involves educating individuals about their emotions and ways for them to cope with those emotions.

According to Schuppert, Gisen-Bloo, Van Germert, Wiersema, Minderaa, Emmelkamp and Nauta (2009), emotion regulation training involves introducing ways of coping with emotional instability, daily stressors and psychological vulnerability. This training provides individuals the knowledge needed to take more responsibility for their own behaviours and to understand they have a choice about how they act based on their emotions. One study about emotion regulation training involved the use of several different stages in order to provide effective training. The initial stage included psychoeducation about emotion recognition and awareness of emotions and behaviours. The second stage incorporated information about individuals understanding their own emotions, temperament and character. Finally, the last stage involved learning emotion regulation skills, followed by attention to lifestyle. Overall, the participants in this study gained control over their own emotions and thoughts, as well as taking responsibility for their own behaviour.

Individuals who can effectively regulate their emotions have the ability to manage and to tolerate stressful emotional experience as well as related physiological arousal (Eisenberg et al., 2000). For example, an individual with emotional regulation skills can respond effectively when experiencing anger, rather than trying to overtake the emotion. Having the ability to respond in an appropriate manner is a very critical component of good emotion regulation (Eisenberg, Cumberland, & Spinrad, 1998). These skills influence an individual’s ability to handle strong feeling states, as well as a number of related experiences. In contrast, individuals with deficits in emotion regulation are typically unable to tolerate stressful emotional experiences and are very easily influenced by the physiological states that occur with these feelings. This can affect the individual’s self-concept and interpersonal efficacy and increases the likelihood that an
individual will seek out alternative ways to manage these experiences, such as drug and alcohol use (Khantzian, 1997).

Emotion regulation difficulties may be present across multiple diagnoses and may reflect maladaptive psychosocial and behavioral functioning. Many psychiatric disturbances can be viewed as self-regulation disorders (Eisenberg et al., 2000). Mood disorders, for example, involve dysregulated emotional states that may lead to episodes of depression or mania. Grawe, Hagen, Espeland and Mueser (2007) studied dual diagnosis patients at nine centres in Norway using a within-subjects pre- and post-test design. The goal of the program was to reduce substance misuse through providing information, motivational enhancement, skills training in developing relationships, relapse prevention, and establishing healthy leisure activities. Patients who completed the treatment showed significant reductions in substance misuse and improvement in global functioning.

According to Eisenberg, Fabes, Guthrie, and Reiser (2000), over the past 10 years, many empirically based treatments addressing issues of emotion regulation have been developed. Most of the techniques being used to increase an individual’s emotion regulation skill are grounded in cognitive-behavioral principles, although some are also drawn from Eastern philosophies. Providing clients with some psychoeducation on emotions and emotion regulation can be very valuable to increase their ability to regulate their emotions. The first step of emotion regulation generally involves helping clients increase awareness of their feelings by learning how to label, identify, and differentiate their emotional states. Labeling and naming emotional experiences can often make those experiences feel more manageable and organized rather than being overwhelming and confusing. Self-monitoring strategies, such as written exercises or lists of feeling states, can often be used to improve an individual’s ability to identify their emotions. Clients may also be taught how to better self-monitor their experiences. Cognitive-behavioral methods use records in which clients can record an emotion eliciting experience and rate the intensity of that emotion.

Clients can try to identify associated thoughts and reactions and behaviors as well as the context in which feelings emerged (Eisenberg et al., 2000). In addition to increasing emotion vocabulary and linking an individual’s feelings to cognitive, behavioral, and physical experiences, self-monitoring can also provide a means for clients to slow things down when they feel emotionally distressed. Helping clients to accept and trust their own feelings is another important part of emotion regulation work. Many individuals have been discouraged from expressing their feelings, especially negative feelings, and have in turn internalized these feeling. Although this method has been proven to be effective, clients may dismiss an exercise that does not have immediate results or that feels awkward or uncomfortable at first. In order to prevent clients from not engaging in the exercises, they need to know that they are not expected to be able to instantly grasp the new skills, but that with practice it will become easier. It is very important for clinicians to develop a way of communicating about emotional levels with clients to quickly understand and be aware of where the client is in their emotional response. In one example, the clinician and client used a scale ranging from 1 to 10, with 1 being the least emotionally aroused or in distress and 10 being the most emotionally aroused or the most distressed. Although much emotion regulation work is focused on helping clients manage their negative emotions, it is also important to help clients enhance positive feeling states (Eisenberg et al., 2000).
Progressive Muscle Relaxation

Relaxation techniques have also been used for many years to help people cope with their emotions (Davis, Eshelman & McKay, 2008). One very common and effective technique, developed by Dr. Edmond Jacobson in 1929, is referred to as Progressive Muscle Relaxation (PMR). In general, this technique involves tensing and relaxing various muscles in one’s body in a specific sequence (Davis, Eshelman & McKay, 2008; Field, 2009). Dr. Jacobson discovered that by repeating the procedure with every muscle group in the body, a deep state of relaxation could be induced. According to McCaffery and Pasero (1990), this technique produces both physiological and psychological relaxation by reducing the response to stress and decreasing the sensation of pain (as cited in Field, 2009). Field (2009) suggests that PMR is generally used to reduce stress and anxiety. However, one of the most difficult problems in research on PMR is compliance. Although compliance in participating in PMR can be an issue, far more studies demonstrate its effectiveness with a variety of individuals.

Pawlow and Jones (2002) examined whether relaxation training was associated with reduced physiological stress. Participants were led through exercises during two laboratory sessions spaced 1 week apart. Participants in the control group sat quietly for an equal amount of time in two laboratory sessions. The results indicated that the training led to lower levels of post intervention heart rate, state of anxiety and perceived stress, as well as increased feelings of relaxation.

In another study on stress, Ghoncheh and Smith (2004) compared the psychological effects of PMR with yoga stretching. Both groups practiced once a week for 5 weeks at home. Individuals that participated in PMR displayed higher levels of physical relaxation and disengagement in the fourth week and higher levels of mental quiet and joy at week 5.

An additional study involved undergraduate students in a large-group setting that were exposed to 20 minutes of meditation, PMR, or a control condition, followed by 1 minute of stress induction and another 10 minutes of each intervention (Rausch, Gramling, & Auerbach, 2006). The participants in both the meditation and PMR groups decreased more on cognitive, somatic, and general state of anxiety compared with the control group. However, the PMR group had the greatest decline of all three groups.

Weber (2004) used PMR, meditative breathing, guided imagery, and soft music to promote relaxation in patients in a psychiatric unit across a month of weekly sessions (as cited in Field, 2009). Anxiety levels were measured before and after relaxation sessions. Overall, in the results of this study, a significant reduction in anxiety level was noted on the post-test.

Miller (2008) implemented a program to assess the effectiveness of progressive muscle relaxation skills in reducing anxiety in three adults with mild intellectual disability and Generalized Anxiety Disorder using a within subjects, multiple baseline across participants design. The study's design included a four-week baseline period, followed by a criterion-based intervention, and four weeks of follow-up beginning one month after the completion of the intervention. Participants were taught progressive muscle relaxation skills during individual meetings with the primary investigator. Skill training occurred two times per week with sessions typically lasting 30-45 minutes. The results of the study provide support for the use of progressive muscle relaxation skills in treating symptoms of Generalized Anxiety Disorder in adults with mild intellectual disability. A direct relationship was evident between the acquisition of progressive muscle relaxation skill development and reduction in anxiety for all participants. Furthermore, progressive muscle relaxation skills were maintained up to 1-month follow-up, while ongoing reductions in anxiety were continuously noted.
Overall, muscle relaxation helps individuals learn to identify places in which stress and distress are manifested in the body through physical tension. This method of relaxation assists individuals in learning to become better aware of stress in their body through a series of tensing and relaxing exercises. Litt, Cohen, Miele and Campbell (2009) suggest that clients who are able to use this skill properly find that they become calm and centered.

**Controlled Breathing**

Breathing control and relaxation has also been demonstrated to be an effective method for the regulation of emotions (Litt et al., 2009). Breathing relaxation training has the potential of helping clients learn to focus and deepen their breathing, especially for clients who tend to have shallow, rapid breathing when they become anxious or dysregulated. According to Singh, Lancioni, Winton, Curtis, Wahler, Sabaawi, Singh and McAleavey (2006), mindful breathing involves consciously returning attention to breathing rather than negative thoughts in the mind. The overall process of controlled breathing entails focusing on breathing in through the nose and out through the mouth with the aim to decrease negative or unpleasant emotions.

A multiple baseline design across group homes was used in one study and the purpose of was to decrease aggression in individuals with an intellectual disability. It was suggested that aggression is often common in this population of individuals due to their inability to regulate their emotions. Staff of the group home was trained to provide mindfulness training, which involved controlled breathing techniques. There was a significant increase in the number of learning objectives mastered by the individuals following the training. Results from this study suggest that the use of controlled breathing, along with mindfulness techniques, is effective in assisting individuals to regulate their emotions.

**Mindfulness Training**

According to Dunn, Callahan and Swift (2013), mindfulness is the awareness one has with their own experience without any judgment. Mindfulness can be defined as paying attention in a particular way, in the present moment and non-judgmentally (Harper, Webb and Rayner, 2013). It originates from Buddhism and enables people to orient their attention toward experiences in the present moment, with acceptance, curiosity and openness. Mindfulness-based therapies are on the increase (Roemer & Orsillo, 2009). Empirical research has suggested that mindfulness has many desirable outcomes such as increased self-control, improved concentration, cognitive flexibility, as well as higher levels of psychological well being (Dunn et al., 2013). According to Harper, Webb and Rayner (2013) numerous studies have used mindfulness-based interventions to positively influence the behaviour of individuals with an intellectual disability. The mindfulness-based interventions were used to improve the quality of life for these individuals, as well as reduce their challenging behaviours. Furthermore, research has shown that mindfulness-based therapies can also be effective with individuals experiencing clinical conditions. Dunn, Callahan and Swift (2013) state that Acceptance and Commitment Therapy (ACT), Dialectical Behaviour Therapy, Mindfulness-based Cognitive Behavioural Therapy and Mindfulness-based Stress Reduction are all recently developed treatment approaches. Mindfulness is commonly used due to its cost-efficiency, accessibility and positive benefits. The use of mindfulness in informal exercises can be easily implemented into any treatment plan regardless of theoretical orientation. In fact, mindfulness can be used with other behavioural models or it can be used as an alternative (Harper, Webb and Rayner 2013).

According to Harper, Webb and Rayner (2013), mindfulness training has also been used to improve the quality of life of individuals with a dual diagnosis and to reduce challenging
behavior. It has been used to support people with a range of clinical issues; including managing anger, reducing substance misuse, stress, depression, and anxiety and improving psychological well-being. Although behavioral approaches have continuously been used to reduce challenging behaviors and promote positive behaviors, there is growing support for moving beyond applied behavior analysis and toward positive behavior support. A number of studies have investigated the effectiveness of mindfulness for promoting positive behavior change and improving the quality of life of people with a mental illness.

Singh, Lancioni, Winton, Singh, Curtis, Wahler and McAleavey (2007) found that aggressive behavior decreased with training in “Meditation on the Soles of the Feet”—an exercise in which participants are asked to focus on the soles of their feet and to shift their attention and awareness to a neutral part of their body. Many studies demonstrated clinical benefits of mindfulness-based interventions. For example, 10 out of 18 studies reviewed by Harper, Webb and Rayner (2013) found that mindfulness-based interventions led to a reduction in aggression. Other studies found reduced levels of stress in participants. Mindfulness-based interventions were also shown to be an effective intervention for reducing challenging behavior in individuals with a mental illness and studies also reported improvements in the mental health and emotional well-being of participants that were exposed to these forms of intervention. Reviewed studies suggest that mindfulness-based interventions have a clear potential for promoting positive outcomes among people with an intellectual disability.

Several variables may affect the impact that mindfulness has on each individual participant (Harper et al., 2013). These variables include: severity of the participants mental illness, experience of staff implementing the mindfulness training, and participant’s motivation to engage in the training. With regards to participant motivation for engagement, learning and behaviour change are all important aspects. Evidence suggests that mindfulness training is used across a large spectrum of clients. Mindfulness techniques are helpful in the process of helping individuals regulate their emotions (Litt et al., 2009). Through the use of mindfulness techniques, clients learn to develop mindful attention to the present moment in a non-judgmental way. Research investigating the efficacy of mindfulness-based interventions for the treatment of psychological symptoms and disorders continues to grow at a fast pace (Shapiro and Carlson, 2009). As of now, there is a large amount of evidence that mindfulness-based interventions can be successfully applied to the treatment of symptoms in individuals with anxiety and depression. Mindfulness-based therapies for example, are commonly used as a method for assisting individuals in coping with their emotions. With regards to the growth in studies investigating the usefulness of mindfulness training, research is still limited as to its application with various types of mental health conditions.

**Outcomes of Group Training Programs**

Group treatments for individuals with a dual diagnosis typically involve a combination of educational strategies, motivational enhancement, cognitive-behavioural skills training and peer support from others with similar experiences trying to achieve similar goals (Grawe et al., 2007). In the article presented, dual diagnosis refers to individuals with an intellectual disability, as well as a co-occurring mental illness. Specific mental illnesses occurring with the intellectual disability were not specified. Several evidence-based studies found that both individual and group cognitive-behaviour therapy and skills training are effective for these individuals (Roberts & Corcoran, 2005). Early research on group interventions suggested that people with a dual diagnosis could be engaged in treatment. Outcomes of the research varied due to weak research designs, small numbers, short treatment periods, lack of attention to motivational enhancement,
and high dropout rates. Research also suggests that the content of the group should match the individual’s motivational level or stage of treatment.

In one study, group sessions were provided twice a week for 90-minutes each or once a week for 120 – 150 minutes each. The main skill areas taught in the program were problem solving, basic communication, assertiveness, refusing offers to use substances, coping with cravings, preventing relapses, friendship skills, and developing alternative leisure activities. Interpersonal skills were thought to be central for each person’s recovery in order to establish healthy behaviours and a sober social network. The results showed that the Better Life program was associated with a low dropout rate of only 17 percent. The positive outcomes associated with participation in the Better Life program are similar to that of several other group interventions for patients with dual disorders (Grawe et al., 2007). In another study, Kabat-Zinn (2003) found that in a group training program of 22 participants diagnosed with generalized anxiety disorder, improvements were seen over the course of the program in anxiety levels, depressive symptoms, and generalized fears, measured with reliable objective scales. Randomization is also important to ensure baseline comparability between groups. Although there has been a widespread use of group interventions for treating dual disorders, few standardized programs have been empirically validated (Grawe et al., 2007).

Summary

In summary, empirical research has shown that individuals with dual diagnosis have a significant impairment in their ability to recognize and also regulate their emotions. This indicates that emotion regulation training is very important component of therapy for individuals with a dual diagnosis. With regards to emotion recognition, many authors have suggested that by enhancing emotion recognition skills, social functioning would improve as well. Progressive Muscle Relaxation, Controlled Breathing and Mindfulness were the evidence-based emotion regulation techniques that were reviewed. These techniques offer many advantages for individuals with a dual diagnosis, including: increased ability to identify emotions effectively, developing skills to respond appropriately to others, as well as ability to influence the occurrence, experience and expression of emotions. As well, evidence suggests that group treatments can be effective for individuals with a dual diagnosis. Although these emotion-regulation techniques have demonstrated to be effective individually, no research has demonstrated the effectiveness of the use of these techniques together. The present workshop was developed to evaluate the effectiveness of these evidence-based techniques to develop emotion regulation skills, using group training. It was hypothesized that individuals who participate in the group training would learn the techniques they would need to assist them in better dealing with overwhelming emotions.
Chapter III: Method

Participants

Participants in the present study were clients of the Supported Independent Living (SIL) Program who met the following criteria: (1) they had been diagnosed with an intellectual disability with a co-occurring mental health disorder, (2) they were over 18 years of age, (3) they resided at Lyons Street Residential Housing, and (4) they had been receiving support from the SIL program for at least one year. All 11 clients of the SIL program were asked to participate in the study but only those who volunteered were included in the study. Of the 11 SIL clients, eight volunteered to participate in the group and met the inclusion criteria. All of the eight clients consented to participate in the group.

The eight study participants consisted of five females and three male, ages 24 to 51 (M=34). Appendix A provides a brief description of each study participant. Current psychopathology of study participants included: Psychotic Disorder (25%), Anxiety (63%), Depression (50%), Adjustment Disorder (13%), ADHD (13%), Agoraphobia (13%), Obsessive Compulsive Disorder (13%), and Autism (13%). Along with a mental health disorder, all participants have also been diagnosed with a developmental disability.

The St. Lawrence College Research and Ethic Board approved the study. Participants were informed during the pre-assessment about confidentiality, personal rights, risks and benefits of the group and group structure. The informed consent form (Appendix B) was also reviewed and signed at this time. The consent form also specified that all parties participating in the group have the ability to withdraw at any time, and if they have any questions regarding the program, they could contact the agency.

Currently, there are no individual or group training programs running at the SIL program. The rationale for choosing to implement a training group about emotion recognition and regulation for this population is that these individuals have difficulty regulating their emotions, and therefore, techniques to deal with overwhelming emotions would be helpful.

Design

For this study, a multiple baseline across groups format was used, where participants were divided into two groups of four. Participants were assigned randomly to either Group 1 or Group 2, and each group consisted of the same training, duration, time of day and number of sessions. The only difference was that Group 2 began 1-week later than Group 1 and therefore, ran 1-week later. The process of the group included pre and post assessments, as well as 15 group sessions occurring 3 times per week, for approximately 20 minutes per session. A Behavioural Psychology Student delivered each group session. During treatment, participants also accessed their regular services provided through the agency.

Dependent variables were determined via discussion with staff members of the SIL program, as well as client file information. The goal for this study were to increase both emotion recognition and emotion regulation skills. Emotion recognition is defined as one’s ability to recognize their own emotions and feelings, as well as the emotions in which others display through facial cues or body language. Emotion regulation is defined as one’s ability to influence the occurrence, experience and expression of their emotions through the use of cognitive or behavioural strategies.

Baseline and follow-up data were compared between each participant as well as for the group as a whole. Measures of central tendency (mean, median, and standard deviation) were used to compare the results of the training group. Further, t-tests were performed in order to determine the statistical significance of the relationship.
Setting and Apparatus

All group training sessions were conducted in the staff meeting room at a residential building of the mental health agency. This setting provided a space for participants to feel comfortable and free from distractions from other clients in the building. A facilitator’s manual was developed which included: the group training calendar, group training schedule, group rules, plans for each session, activity materials and instructions for each session, and instructions for techniques to be presented. A participant manual was also developed which included: what participants will learn, group rules, group training calendar, and all the worksheets participants need for the activities to be completed in group training sessions. Each participant received his or her own participant manual, which was developed to co-ordinate with the facilitator manual. Appendix C outlines the group training schedule, which shows what material was covered and what was practiced during each of the 15 group training sessions.

Measures

Participants were assessed prior to, during, and after completing the 15 group training sessions. Three types of assessment measures were used: a pre and post assessment of their ability to complete Progressive Muscle Relaxation, Controlled Breathing and Mindfulness tasks, ongoing permanent product measures related to recognizing their emotions, and a post-group feedback survey. The Behavioural Psychology student completed the pre and post assessments, as well as the post-group feedback survey. The Behavioural Psychology Student and a staff member of the SIL Program reviewed the ongoing permanent product measures.

Pre-assessment

Before the group began, each individual participant completed a pre-assessment to collect baseline data on their ability to perform the tasks using a checklist (see Appendix D). This assessment was completed individually with each participant, to assess their knowledge regarding the topics that would be covered in the group sessions. The assessment data was collected using a combination of task analyses for Progressive Muscle Relaxation, Controlled Breathing and Mindfulness. Participants were assessed based on their ability to complete each task effectively and results were recorded as either ‘completed independently’ or with ‘prompting’. If prompts were required for the participant to complete the step, further data was recorded as to whether verbal, modeling or physical prompts were used. A score was then generated for each participant following completion of the assessment.

Ongoing Permanent Product Measures

Throughout group sessions, participants were required to complete worksheets, which were included in their participant manual. The worksheets were based on participants recognizing which emotions they were feeling and then rating the intensity of each emotion. 1. Emotions Diary: This activity was included in the participant manual for each session for participants to rate their emotions. It consisted of pictures of six basic emotions (happy, angry, embarrassed, sad, worried and scared) with three options (no, a little or a lot). 2. Emotions Record: This worksheet was completed by participants for each technique (Progressive Muscle Relaxation, Controlled Breathing and Mindfulness) that was taught in the group sessions. The emotions record consisted of the following five columns: (1) describe the situation, (2) identify the emotion, (3) rate the intensity of the emotion, (4) describe the technique used and (5) rate the intensity of the emotion after the technique had been used. 3. Emotions Intensity Scale: This worksheet was also completed during group sessions and was used once for each technique being taught. It consisted of six thermometers using a 5-point Likert scale. Each scale represented the six basic emotions listed above and participants were
required to colour in the thermometer to the level of intensity they felt regarding each specific emotion.

**Post-assessment**

Once the 5-weeks of group sessions were completed, each participant was met with individually again to complete the post-assessment. This assessment was identical to the pre-assessment and was conducted in the same way. Both assessments (pre and post) consisted of the same list of task analyses and were scored in the same way.

**Post-group Feedback Survey**

During the post-assessment, a feedback survey was verbally completed with each participant asking how effective the training group was for them and which sections they felt were most helpful (Appendix E).

**Procedures**

During the first group session, group rules (Appendix F) were reviewed with all participants and they had the opportunity to ask questions about the group or study in general. To ensure participant confidentiality, each client’s data was assigned a numeric code. No client names or distinguishing information was used in coding information.

The group consisted of emotion recognition training as well as emotion regulation training. For the purpose of this study, emotion recognition training consisted of activities to assist participants in understanding emotions, recognizing the emotions they are feeling and learning how to rate the intensity of these emotions. The intervention consisted of a 15-session group training program that was delivered three times per week for approximately 20 minutes per session. The group was developed and presented by the Behavioural Psychology student. The main focus of each training session was to have participants recognize their current emotional state, complete an evidence-based emotion regulation technique, and then recognize how that technique affected their emotions.

In order to promote emotion recognition skills, the Emotions Diary activity was completed at the beginning of each group training session. Participants were also required to fill out an Emotions Record to compare the intensity of their emotions. This was done twice, once prior to completing each PMR, Controlled Breathing and Mindfulness technique and once again afterwards. The same method, as mentioned above, was used for the Emotion Intensity Scale.

Emotion regulation was demonstrated in the form of skills and techniques, in which participants could use in a variety of situations to assist them in managing their emotions. Each technique was practiced once per week in the group sessions and then participants were prompted each day to practice. A task analysis was developed for both PMR and Controlled Breathing to break the activities into simpler steps to be taught to the participants. These task analyses were used during group training sessions to teach the skills to participants, but further examples were used in order to assist participants in memorizing these skills. The aim of teaching participants PMR and Controlled Breathing was to give them skills to use in situations where they need to regulate their emotions. Alternatively, Mindfulness consists of several modules but for the purpose of this study, the following core principles were taught: Defusion, Expansion and Valued Action. At the end of each group training session, participants received a sticker on their calendar to keep track of their attendance.
Chapter IV: Results

The primary hypotheses of this study were that implementing an emotions training group for individuals with a Dual Diagnosis would: (1) increase participant knowledge of emotions, emotion recognition and emotion regulation, and (2) increase participant independence scores on post assessment.

Final products of this thesis include a facilitator’s manual (Appendix A), and an accompanying participant manual (Appendix B). The facilitator’s manual includes the group training calendar, group training schedule, group rules, plans for each session, activity materials and instructions for each session, and instructions for techniques to be presented. The participant manual includes what participants will learn, group rules, group training calendar, and all the worksheets participants needed for the activities to be completed in group training sessions.

Figure 1 illustrates the average of the 8 participants pre and post assessment scores for Progressive Muscle Relaxation (PMR), Controlled Breathing, and Mindfulness. As presented below, it is evident that there are significant increases in post assessment scores for each activity. More specifically, it demonstrated that participants showed the least amount of improvement with regards to Mindfulness.

![Figure 1. Graph of Client Pre and Post Assessment Results: Independence Means](image)

Figure 2 illustrates each participants average independence score improvements from pre to post assessment. The data presented demonstrates that each participant involved in the study had some improvement with regard to his or her level of independence in completing each activity. More specifically, the highest participant independence improvement score was 28 and in comparison, the lowest score was 6.
Using the above data, the independence scores of Group 1 and Group 2 were compared to determine if there was a significant difference in scores. The results indicated that Group 1 had an average increase of 11, whereas Group 2 had an average increase of 17.

Table 2 presents the average percentage increase in participant independence for each activity. The results demonstrate that for each activity there was a significant percentage increase from pre to post assessment scores. More specifically, Controlled Breathing had the highest percentage increase of 125 percent from pre to post assessment scores. Further, the average scores for the Mindfulness assessment increased by 75 percent. Lastly, the assessments for Progressive Muscle Relaxation presented the lowest percentage increase of 56 percent, which still demonstrates a significant increase in participant independence. Specifically to Progressive Muscle Relaxation, participants generally had very high scores on the pre assessment, which resulted in a significantly smaller increase to the post assessment scores. The overall data presented represents the success of the training group at increasing participant scores on the post assessment.

Table 2  
Pre and Post Assessment Results: Independence Average Percentage Increase

<table>
<thead>
<tr>
<th>Controlled Breathing</th>
<th>PMR</th>
<th>Mindfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td>125%</td>
<td>56%</td>
<td>75%</td>
</tr>
</tbody>
</table>

Figure 2, 3 and 4 demonstrate the average use of prompts needed for participants to complete pre and post assessments. The results demonstrate that on average participants needed less prompting on the post assessment. It is shown that verbal prompting was used most frequently for each technique and physical prompting was only used during Progressive Muscle Relaxation. During the post assessment, no physical prompts were needed. More specifically, the
average amount of verbal, modeling and physical prompts used for the pre and post assessments were identified. Firstly, verbal prompts went from being used an average of 5 times in pre assessment to 2 times during the post assessment. Secondly, modeling prompts were used approximately 3 times during pre assessment and decreased to being used less than 1 time during the post assessment. Lastly, physical prompts were used less than 1 time during the pre assessment and not used at all in the post assessment.

Figure 2. Graph of Client Pre and Post Assessment Prompting Means: Controlled Breathing

Figure 3. Graph of Client Pre and Post Assessment Prompting Means: PMR
As mentioned above, there was a significant decrease in prompts used from pre to post assessment. Specifically, for the Controlled Breathing assessment, verbal prompting decreased, on average, by 75 percent and modeling prompts by 100 percent. Further, prompts for Progressive Muscle Relaxation also had a significant decrease as verbal prompting decreased by 57 percent, modeling prompts by 86 percent and physical prompts by 100 percent. Lastly, for the Mindfulness assessment, it was demonstrated that many verbal prompts were still needed for participants to complete the post assessment due to the average percentage decrease for verbal prompts being only 40 percent. Modeling prompts were no longer needed during the post assessment for Mindfulness and this was demonstrated by the percentage decrease being 100 percent.

Table 4
Pre and Post Assessment Results: Prompting Average Percentage Decrease

<table>
<thead>
<tr>
<th>Controlled Breathing</th>
<th>PMR</th>
<th>Mindfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V  M  P</td>
<td>V  M  P</td>
</tr>
<tr>
<td></td>
<td>75% 100% 0%</td>
<td>57% 86% 100%</td>
</tr>
</tbody>
</table>

A satisfaction survey was also used during this study in order to analyze the benefits of the group training sessions. A total of 6 questions were included in the survey. The purpose of the survey was to evaluate whether or not participants perceived the group as being beneficial and practical. Table 5 presents the specific questions that were asked to each of the 8 participants. Participants were asked to rate each on a Likert scale ranging from ‘not true’ to ‘very true’. The table is a summary of the percentage of participant’s responses for each question.
Results of the survey identified that 87.5 percent of the participants found the overall group to be helpful and 75 percent felt that the skills learned during were very helpful. Specific to activities throughout the group, 62.5 percent of participants found the activities to be helpful for learning and 87.5 percent stated the handouts were easy to understand.

The completed satisfaction surveys all had positive reviews with regards to the group and most felt the skills learned were helpful. Overall, all participants found the strategies to be presented in an understandable way and found the activities and handouts that were used throughout very helpful.

Additionally to the 6 questions asked in the satisfaction survey, participants were asked to comment on what they enjoyed most about the group, as well as what they would change. Appendix C presents the positive and critical comments that participants made regarding the group training, as well as the percentage of participants that stated each. Comments received from participants demonstrated they enjoyed: spending time with other clients, getting treats every session, talking about their feelings, learning about breathing exercises and doing worksheets and activities throughout the group. Some participants suggested that the group consisted of too much of the same thing, therefore they would get bored at some points; others suggested they would have liked if there were more activities and group exercises. The most
common comments received from the survey suggests that 37.5 percent of participants enjoyed getting treats every session and 25 percent stated that they liked being able to spend time with friends while learning. As for critical comments about the group, 37.5 percent of the participants stated they had no comment and enjoyed everything about the group.
Chapter V: Discussion

Thesis Summary

This purpose of this thesis was to evaluate the effectiveness of group training on emotions for individuals with a dual diagnosis using emotion recognition, progressive muscle relaxation, controlled breathing and mindfulness training. A participant and facilitator manual was created and group training sessions were delivered three times a week. The emotion regulation techniques used were chosen based on empirical articles, which indicated the effectiveness of each technique in order to help individuals regulate their emotions.

At the time of the thesis, it was hypothesized that implementing an emotions training group for this population of individuals would be effective in increasing their knowledge of emotions, emotion recognition and emotion regulation. It was also assumed that participation in this group would lead to better emotional health and an overall increase in quality of life. The core curriculum of the group training sessions, as well as the manual, was determined using input and resources from several sources. The majority of sources included empirical articles and other online databases, but some resources were gathered from within the agency. To ensure the quality and applicability of the manual’s overall content, feedback was obtained from agency staff members, and they provided suggestions for changes or additional content that could be added in the manual. Changes were made to the manual based on these suggestions.

This study demonstrated that the training group improved participant pre and post assessment scores with regards to increasing independence and decreasing the amount of prompts used for each activity. Specifically, it was identified that verbal prompting was needed most for completion of Mindfulness activities, as compared to Controlled Breathing and Progressive Muscle Relaxation.

Strengths

A major strength of this thesis is that it incorporates an empirical foundation into the final product. Empirical and peer-reviewed articles reflecting evidence-based practices were referred to when determining the most effective means for teaching individuals with a dual diagnosis the skills to effectively regulate their emotions. The facilitator’s manual for group training sessions was guided by an extensive review of literature. Given this, the manual and group training program is considered to reflect ‘best practices’.

A further strength of this thesis is that it is based upon the integration of information from several sources, as many professionals, both internal and external to the agency, were consulted throughout the development of this thesis. In addition, changes were made based on feedback from the Supported Independent Living Program staff, which helps to ensure the usefulness of the manual in practice. Participants can also use the manual even after group training is completed in order to identify their emotions. Additionally, the practical format of the manual allows for the participants to review the manual at anytime, which contribute to the manual’s overall usability.

Limitations

Although the group training and corresponding manuals have the potential to be valuable, there are several limitations that must be considered. One limitation to consider is that no one else co-facilitated or presented the group independently at any point. Therefore, the information was always presented in the same way, which in some ways is a strength but may also be a limitation. With only one person facilitating the group, any of the data that was collected regarding participant scores may not be as effective. Further, this study demonstrates no inter-observer reliability because no other staff members completed the pre or post assessment with
participants. This means that the data regarding participant assessment scores that was collected may be very subjective. Therefore, a blind observer may have been beneficial to measure participants' skills and emotionality before and after the training.

Additionally, there was no way to test the usefulness of the manual for staff. Due to time constraints, only the student was able to deliver the groups using the facilitator manual. This is a limitation in the sense that the layout of the manual may not be as simple for staff to present. This decreases the maintenance aspect of this thesis because it was not ensured that the delivery of the group training could be easily taken over by staff members within the agency.

Another limitation to consider is that this overall study was under time constraints. Specifically, there was no analysis completed of the permanent product measures used in the manual and not enough data to demonstrate the effectiveness of these measures. Additionally, there were limitations on the extent to which participants were trained with regards to all the emotion regulation techniques. Certain sections of the group were not covered as thoroughly as others and during the post assessment, it was clear that participants had more difficulty understanding the concept of specific sections. As presented in the results section of this thesis, participants were not overly successful with regards to the mindfulness section of the group training. It was a concept that involved very abstract thinking, which seemed to be a very difficult task for this specific group of individuals.

**Multilevel Challenges**

**Client Level.** The purpose of conducting this group training program was to improve client’s ability to regulate their emotions more effectively in a variety of areas. However, implementing group training with individuals with a dual diagnosis can pose many challenges. Factors such as responsivity may interfere with client’s ability to understand the curriculum of the group training program and may also prevent them from meeting the goals and objectives. For example, it is important for facilitator’s to identify when responsivity is an issue, and develop strategies to help clients overcome these barriers. Factors that may affect participant responsivity include minimal education, literacy deficits, and physical, cognitive, and behavioural impairments.

Another concern is that this population of individuals tends to demonstrate a lack of motivation to participate in extracurricular activities. In some cases, clients may be unaware that there is need for change and feel that training will be of no help to them. Therefore, this group training program attempted to promote strategies to enhance participant engagement during the training process. The group training sessions, as well as the participant manual incorporated activities and visuals to help the clients stay focused and to want to be engaged in the groups. If the clients are more interested in the group, they will most likely benefit from the content being covered and potentially be more motivated.

**Program level.** Conducting a group training program in a community setting that does not have regular programming has many challenges. The Supported Independent Living Program did not have any group programming available for clients on site. All programming was offered at other locations within the agency. As a result, clients were not familiar with any programs running out of this location. Therefore, implementing a group training program presented challenges such as lack of participant attendance. Also, since the Supported Living Program was not running any groups at that time, there was no formal location from which to facilitate the groups.

**Organization level.** The Supported Independent Living Program makes up one part of a large organization, Frontenac Community Mental Health and Addiction Services. This program is specifically responsible for the support of clients with a dual diagnosis housed in their own apartments. The agency overall is responsible for scheduling and programming for the residential
facilities. Staff working within the agency are subject to guidelines and policies passed down from persons who occupy important decision-making positions within the organization. It is important to note that decisions made at an organizational level are not always conducive at the service level. In fact, decisions at the organizational level can greatly impact the implementation and outcomes of group training programs. For example, one concern during the implementation of this training program was that a music group was started by the agency and it occurred during one of the group training sessions.

Furthermore, decisions made about staffing may impact the number of facilitators available to implement the group training program. Due to these potential challenges, the current manuals are organized in a way that separates each session very clearly, with different techniques to be presented during each session. In other words, this will provide facilitators with the flexibility to select only the relevant areas to train, and customize the group training program based on the needs of the clients at that time.

**Societal level.** Emotion regulation skills learned in group training may also have the capacity to make an impact at a societal level. For example, it is a goal of most programs to teach skills in a way that they will generalize beyond the training environment. This aids clients in their everyday functioning, and helps them cope with a variety of situations and events. However, it is not guaranteed that this generalization will occur, and clients may continue to demonstrate difficulty implementing skills in their everyday lives. Therefore, facilitators are encouraged to follow up with clients after sessions to address any challenges to skill implementation that may arise outside of the training environment.

Another major concern at the societal level is incidences of stigma and bias directed at individuals with a mental illness from other members of society. This may result in these individuals being rejected for certain opportunities, regardless of personal skills or qualifications.

**Contributions to Behavioural Psychology Field**

The field of Behavioural Psychology is aimed at supporting positive behaviour change in order to bring about the best in people. More specifically, one goal of Behavioural Psychology is to develop interventions that will help to improve the client's quality of life. This thesis has the capacity to contribute to this goal, as it provides a unique treatment approach that combines a variety of evidence based practices for helping individuals regulate their emotions. The participant manual that was created has the potential to assist clients in becoming successful outside of group training. Additionally, the manual helps clients to become more successful in a many areas of life by giving them the skills they need to be successful.

This thesis can also be used as a reference for facilitators working with individuals with a mental illness who have difficulty recognizing and regulating their emotions. It provides a variety of empirically based techniques, and can be helpful for many different individuals in a variety of settings.

In addition, professionals in the field of Behavioural Psychology are always expanding the literature on various intervention procedures for different client populations. This is possible because one of the purposes of Behavioural Psychology is its ability to adapt intervention procedures to meet the needs of a variety of clients. This thesis serves to add to this growing body of literature, by successfully combining and adapting several treatment approaches to use for individuals with dual diagnosis.
Recommendations for Future Research

It is recommended that future group training programs in this agency should include a variety of topics and a variety of different layouts. This may include more games, group activities to improve social interaction, worksheets to increase independence, as well as both visual and hands-on learning modules. Further, it would have been beneficial to use some measure of each participant’s emotion regulation ability. This data could have been taken before and after training and other staff could have rated each participant, which would contribute to the interobserver agreement of the study. Additionally, a means of evaluating the effectiveness of the training manuals for staff to implement the group training program should be evaluated. This would ensure that the data collected on the effectiveness of the manuals were based on both participant opinions, as well as staff within the agency.
References


Appendix A: Description of Study Participants

**Client 01:** A 24-year-old female diagnosed with a developmental disability with psychosis not otherwise specified.

**Client 02:** A 40-year-old female with a developmental disability with a psychotic disorder and a neurological condition.

**Client 03:** A 51-year-old male diagnosed with a developmental disability with an anxiety disorder and depression.

**Client 04:** A 25-year-old female diagnosed with a developmental disability with adjustment disorder and ADHD.

**Client 05:** A 37-year-old male diagnosed with a development disability with an anxiety disorder and depression.

**Client 06:** A 27-year-old female diagnosed with a developmental disability with an anxiety disorder, agoraphobia and obsessive compulsive.

**Client 07:** A 27-year-old male diagnosed with a developmental disability with autism, an anxiety disorder and depression.

**Client 08:** A 42-year-old female diagnosed with a developmental disability with an anxiety disorder.
Appendix B: Informed Consent Form

**Project title:** The Use of Evidence-based Practices to Increase Emotion Recognition and Regulation in Individuals with a Dual Diagnosis using Group Training

**Principal Investigator:** Cassandra Snook  
**Name of supervisor:** Colleen Cairns  
**Name of Institution:** St. Lawrence College  
**Name of part partnering institution/agency:** Supported Independent Living Program of a mental health and addiction services agency

You have been invited to take part in a research study. I am a student in my fourth year of the Behavioral Psychology Program at St. Lawrence College. As a part of placement, I am completing a study called an applied thesis and I am asking for your help to complete this project. The information in this form is to help you understand my study so that you can decide if you want to participate. Please read the information below carefully and ask all the questions you might have before deciding whether or not to participate.

**The Study**  
I will be conducting a study on group training of emotions for people in the Supported Independent Living Program. The study will help people recognize and accept their emotions. Techniques, such as how to control your breathing and how to relax your muscles, will also be used to help with control emotions.

**Your Role**  
If you choose to take part in this study, you will be asked to participate in a 6-week group training program involving discussions, activities, and relaxation training. Also, you will be asked to complete pre- and post-assessments, as well as a post-training interview about what you thought of the group. The group will take place 3 times a week and will be 20-30 minutes per session. You will be required to attend every session. The pre- and post-assessments will take about 20 minutes of your time and will occur immediately following the completion of the group.

**Benefits to the Study**  
There are many benefits from participating in this study. First, you will learn how to effectively identify and recognize your emotions. Secondly, you will learn techniques on how to control your emotions. Finally, the study will help you have a better quality of life and better emotional health. The skills you will learn will help you deal every day with emotions while at home or in the community.

**Disadvantages/ Risks Involved**  
A potential risk is that the study may result in negative emotions as you identify some of the emotions that you have and how they affect you. At this time, no other risks that may result from
participating in this study have been identified. If you feel any negative emotions at any point, please tell the group facilitator or staff immediately.

**Ensuring Confidentiality**
All information that is obtained from the study will be kept strictly confidential. The information will be stored in a locked cabinet and a password protected computer file. All hardcopy data from this study will be destroyed upon completion of the study. I will take every precaution to keep the information private and confidential, unless required by law. You will not be identified by name in any reports, publications, or presentations and everything will be kept anonymous. Any data collected will be kept on file at St. Lawrence College for up to 7 years for research purposes, after which it will be destroyed.

**Contact Information**
This study (will/has) been approved by the agency and the Research Ethics Board at St. Lawrence College. The study will be developed under the supervision of Colleen Cairns, my supervisor from St. Lawrence College, and also with my agency supervisor, Tina Lance.

If you would like to receive more information about the study or have additional questions or concerns, feel free to e-mail me at csnook06@student.sl.on.ca, or contact my College Supervisor, Colleen Cairns at (613) 539-7694 or ccairns@sl.on.ca. You may also contact the Research Ethics Board regarding your rights as a research subject at appliedresearch@sl.on.ca

**Consent**
Participation in this project is voluntary and you may withdraw at anytime, without giving reason. In addition, you may ask for your results to not be used in the study at any time.

If you agree to participate in the study, please complete the form at the end of this letter and return it to me. A copy of this signed document will be given to you for your own records. I sincerely appreciate your cooperation.

An additional copy of your consent will be retained at the agency [and in a secure location at St. Lawrence College, if applicable].
By signing this form, I agree that:

• The research study has been explained to me.
• All my questions were answered.
• Possible harm and discomforts and possible benefits of this project 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 about the research study.
• I have been told that my personal information will be kept confidential.
• I understand that the results of this study may be published or presented in a professional forum.
• 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 participate in the research study

Participant Signature: ____________________________

Printed Name: ____________________________ Date: __________

SLC Student Signature: ____________________________ Date: __________

Printed Name: ____________________________
Appendix C: Group Training Schedule

*Group Training Schedule*

<table>
<thead>
<tr>
<th>Session</th>
<th>Main Topics/ Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2</td>
<td>Types of Emotions</td>
</tr>
<tr>
<td></td>
<td>Facial Cues Activity</td>
</tr>
<tr>
<td>3</td>
<td>Managing Emotions</td>
</tr>
<tr>
<td></td>
<td>Introduction to Relaxation Techniques</td>
</tr>
<tr>
<td></td>
<td>Mindfulness</td>
</tr>
<tr>
<td>4</td>
<td>Progressive Muscle Relaxation Session</td>
</tr>
<tr>
<td>5</td>
<td>Controlled Breathing Session</td>
</tr>
<tr>
<td></td>
<td>My Body Feels: Activity</td>
</tr>
<tr>
<td>6</td>
<td>Mindfulness Session</td>
</tr>
<tr>
<td>7</td>
<td>Introduction to Values Assessment</td>
</tr>
<tr>
<td></td>
<td>Functions of Emotions</td>
</tr>
<tr>
<td></td>
<td>Emotion Record Introduction</td>
</tr>
<tr>
<td></td>
<td>Controlled Breathing Practice</td>
</tr>
<tr>
<td>8</td>
<td>Mindfulness Practice</td>
</tr>
<tr>
<td>9</td>
<td>Emotion Intensity Scale (1)</td>
</tr>
<tr>
<td></td>
<td>What Makes up an Emotion</td>
</tr>
<tr>
<td></td>
<td>Progressive Muscle Relaxation Practice</td>
</tr>
<tr>
<td>10</td>
<td>Mindfulness Practice</td>
</tr>
<tr>
<td>11</td>
<td>Values Assessment (Column I)</td>
</tr>
<tr>
<td></td>
<td>Emotions Record (1)</td>
</tr>
<tr>
<td>12</td>
<td>Progressive Muscle Relaxation Practice</td>
</tr>
<tr>
<td></td>
<td>Emotion Intensity Scale (2)</td>
</tr>
<tr>
<td></td>
<td>Controlled Breathing Practice</td>
</tr>
<tr>
<td>13</td>
<td>Complete Emotion Record (1)</td>
</tr>
<tr>
<td></td>
<td>Mindfulness Practice</td>
</tr>
<tr>
<td></td>
<td>Values Assessment (Column II)</td>
</tr>
<tr>
<td>14</td>
<td>Mindfulness Practice</td>
</tr>
<tr>
<td></td>
<td>Emotion Intensity Scale (3)</td>
</tr>
<tr>
<td></td>
<td>Values Assessment (Column III)</td>
</tr>
<tr>
<td>15</td>
<td>Conclusion/ Review</td>
</tr>
</tbody>
</table>
## Appendix D: Pre and Post Assessment

### Pre-Assessment - Data Collection Sheet - Controlled Breathing

<table>
<thead>
<tr>
<th></th>
<th>Independently</th>
<th>With Prompting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Verbal</td>
<td>Modelling</td>
</tr>
<tr>
<td>Sits up straight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closes eyes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes deep breath through nose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhales out through mouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes 3 long &amp; easy breaths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes 3 fast &amp; steady breaths</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes deep breath through nose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Says &quot;relax&quot; when exhaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxes muscles making them loose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhales through nose, exhales through mouth</td>
<td></td>
<td></td>
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</tbody>
</table>

Total=
<table>
<thead>
<tr>
<th>Pre-Assessment Data Collection Sheet- Progressive Muscle Relaxation</th>
<th>Independently</th>
<th>With Prompting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Verbal</td>
<td>Modeling</td>
</tr>
<tr>
<td>Clenches both hands tightly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bends both elbows</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexes both arms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straightens arms by side of body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locks elbows so arms are straight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raises eyebrows to forehead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scrunches up entire face towards nose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closes eyes tightly &amp; smiles at same time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clenches jaw together</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opens mouth in an &quot;O&quot; shape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tilts head back so it presses against neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stretches head to right toward shoulder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stretches head to left toward shoulder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifts head back to normal position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tilts head forward so chin touches neck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raises both shoulders toward ears</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stretches shoulders together behind back</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raises arms straight in front of body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes a deep breath &amp; tighten stomach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arches back by pressing chest outwards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straightens legs out in front of body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presses thighs together tightly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifts legs off ground &amp; points toes downwards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexes toes by pointing upwards</td>
<td></td>
<td></td>
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<tr>
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### Pre-Assessment - Data Collection Sheet - Defusion

<table>
<thead>
<tr>
<th></th>
<th>Independently</th>
<th>With Prompting</th>
<th>Verbal</th>
<th>Modeling</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Places card in front of eyes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holds card there for 30 seconds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes what holding card in front of eyes is like</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pushes card as far away from eyes as possible</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes what holding card away is like</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Places card onto table</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes what placing card elsewhere is like</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Pre-Assessment - Data Collection Sheet - Expansion

<table>
<thead>
<tr>
<th></th>
<th>Independently</th>
<th>With Prompting</th>
<th>Verbal</th>
<th>Modeling</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describes an unpleasant emotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes what the upsetting event is</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes what the unpleasant emotion is like once room is made for it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
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</table>
Appendix E: Feedback Survey

*Emotions Group- Satisfaction Survey*

<table>
<thead>
<tr>
<th></th>
<th>Not True</th>
<th></th>
<th></th>
<th></th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>The group was helpful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The facilitator presented strategies in a way I could understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The facilitator answered question I had in a way I could understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The skills I have learned are helpful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The handouts were easy to understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>The activities were helpful for me to learn.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

The best thing about the group was:

The things I would change about the group are:
Appendix F: Group Rules

Emotion Recognition and Regulation Training Group Rules

I agree to the following group rules:

1. I will continue to attend all of my regular appointments.

2. I will maintain my wellness to the best of my ability by taking my medications as prescribed.

3. I will keep information obtained during the sessions as well as the names of the people in the group confidential. Any infraction will lead to termination for the remainder of the contract.

4. If I am to be late or miss a session, I will let staff know ahead of time. It is expected that absence from sessions may only be accepted due to extraordinary cause.

5. I am not to come to sessions under the influence of drugs or alcohol. This is also not a valid excuse for missing sessions.

6. I will not bring items that could be used to harm myself or others to the sessions.

7. I agree to commit to the emotions training group so that I can learn new skills and to also facilitate others learning experience. I understand that disruptive behaviours like swearing, monopolizing the group, withdrawing, or lack of participation are all considered therapy interfering behaviours and therefore unacceptable.

8. I understand that completion of my practice assignments is necessary for the acquisition of skills and that non-completion of the weekly practices is seen as therapy interfering behaviour.

Signature _____________________ Date _____________________
Emotions Training Group

FACILITATOR’S MANUAL
# Group Training Schedule

<table>
<thead>
<tr>
<th>Session 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Types of Emotions</td>
</tr>
<tr>
<td>• Facial Cues Cards Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Managing Emotions</td>
</tr>
<tr>
<td>• Introduction to Relaxation Techniques</td>
</tr>
<tr>
<td>• Mindfulness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Detailed Progressive Muscle Relaxation Session</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 5:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Detailed Controlled Breathing Session</td>
</tr>
<tr>
<td>• My Body Feels: Activity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 6:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Detailed Mindfulness Session</td>
</tr>
<tr>
<td>• Introduction to Values Assessment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 7:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Functions of Emotions</td>
</tr>
<tr>
<td>• Emotion Record Introduction</td>
</tr>
</tbody>
</table>
• Controlled Breathing Practice

**Session 8:**
• ‘Recognize that Emotion’ Activity
• Mindfulness Practice

**Session 9:**
• Complete Emotion Intensity Scale (1)
• What Makes up an Emotion
• Progressive Muscle Relaxation Practice

**Session 10:**
• ‘What’s the Emotion’ Activity
• Mindfulness Practice
• Complete Values Assessment (Column I)

**Session 11:**
• Complete Emotion Record (1)
• Progressive Muscle Relaxation Practice

**Session 12:**
• Complete Emotion Intensity Scale (2)
• Controlled Breathing Practice
Session 13:
• Complete Emotion Record (1)
• Mindfulness Practice
• Complete Values Assessment (Column II)

Session 14:
• Mindfulness Practice
• Complete Emotion Intensity Scale (3)
• Complete Values Assessment (Column III)

Session 15:
• Conclusion Session
• Review
1:1 Orientation & Introduction

- Participants welcomed to the group & each member introduces themselves
- Review of Group Rules (1:1)
  - Have each participant agree to rules
  - Answer questions participants may have as well as discuss any rules not on list.
- Give general overview of what the group will consist of
  - Activities based on emotion recognition
  - Progressive Muscle Relaxation
  - Controlled Breathing
  - Mindfulness
- Review Participant Manual
  - What is it
  - Inform participants they will be using manual each session
  - Review group calendar & schedule
- Discuss format of the group
  - Order
  - Length
  - Purpose
- Group reinforcement for attending session
1:2 Emotion Recognition and Regulation Training Group Rules

I agree to the following group rules:

9. I will continue to attend all of my regular appointments.

10. I will maintain my wellness to the best of my ability by taking my medications as prescribed.

11. I will keep information obtained during the sessions as well as the names of the people in the group confidential. Any infraction will lead to termination for the remainder of the contract.

12. If I am to be late or miss a session, I will let staff know ahead of time. It is expected that absence from sessions may only be accepted due to extraordinary cause.

13. I am not to come to sessions under the influence of drugs or alcohol. This is also not a valid excuse for missing sessions.

14. I will not bring items that could be used to harm myself or others to the sessions.

15. I agree to commit to the emotions training group so that I can learn new skills and to also facilitate others learning experience. I understand that disruptive behaviours like swearing, monopolizing the group, withdrawing, or lack of participation are all considered therapy interfering behaviours and therefore unacceptable.

16. I understand that completion of my practice assignments is necessary for the acquisition of skills and that non-completion of the weekly practices is seen as therapy interfering behaviour.

Signature ___________________________ Date__________________________
2:1 Types of Emotions

- What are Emotions?
  - Emotions are what people feel.
  - They are everywhere in our daily lives.
  - We make decisions based on whether we are happy, angry, sad, anxious, bored, or frustrated.
  - We choose activities and hobbies based on the emotions they cause in us.

- Discussion: Types of Emotions

  **Fear (feeling scared)**
  - An unpleasant emotion caused by the threat of danger, pain, or harm.
  - Purpose of fear is to get us out of dangerous situations, or to keep us from getting into them.
  - It causes our heart to race and breathing to speed up. This reaction prepares us to take appropriate action, such as running as fast as we can.

  **Anger**
  - A reaction to a perceived threat to our loved ones, our property, or ourselves.
  - Anger is a warning bell that tells us that something is wrong.
  - Everyone experiences anger, and it can be healthy.
  - It can motivate us to stand up for others and ourselves.
  - When we manage our anger well, it allows us to make positive changes in our lives and situations.

  **Sadness**
  - Emotional pain associated with, or characterized by feelings of disadvantage, loss, despair, helplessness or sorrow.
  - When experiencing sadness someone may become quiet and withdraw themselves from others.
  - Crying is often an indication of sadness.
  - Sadness indicates that we have done or witnessed something that is hurtful and encourages us not to do that in the future.
**Happiness**
- Is a state that involves positive or pleasant emotions.
- The purpose of happiness is to let us know that we have done or saw something that made us feel better about ourselves, and to encourage us to do that in the future.

**Embarrassed**
- An emotion that makes you feel silly in front of other people.
- It could be something you did or something that someone else did to you.
- It also makes us feel bad about our mistakes so that we don't repeat them.

**Anxiety (Worry)**
- A feeling of worry, nervousness, or unease about not knowing what may happen.
- Worry may also happen if you think you will miss something or forget about something you were suppose to do.
2:2  *Facial Cues Flashcard Activity*

- Complete activity following discussion about types of emotions
- Individually flash cards to group and prompt them to respond which emotion each card represents
3:1  Managing Emotions

• **Review from previous session about types of emotions**
  - Ask group to state the 6 emotions reviewed the previous session (anger, sadness, happiness, worry, embarrassment & fear)

• **Discussion about managing emotions**
  - Just because emotions are important, that does not mean that they aren't stressful at times.
  - Emotions, especially very intense ones can be overwhelming. Therefore, it can be helpful to learn ways to bring down the intensity of emotions so you can better approach it and learn from it.
  - There are a number of healthy ways of managing your emotions that can help make your emotions feel less unpredictable and uncontrollable.
  - Even though emotions may sometimes feel unpleasant, they are all working for us in some way. By listening to our emotions, we can get some important information about our environment and ourselves.
Introduction to Relaxation Techniques & Mindfulness

Controlled Breathing

- When you become anxious and breathe too fast, you breathe out too much air. This means that you don’t have enough air in your blood, which then makes you feel worse.
- You may experience these symptoms if you have panic attacks, or periods of anxiety.
- At rest the average person needs only 10-12 breaths per minute. This will increase if you are doing physical activity. You can work out your breathing rate by timing it over 1 minute (breathing in then out is counted as 1 breath).
- If your breathing rate is too high, learning to control your breathing can help you feel better. Breathing slowly will also help you to relax. When you are relaxed, you are in a better shape to tackle any problems that you may be facing.

Progressive Muscle Relaxation

- Progressive Muscle Relaxation teaches you how to relax your muscles through a two-step process.
- First, you tense particular muscle groups in your body, such as your neck and shoulders.
- Next, you release the tension and notice how your muscles feel when you relax them.
- This exercise will help you to lower your overall tension and stress levels, and help you relax when you are feeling anxious. It can also help reduce physical problems such as stomachaches and headaches, as well as improve your sleep.

Introduction to Mindfulness

- Mindfulness is a way to reduce stress, increase self-awareness, enhance knowledge of emotions, and help to handle painful thoughts and feelings.
- Involves paying attention to your own emotions and accepting them in a non-judgmental way.
- Practicing mindfulness helps you:
  1. Be fully present, here and now
  2. Experience unpleasant thoughts and feelings safely
  3. Become aware of what you’re avoiding
  4. Become more connected to yourself, to others and to the world around you
  5. Become less judgmental
  6. Become less upset and less reactive to unpleasant experiences
  7. Learn the difference between you and your thoughts
  8. Learn that everything changes; that thoughts and feelings come and go
Emotion Awareness

Increasing Your Awareness of Your Emotions

- Our emotions are necessary and important.
- The only way we can learn from our emotions is if we are aware of them when they occur.
- Therefore, it can be important to learn ways of increasing your awareness of your emotions.
- The more aware you are of your emotions, the better able you will be in hearing what they have to say.

Your Emotions: Benefits of Increased Awareness

- Not knowing what you are feeling is connected with a number of negative consequences.
- By not knowing what you are feeling, your emotions may feel very unpredictable and out-of-control.
- As a result, you might find it difficult to manage your emotions.
- When this happens, people often rely on more unhealthy ways of managing emotions, such avoidance and self-medication through the use of drugs and alcohol.

When you know what you are feeling, you can better figure out exactly what coping strategy is needed for that emotion you are experiencing.
5:1  Activity: My Body Feels...

Instructions:

- Ensure participants each have the “My Body Feels” worksheets.

- Brainstorm with group the feelings/ body language one may experience when they are feeling each of the 6 emotions being described.

- As these are being described, have participants draw onto their “body worksheet” what each may look like.

- Below are examples of feelings each emotion may cause

Happy
- Smile
- Laugh
- Sing
- Body feels relaxed
- Heart feels good

Angry
- Face feels hot
- Face turns red
- Frowning
- Eyes are glaring
- Muscles feel tight
- Hands make fists
- Heart is beating fast
- Hard to catch breath

Embarrassed
- Frowning
- Cheeks turn red
- Hands get sweaty
- Hands start to shake

Sad
- Cry
- Body feels tired

Worried
- Butterflies in stomach
- Stomach feels upset
- Body shakes
- Feel dizzy
- Head hurts
- No smile
- Clench fists

Scared
- Heart beats fast
- Eyes open wide
- Hands get sweaty
- Stomach feels upset
- Jaw clenched together
- Muscles feel tight and shak
6.1 Introduction to Values Assessment

VALUES WORKSHEET (Adapted from Kelly Wilson’s Valued Living Questionnaire)

- Values are the things in our life that are most important to us.
- They are the things that can guide us and motivate us as we move through life.
- Values are not the same as goals.
- Values are directions we keep moving in, whereas goals are what we want to achieve along the way.
- Not everyone has the same values, and this is not a test to see whether you have the "correct" values.
- There may be certain areas that you don’t value much; you may skip them if you wish.
- It is also important that you write down what you would value if there were nothing in your way.

• For each of the ten sections rate how important this value is to you on a scale of 0 (low importance) to 10 (high importance).

• Rate how successfully you have lived this value during the past month on a scale of 0 (not at all successfully) to 10 (very successfully).

• Finally rank these valued directions in order of the importance you place on working on them right now, with 10 as the highest rank, and 9 the next highest, and so on.
Functions of Emotions

Emotions Communicate Information to Other People
Our emotions tell other people how we are feeling. For example, the expression of anger may tell someone that we should be left alone, or anxiety and sadness may tell someone that we need help.

Emotions Provide Us with Information
Emotions give us information about our environment. For example, when we experience anxiety, we are given information that we may be in danger. When we experience anger, we might be provided with information that we do not have control or that someone has violated our rights in some way. Our emotions are our bodies' way of communicating with us.

Emotions Get Us Ready to Act
Emotions allow us to respond quickly and motivate us to act in certain ways. Because our emotions provide us with information about our environment, they also guide us in acting in ways that are appropriate to the situation. For example, when you sense danger or threat, you may respond by leaving the situation.

Emotions Deepen Our Experience of Life
Life would be very boring without emotions. We need both our positive (happiness, excitement, joy) and negative (anger, anxiety, sadness) emotions. We may sometimes wish that we could get rid of all of our negative emotions; however, the experience of negative emotions is necessary to make positive emotions feel positive.
9:1 What Makes Up an Emotion?

An emotion has many parts:

1. **Thoughts**: Ideas or images that pop into your head when you are experiencing an emotion.

2. **Your Body's Response**: The physical changes you experience (for example, increased heart rate, feeling queasy) when you experience an emotion.

3. **Behaviors**: The things you want or feel an urge to do when you experience a certain emotion.

All the emotions you have are made up of these three parts (whether you are aware of it or not). Most people, however, are not really aware of these different parts. Sometimes one component is so strong that it makes it difficult to get in touch with the others.
Progressive Muscle Relaxation

Arms

1. Clench both hands tightly, making them into fists. Hold the tightness. Pay attention to the how your muscles feel. Now let go of the tension and notice the difference. Stay focused on how you are feeling. Clench your fists together again. Hold it... and relax.

2. Next, bend both elbows and flex your arms. Hold it... and now let go of the tension.

3. Now straighten your arms by your side and lock your elbows so your arms don’t bend. Let go of the tension... and relax.

Head

1. Raise your eyebrows up as high as you can and feel the tension in your forehead. Hold it... and now relax your face.

2. Scrunch up your entire face as though you were trying to make every part of it meet the tip of your nose. Feel how tight it is... now release the tension and notice how relaxed your face feels.

3. Close your eyes tightly and smile, stretching your mouth as wide open as you can. Hold it... now relax.

4. Clench your jaw and push your tongue to the roof of your mouth. Hold it... now relax. Now open your mouth as wide as you can, so it is in the shape of an “O”. Hold it... and now release so that your jaw goes back to its normal position. Feel how relaxed your face is.

5. Tilt your head back as far as you can so that it presses against the back of your neck. Hold it... now relax. Stretch your head to the right so that it rests on your shoulder. Hold it... and relax. Now roll your head over to the other side. Hold it... now relax. Lift your head back to its normal position. Now tilt your head forward until your chin is resting on your chest. Hold it... and relax.

Midsection

1. Bring your shoulders up as high as you can as though you were trying to touch your ears with them. Hold it... now let them fall back down again. Now stretch your shoulders back as though you were trying to make your shoulder blades touch together. Hold this position... and release. Now let your arms drop by your sides and relax.

2. Bring your arms straight in front of you, lifting from your shoulders so that your arms are straight out in front of you. Hold this position and now try to cross one arm over the
other, keeping your arms as straight as possible. Hold it...feel the stretch...now relax and bring your arms back to your sides.

3. Take a deep breath. Before you breathe out, make all your muscles in your stomach go hard. Hold it...now relax your muscles.

4. Gently make your back arch by pressing your chest outwards. Hold the tension...now relax.

Legs

1. Straighten your legs out in front of you and squeeze your thighs and butt as hard as your can. Hold this position...now let go.

2. Now press your thighs together as hard as your can. Hold it...now relax.

3. Tighten your leg muscles and point your toes all together at the same time. Hold this position...now release and let your toes return to their normal position.

4. Flex your toes by pointing them upwards towards your head. Hold...now release and let your feet hang loosely.
Controlled Breathing

1. Sit up as straight as you can. Keep your body as relaxed as possible.
2. Close your eyes. Only think about your breathing.
3. Take a deep breath through your nose and let it out slowly through your mouth. Repeat this step again.
4. Take 3 long easy breaths in through your nose and out through your mouth. These breaths should be easy and gentle using little to no effort.
5. Breathe in through your nose and out through your mouth 3 times very fast and steadily.
6. Now, as you’re breathing with no effort, say to yourself: “Relax,” on your next breath out.
7. Now let your muscles relax – let them go loose and floppy and say “relax” to yourself again.
8. Inhale through your nose and exhale through your mouth, keeping your mouth, tongue, and jaw relaxed.
9. Relax as you focus on the sound and feeling of long, slow, deep breaths.
Mindfulness Activities

*Defusion- Task Analysis*

1. Place a recipe card or Post It before your eyes and let that be an unpleasant thought.

2. Hold it there for 30 seconds and keep thinking about the unpleasant thought.

3. Describe what holding that negative thought before your eyes is like (for eg., I can’t think of anything else, it blocks my thoughts, etc.).

4. Now, avoid that thought by pushing the recipe card as far away from you as you can. Hold the recipe card there for 60 seconds and keep thinking about the unpleasant thought.

5. Describe what holding that negative thought away from you is like

6. So, put that thought aside and place the recipe card on the table or on a leaf on a gently flowing stream.

7. Describe what placing that negative thought elsewhere is like

*Expansion- Task Analysis*

1. Think of an unpleasant emotion that is associated with an upsetting event.

2. Tell me what that emotion is and what that upsetting event is.

3. Make room (expand) for the unpleasant emotion.

4. Now that you have made room (expanded) the unpleasant emotion, describe what that emotion is like.
Ten Domains of the Values Assessment

1. **Family relations.** What sort of brother/sister, son/daughter, uncle/aunt do you want to be? What personal qualities would you like to bring to those relationships? What sort of relationships would you like to build? How would you interact with others if you were the ideal you in these relationships?

2. **Marriage/couples/intimate relations.** What sort of partner would you like to be in an intimate relationship? What personal qualities would you like to develop? What sort of relationship would you like to build? How would you interact with your partner if you were the ‘ideal you’ in this relationship?

3. **Parenting.** What sort of parent would you like to be? What sort of qualities would you like to have? What sort of relationships would you like to build with your children? How would you behave if you were the ‘ideal you’.

4. **Friendships/social life.** What sort of qualities would you like to bring to your friendships? If you could be the best friend possible, how would you behave towards your friends? What sort of friendships would you like to build?

5. **Career/employment.** What do you value in your work? What would make it more meaningful? What kind of worker would you like to be? If you were living up to your own ideal standards, what personal qualities would you like to bring to your work? What sort of work relations would you like to build?

6. **Education/personal growth and development.** What do you value about learning, education, training, or personal growth? What new skills would you like to learn? What knowledge would you like to gain? What further education appeals to you? What sort of student would you like to be? What personal qualities would you like to apply?

7. **Recreation/fun/leisure.** What sorts of hobbies, sports, or leisure activities do you enjoy? How do you relax and unwind? How do you have fun? What sorts of activities would you like to do?

8. **Spirituality.** Whatever spirituality means to you is fine. It may be as simple as communing with nature, or as formal as participation in an organized religious group. What is important to you in this area of life?

9. **Citizenship/environment/community life.** How would you like to contribute to your community or environment, e.g. through volunteering, or recycling, or supporting a group/charity/political party? What sort of environments would you like to create at home, and at work? What environments would you like to spend more time in?

10. **Health/physical well-being.** What are your values related to maintaining your physical well-being? How do you want to look after your health, with regard to sleep, diet, exercise, smoking, alcohol, etc? Why is this important?
Appendix H: Participant Manual

Emotions Training Group

PARTICIPANT MANUAL
What you will learn...

Types of Emotions
How to Manage your Emotions
What Emotions do to your Body
Functions of Emotions
How to Recognize your Emotions
What makes up an Emotion

Controlled Breathing Exercises
Progressive Muscle Relaxation Techniques
   Mindfulness Techniques

When is it?
Every Tuesday, Thursday & Friday

In the Common Area
Group Rules

I agree to the following group rules:

- I will continue to attend all of my appointments.
- I will keep taking my medications.
- I will keep all group information confidential.
- If I am to be late or miss a session, I will let staff know ahead of time.
- I will not come to sessions under the influence of drugs or alcohol.
- I will not bring items that could be used to harm myself or others to the sessions.
- I will not swear or engage in behaviour that will disrupt other in the group.

Signature ______________________
Date _________________________
Today I Felt ...
Date:______________
My Body Feels...

Emotion: ___________________________________________
## Values Assessment

<table>
<thead>
<tr>
<th>Domain</th>
<th>Valued Direction</th>
<th>Importance</th>
<th>Success</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Couples/Recreation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Relations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Relations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education/Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizenship/Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health/Physical Well-being</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Emotion Record

<table>
<thead>
<tr>
<th>Describe the Situation</th>
<th>Identify Emotion</th>
<th>Rate Intensity of Emotion</th>
<th>Technique Used</th>
<th>Rate Intensity of Emotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the situation you felt a strong emotion</td>
<td>What emotions did you experience as a result of the situation</td>
<td>Rate the intensity of the emotion using a scale of 1-10</td>
<td>What technique did you use to manage your emotions?</td>
<td>Rate the intensity of the emotion using a scale of 1-10</td>
</tr>
</tbody>
</table>
Recognizing Emotions Quiz

Emotions for beginners

1. a) hot  b) excited  c) cold
2. a) shy  b) hungry  c) surprised
3. a) happy  b) shy  c) angry
4. a) in love  b) sad  c) shocked
5. a) frightened  b) sleepy  c) lonely
6. a) frustrated  b) patient  c) glad
7. a) merry  b) cheerful  c) furious
8. a) disgusted  b) bossy  c) satisfied
9. a) brave  b) bored  c) hot
10. a) comfortable  b) surprised  c) jealous
11. a) sad  b) optimistic  c) relaxed
12. a) scared  b) joyful  c) innately
13. a) shocked  b) worried  c) exhausted
14. a) proud  b) angry  c) amazed
15. a) happy  b) jealous  c) envious
16. a) excited  b) comfortable  c) bored
Emotion Intensity Scale

Date: ____________________

[Diagram showing thermometers for Happy, Angry, Surprised, Scared, Worried, and Sad emotions]
### Appendix I: Additional Satisfaction Survey Participant Comments

#### Additional Participant Comments

<table>
<thead>
<tr>
<th>Best Things About the Group:</th>
<th>Participant Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doing the worksheets &amp; activities</td>
<td>12.5%</td>
</tr>
<tr>
<td>Breathing exercises</td>
<td>12.5%</td>
</tr>
<tr>
<td>Getting treats every session</td>
<td>37.5%</td>
</tr>
<tr>
<td>Being able to spend time with friends while learning</td>
<td>25.0%</td>
</tr>
<tr>
<td>Talking about feelings made me feel less worried</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Things to Change About the Group:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less having to exercise &amp; move around</td>
<td>12.5%</td>
</tr>
<tr>
<td>Would have liked more activities</td>
<td>12.5%</td>
</tr>
<tr>
<td>To much of the same thing</td>
<td>12.5%</td>
</tr>
<tr>
<td>No comment</td>
<td>37.5%</td>
</tr>
</tbody>
</table>
### Appendix J: Raw Data

**Pre and Post Assessment Results: Independence Means**

<table>
<thead>
<tr>
<th>Controlled Breathing</th>
<th>PMR</th>
<th>Mindfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre</strong></td>
<td><strong>Post</strong></td>
<td><strong>Pre</strong></td>
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<tr>
<td>4</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Pre and Post Assessment Results: Prompting Means**

<table>
<thead>
<tr>
<th>Controlled Breathing</th>
<th>PMR</th>
<th>Mindfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre</strong></td>
<td><strong>Post</strong></td>
<td><strong>Pre</strong></td>
</tr>
<tr>
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<td>M</td>
<td>P</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. V= Verbal Prompt; M=Modeling Prompt; P= Physical Prompt