Psychoeducational Programming to Alter Stages of Change and Distress with Regard to Substances

by

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Dedication

I would like to dedicate this thesis to my grandmother.

“Me Too”
Abstract

This research project completed at Frontenac Community Mental Health & Addictions Services aims to assess the effectiveness of a psychoeducational program entitled Thinking Things Through (TTT). There were a total of 32 (n= 32) participants included within this research study. The purpose of the study was to determine whether psychoeducational programing would be effective in decreasing distress levels in individuals with addictions. Two questionnaires were administered prior to, and at the completion of the psychoeducational group. The Outcome Questionnaire measures overall distress within a client’s life, and the Readiness to Change Questionnaire assesses the participant’s current motivation for change. It was found that the amount of distress decreased over the course of the group. For the Outcome Questionnaire, at pre-programming the mean score was $M=33.16$ as compared to post-programming, $M=27.19$. Additionally, the stages of change from pre to post treatment did not significantly change. Some individuals altered their stage of change negatively, as others altered it positively. At the time of pre and post treatment, the majority of individuals were in the action stage. With regards to stages of change, 22 (69%) individuals did not alter their stage of change, whereas 5 (15.5%) individuals altered their stage of change positively, and 5 (15.5%) negatively. The results showed no significant difference between stages of change, but did alter the amount of distress within the addictions population. It is recommended that further research be concluded to assess for best-practices when aiding individuals through the stages of change model.
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Chapter I: Introduction

Approximately six million people in Canada will meet the criteria for a substance use disorder over their lifetime outlined by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (Pearson, Janz, & Ali, 2013). Individuals that use substances can cause their friends, family, and society many concerns due to the intensity or frequency of their substance use. Additionally, the use of substances can affect relationships, financial situations, overall mood, and decision-making (VanWormer, 2013). However, there are various resources to help people make positive changes within their lives. Research has shown that many supports can be effective when treating individuals with a substance use disorder. These resources include: individual counselling, group counselling, and psychoeducational learning.

Substance related disorders were historically divided into substance abuse and substance dependence. A substance abuse disorder is defined as a “use of psychoactive substances to the degree that a severe and long-lasting impairment in function results” (Sarason & Sarason, 2005, p. 576). Substance dependence is characterized by “a pattern of substance use that leads to clinically significant impairment or distress that includes cognitive, behavioural, and psychological symptoms” (Sarason & Sarason, 2005, p. 576). The criterion for a substance use disorder recently changed with the publication of the DSM-5 (Grohol, 2013), which will be discussed later in this research paper.

Frontenac Community Mental Health and Addictions Services, located in Kingston, Ontario, is a facility that aims to foster the recovery process in individuals with substance use disorders and assist them with various circumstances they may encounter. Consent was obtained for the use of the agency name in this research report (Appendix A). This agency has a wide range of resources to help individuals with any current struggles they may be experiencing. These supports include: court support, crisis support, vocational aid, addictions services, mental health support, housing services, and community support. These services are offered at two locations in downtown Kingston. This agency strives to make everyone feel welcome while receiving treatment, attending counselling, or inquiring about the intake process.

In order to receive treatment from the Frontenac Community Mental Health and Addictions Services Options for Change Addictions Team, a substance related concern must be present. The Options for Change Addictions Team, offers both group and individual counselling. Each day, there are various groups that run, including; Relapse Prevention, Back on Track, Seeking Safety, Problem Solving and Support, Otherwise, Mind Over Mood, Making Changes, Getting Started, Anger Management, and Thinking Things Through. The Thinking Things Through (TTT) group will be the primary focus of this research. As described by Frontenac Community Mental Health & Addictions Services “this psycho-educational group provides individuals with the opportunity to think about and explore their relationship with alcohol and drugs. Abstinence is not a requirement” (Frontenac community mental health & addictions services [Brochure]). The TTT brochure, for clients, is included within Appendix B. This group has a psychoeducational approach in which participants learn about substance use. The program runs for 4 weeks and sessions are 2 hours in duration. Most of the participants within this group are mandated by probation, parole, or the Children’s Aid Society to attend, which could affect their current stage of change as they may not currently recognize the need for treatment. Participants are encouraged to make a decision about changing their substance use based on the information from the program upon completion of the group. This program is designed to meet individuals at the precontemplation and contemplation stage in recovery. This
means that the individual may have no desire to change their substance use, or may feel ambivalent towards changing their use. If they do decide to alter their substance use, they may be pushed into a different stage of change, such as preparation or action.

The TTT program has been running for several years; however, its effectiveness has not yet been assessed. Previous Behavioural Psychology students have researched the questionnaires that have been used to assess stages of change and distress with the clients in this group. Although they analyzed the questionnaires, the outcome of the group has not been researched. Thus, this research paper will explore the effectiveness of psychoeducational programming to alter stages of change and overall distress within the addictions population.

**Hypothesis**

This study will examine two hypotheses. First, it is hypothesized that the TTT group will alter the stage of change positively that a participant is currently in, meaning that an individual moves their way through the stages of change towards the action phase. This hypothesis will be evaluated by administering the Readiness to Change Questionnaire (Vogelzang, 2013). Second, it is hypothesized that an individual’s amount of overall distress will be increased after completing the group. It is hypothesized that the amount of distress will increase because the participants will be exposed to triggering situations within the group and asked to evaluate their own substance use behaviours. This will be measured using the Outcome Questionnaire (Lambert, Finch, Okiishi, & Burlingame, 2005).

**Overview**

This research paper will review various topics such as: background on addictions, how addictions develop, how people with addictions recover, current diagnostic criteria, the effect of childhood trauma on addictions, the impact of childhood trauma on addiction, educational programming and substance use social influences and addiction, and an overview of the measures used in this study. An overview of methods and procedures, results and relevant graphs will be reported along with discussion of findings, strengths and limitations, program changes, multilevel challenges, contributions to the psychology field, as well as recommendations for further research.
Chapter II: Literature Review

Background on Addictions

Addictions have been widely studied throughout history and there is a vast amount of literature on this topic. “Traditionally, the term addiction has been used to identify self-destructive behaviours that include a pharmacological component” (DiClemente, 2003, p. 3). DiClemente (2003) suggests that an addicted person is someone who has a dependence on an illegal drug. It is also known that individuals can be addicted to legal substances such as, caffeine and alcohol (American Psychiatric Association, 2013). VanWormer and Davis (2013) acknowledge that gambling addictions affect some of the population today. An addiction is identified by the following characteristics: “strong physiological craving, withdrawal symptoms, and the need for more of the drug to get the same effect” (American Psychiatric Association, as cited in DiClemente, 2003, p. 3). Tolerance, withdrawal, psychological dependence, and physical dependence are important factors when treating individuals with an addiction (Frontenac Community Mental Health & Addictions Services: Thinking Things Through, 2013).

People were using substances as early as 5000 BC (VanWormer & Davis, 2013). VanWormer and Davis noted that alcohol and opium were the first substances that were used. Subsequently, new forms of alcohol, such as beer, were introduced (VanWormer & Davis, 2013). There is some research to suggest that alcohol was safer to ingest than water due to contaminants. In the 1600’s, it was found that individuals were mixing opium (from the poppy) and alcohol to increase the effects. Between the 1700’s and 1800’s, perspectives on alcohol changed (VanWormer & Davis, 2013). The use of alcohol was viewed as a normal part of daily life and became a large part of modern society. Around the same time, some large corporations were even including illicit drugs within their consumer products. For example, Coca-Cola included cocaine in their soft drinks until 1903 (VanWormer & Davis, 2013). This particular soft drink became addictive to many individuals. VanWormer and Davis report that it was not until 1914 when the quantity of illicit substances included in consumer products was limited. Currently, attitudes towards licit and illicit drugs seem to have changed considerably (Levinthal, 2012). Levinthal suggests that there is now a more information and greater understanding of the levels of misuse and abuse regarding all substances.

How Addictions Develop

There are various methods or routes of administration for drug use. These routes are oral administration, injection, inhalation, and absorption through the skin or membranes (Levinthal, 2012). All of these types of administrations allow substances to enter the body in a different manner. Some routes of administration are faster than others, which may make them more desirable and increase the likelihood of future use. For instance, oral administration has a fairly slow absorption time, whereas inhalation has the fastest rate (Levinthal, 2012). There are three different methods for injecting a substance: intravenous, intramuscular, and subcutaneous. Additionally, injecting substances is a quick route of administration; 15 seconds is the minimum time it may take to receive and effect from the drug (Levinthal, 2012). Of all of these routes, inhalation is the fastest way to get the desired effect taking anywhere from 5 to 8 seconds for the reaction to be present (Levinthal, 2012).

Frontenac Community Mental Health & Addictions Services, Thinking Things Through group (2013), suggests that the first time a substance is taken, the individual experiences their first high. Educational information from the group also states that individuals who have a
positive experience with their first drug use are more likely to continue this pattern. The route of administration may or may not influence the development of an addiction. There is research to suggest that individuals who engage in regular substance use may be ‘chasing their first high’, which means the person seeks the same effects they had in their first experience (Frontenac Community Mental Health & Addictions Services: Thinking Things Through, 2013).

**Diagnosis Criteria of the DSM-5**

The American Psychiatric Association (APA) recently published the latest version of the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5). In this new edition, various changes were made to the criteria used to diagnose a substance use disorder. Grohol (2013) identified some major changes from the fourth to the fifth edition of the text. In the fourth edition of the DSM, recurring legal problems was a criterion that needed to be present with a substance related disorder (Grohol, 2013). In addition, gambling disorder was removed from the substance addiction category and now found under the category of behavioural addictions (APA, 2013). Grohol (2013) states that a new criterion has been added to the diagnosis – “craving or a strong desire or urge to use a substance”. The new diagnoses do not differentiate between substance abuse and substance dependence (APA, 2013). The fifth edition also separates substance related disorder, alcohol related disorder, and unspecified alcohol-related disorder into three different diagnoses (APA, 2013). The DSM-5 has separate categories for each substance and their effects. These other substances include; caffeine, cannabis, phencyclidine, hallucinogens, inhalants, opioids, sedatives, stimulants, and tobacco (APA, 2013).

According to the APA, a substance related disorder falls under the classification of either a substance use disorder or a substance induced disorder. A substance use disorder is characterized by: “impaired control, social impairment, risky use, and pharmacological criteria” (APA, 2013, p. 483). The APA (2013) suggests these aforementioned categories included in a substance use disorder to include:

Taking the substance in large amount, taking it for longer than originally wanted, desire to stop using or cutting down, several unsuccessful attempts to quit, spending a large amount of time to get the substance, using the substance, or recuperating, and the focus on the substance while completing daily activities (p. 483).

On the other hand, substance intoxication, withdrawal, and substance/medication-induced mental disorders falls under the substance induced disorder category. The criteria for substance intoxication and withdrawal are as follows: “the development of a reversible substance-specific syndrome due to the recent ingestion of a substance... The clinically significant problematic behavioural or psychological changes associated with intoxication... The symptoms are not attributable to another mental disorder” (APA, 2013, p. 485). Last, a substance/medication-induced mental disorder includes all mental disorders caused by the direct use of substances. An example of this may be major depressive disorder triggered by drug use.

Alcohol-related disorders are broken down into the following sub-categories: alcohol use disorder, alcohol intoxication, alcohol withdrawal, and other alcohol-induced disorders (APA, 2013). An alcohol use disorder is defined as the following: “a problematic pattern of alcohol use leading to clinically significant impairment or distress...occurring within a 12 month period” (APA, 2013, p. 490). Large amounts of alcohol, persistent desire to stop, time spent on use, cravings, failure to complete major roles, tolerance, and withdrawal is some of the criteria of an alcohol use disorder. Two of these must be present in order to be diagnosed. The diagnostic criteria for alcohol intoxication are as follows: recent alcohol consumption, problematic
behaviour and psychological changes, slurred speech, incoordination, unsteady gait, and impaired memory (APA, 2013). The diagnostic criteria for alcohol withdrawal include autonomic hyperactivity, increased hand tremor, insomnia, nausea, anxiety, psychomotor agitation, and seizures when a substance is stopped.

How People with Addictions Recover- Stages of Change Model

There are a number of theories that address how people with addictions cope and recover (VanWormer & Davis, 2013). One such theory is Prochaska and DiClemente’s (1982) stages of change model. This model is “sometimes referred to as the transtheoretical model because it relies on several theories of social psychology” (VanWormer & Davis, 2013, p. 417). Prochaska and DiClemente (1982) suggest six stages called: precontemplation, contemplation, determination, action, maintenance, and relapse.

Individuals in the precontemplation stage do not feel as though they have a problem and there is no recognition of a problem (DiClemente, 2003). Prochaska and DiClemente (1982) identify this as the first stage in their model, and it precedes any type of change. Although the individual does not acknowledge they have a problem, others recognize their substance use as so (Prochaska and DiClemente, 1982). Individuals in the precontemplation stage are not likely to make any changes to their behaviour.

Following the stage of precontemplation, individuals enter the stage entitled contemplation. Prochaska and DiClemente state that at this stage individuals may begin to see that their behaviour may be a problem. There is evidence to suggest that individuals who struggle with addictions may be stuck in the contemplation stage for some time. During this stage, individuals begin to realize that they have a problem that they should change, but are unsure if it is the best decision for them at the current time (Frontenac Community Mental Health & Addictions Services: Thinking Things Through, 2013). They also begin to review pros and cons of changing their behaviour.

The next stage in the model is determination (Prochaska & DiClemente, 1982). Prochaska and DiClemente propose that during this stage the individual is seriously committed to making a change. This stage may be short in duration because it may not take long for an individual to make a decision on how they would like to alter their behaviours or make a tangible plan (Frontenac Community Mental Health & Addictions Services: Thinking Things Through, 2013).
After these preparation stages, the action stage comes into play. Proposed by DiClemente (2003), the action stage is characterized by “(1) breaking free of the addiction by utilizing behavioural change processes and the strategies of the plan, (2) commitment, (3) revising the plan to face the difficulties, and (4) managing temptations and slips that can provoke relapse” (p. 169-170). Throughout the action stage, people make extreme attempts to change their substance use. This stage can last anywhere from 3 to 6 months in length (Prochaska & DiClemente, 1982).

After the action phase, individuals who continue to change their substance use (i.e. remain abstinent) enter the maintenance phase (Prochaska & DiClemente, 1982). DiClemente (2003) suggests that during the maintenance stage, the individual must adhere to their plan to remain abstinent for approximately 6 to 12 months. An individual is no longer considered to be cycling through the stages of change model after they have maintained abstinence for this period (D’Sylva, Graffam, Hardcastle, & Shinkfield, 2012).

Individuals can successfully enter the maintenance phase over time; alternatively, they may enter the relapse stage before or while maintaining their abstinence (Prochaska & DiClemente 1982). If an individual relapses, they can return to the precontemplation or contemplation stage (Frontenac Community Mental Health & Addictions Services: Thinking Things Through, 2013). Relapse is considered part of the recovery process and is treated as a
Learning experience. Prochaska and DiClemente (1982) found that self-efficacy was a large factor when assessing individual’s probability to relapse. In the research, self-efficacy has been defined as an individual’s perception of his or her own achievements (Prochaska & DiClemente, 1982).

**The Impact of Childhood Trauma on Addiction**

Research suggests that childhood trauma and addictions have a strong relationship. Children that are exposed to emotional abuse, physical abuse, verbal abuse, neglect, and addicted guardians may be viewed as having a traumatic childhood. Parents who suffer from an addiction or substance related disorder may face greater challenges when it comes to caring for their children (Wells, 2009). Wells (2009) also states that these parents may not react appropriately to their children while intoxicated. In the homes of parents who use substances, children typically face various psychological and physical health concerns (Wells, 2009). Evidence suggests that children who grow up in those conditions are likely to demonstrate behavioural, psychological, social, or physical difficulties (Wells, 2009). In severe cases, children may be placed into the foster care system (Wells, 2009).

Wells (2009) found that children are more likely to become a victim of abuse if their mothers struggle from a substance use disorder, but not fathers. Phoenix (2007) also suggests that these family situations may cause individuals to be triggered later on in life. Additionally, it is stated that people may use substances of choice when they are triggered to escape the negative memories. Coping strategies and psychoeducational programming are often offered to individuals to prevent relapse when these triggering memories of childhood trauma occur (Phoenix, 2007).

Afifi, Herlksen, Asmundson, & Sareen (2012) examined childhood abuse including: emotional abuse, physical abuse, emotional neglect, sexual abuse, and physical neglect, when developing substance use concerns. This study examined the correlations between the occurrence of childhood maltreatment and substance use in later life. They found that, within the representative sample, the occurrence of childhood maltreatment was a predictive factor of substance abuse or dependence on various substances. It was suggested that the minimization of childhood maltreatment would in turn alter the amount of substance related disorders in the community.

**Social Influences and Addiction**

There are various reasons why an addiction may develop and persist in an individual’s life. One explanation for this is the influence of social norms. Another explanation why an addiction may develop is the presence of child maltreatment. Environmental factors, genetic factors, personality factors, reinforcement of drug use, and compulsive behaviours are other contributing factors in the development of a substance use disorder (DiClemente, 2003). Peer pressure (social norms) and child maltreatment will be discussed in further detail later within the literature review.

Allen, Chango, Szwed, Schad, and Marston (2012) found that there were various peer factors that could potentially influence an adolescent to begin using substances. Overall, they found that influences from close friends were a major predictor in the onset of using illicit or licit substances. They suggest “adolescents with close friends who were well liked within the broader peer group were far more likely to have their future substance use predicted by their friend’s current level of use” (Allen et al., 2012, p. 9). Adolescents that lack social skills were also found
to have more susceptibility to substance use (Allen et al., 2012). Although Allen and colleagues found that peers were a major factor in influencing individuals to decide to use substances, Vervaekte, VanDeursen and Kork (2008) found that this was not a major predictor. Vervaekte, VanDeursen and Kork found that peers maintained continuous use of substances. It stated that the adolescents were able to independently make a decision at first about the initial use (Vervaekte, VanDeursen & Kork, 2008). However, afterwards, the individual was pressured to continue the use of the substance by peer groups.

Allen et al. (2012) also inferred that young people who have a weak family base were more likely to follow peer pressure. Thus, they may be more influenced into using substances by those in their social group. Allen et al. also found that age 13 is a critical period in an adolescent’s life. Those who receive an adequate amount of support from their mothers in this age range were less likely to start using substances.

Educational Programming and Substance Use

Psychoeducational programming is an approach that can be used in various settings, such as a classroom style setting, to teach individuals about various topics. Throughout the literature, there have been various views surrounding the use psychoeducational programming to alter substance use. Gorman (1997) suggested that the use of illicit drugs within the younger population has increased, steadily, over time. A theory proposed by Midford (2000) states that “drug use by young people is driven by individual deficiency and that the problem can be remediated by enhancing self-esteem or improving decision making skills (p. 442)”. Additionally, Gorman assumed that “young people who use drugs are socially incompetent” (p. 4). To date, these theories have not been proven to be correct, based on empirical evidence. Within the body of literature that surrounds the topic of educational programming to alter substance use, there is an insufficient amount of research completed. More research needs to be completed to assess this topic. However, various views about the aforementioned topic have been noted which will follow in this literature review.

Swadi and Zeitlan (1987) conducted a study that examined adolescent cannabis use. They delivered three types of programming to students to see if the amount of new cannabis users varied across the groups. They found that individuals in the horror group (designed to scare youth away from drug use) had the most negative effects. Within this group, there was a statistically significant increase in the amount of cannabis users, 7.3%. On the other hand, the personal relationship group had a positive effect on substance use (Swadi & Zeitlan, 1987). There was an increase in the amount of cannabis use (2.6%); however, this was less than the control group (3.6%). It has been noted that healthy relationships are a major factor when determining someone’s substance use patterns (Frontenac Community Mental Health & Addictions Services: Structured Relapse Prevention, 2013).

Kim and Jang (2008) conducted a study with individuals in a hospital setting. They evaluated the use of a psychoeducational group versus a control group for decreasing substance use. The participants in the psychoeducational group received relapse prevention information, knowledge about their symptoms, as well as self-reliance training. In contrast, the participants in the control group took part in a support meeting. They found that the individuals from the psychoeducational group were more satisfied overall. These individuals had a higher score on the self-report measures implemented after the treatment, resulting in decreased substance use.

In another study conducted by Gorman (1997), adolescents in grades 8, 10, and 12 were surveyed for current or past substance use. The vast majority of the students surveyed disclosed
that they had used illicit drugs. Gorman then compared this to previous statistics and found that the amount of people using substances had increased over the time.

A number of programs are described in the literature as having used psychoeducation to alter substance use. Gorman (1997) evaluated two main approaches to this type of programming. The author stated that social influence programs might be effective when treating substance use. It was also noted that this approach has a zero tolerance level toward drug and alcohol use. This type of programming considers any form of substance use harmful and wrong. In addition to social influence programming, he suggested using a broad-based approach. The broad-based approach has a heavy influence on various life skills that each individual possesses. Gorman stated that all psychoeducational programs should attempt to teach assertiveness, self-esteem, and decision-making skills. It was found that people whom acquire these skills were less likely to experiment with illicit drugs.

Midford (2000) suggested another type of psychoeducational programming, called affective programs. This program strives to reduce the likelihood to substance use by increasing personal development with regards to changing their substance use. Finally, Coggans (2006) suggests life skills training. Within this curriculum, resisting peer pressure, increasing self-confidence, self-esteem, and self-mastery are all important components. Coggans stated that life skills training influenced areas such as attitudes, knowledge and normative experiences within the adolescent population.

Coggans (2006) suggested various criteria that should be considered and met when designing a psychoeducational program to deter or alter substance use, such as discourage the use of drugs, teach skills to refuse substances, address developmental issues, explaining various substances, and family life. Coggans also suggested that peer groups are a big part in the decision to use illicit drugs. Peers were suggested to be more influential than family norms when it comes to using substances. Midford (2000) also supported this idea of peers being influential to the decision to start using substances: “young people begin to use drugs, because of social pressure from a variety of sources (p. 442)”’. In addition, Midford stated that media and idealized images of themselves are influential. These images of themselves may be based on peer norms and how other people perceive the individual.

There is a discrepancy in the research about the effectiveness in utilizing psychoeducational programming to treat substance use. Midford (2000) stated that psychoeducational programming is indeed effective when treating a substance use disorders, but there are considerable qualifications. The major qualifier of drug education is the implementation of the program. This could include the instructor style, environment, or participants in the program. These three factors can influence how the program is run, delivered to the clients, and how the clients interpret this information. On the other hand, Gorman (1997) suggested that this type of programming is ineffective when treating those who use substances. He stated this because he found that psychoeducational programming does not affect people’s decision-making skills, which he believes is the most important factor with regard to substance use. Moreover, Coggans (2006) stated that there have been no studies that demonstrate the long-term effects and effectiveness of psychoeducational programming. Given the gaps in literature about educational programming and substance use, additional research is required in order to determine the efficacy of psychoeducational programming with this population for the purposes of guiding treatment protocols.
Measures to Evaluate Treatment Effectiveness

The Outcome Questionnaire (OQ-30.2).

The Outcome Questionnaire 30.2 (OQ-30.2) was developed from the Outcome Questionnaire 45.2 (OQ-45.2) (Lambert et al., 2005). Lambert et al. suggest that there were various reasons in adjusting this measure. First, items from the OQ-45.2 that were common problems among various disorders should be highlighted in the newer version of the scale. Also, items were chosen based on the occurrence of symptoms across individuals. The items on the newer test needed to assess personal and social characteristics that alter someone’s quality of life to determine a change. Thus, these characteristics were highlighted in the newer version of the Outcome Questionnaire.

The OQ-30.2 was adapted to assess the amount of distress that an individual can recognize at any point in time (Lambert et al., 2005). Assessing the amount of distress in the addictions population is an important factor within treatment. Lambert and colleagues (2005) state that there are three factors that are measured using this scale: subjective discomfort, interpersonal relationships, and social role performance. These three factors also measure the individual’s progress when it comes to their treatment and recovery (Lambert et al., 2005).

The OQ-30.2 is a short 30-item questionnaire that assesses an individual’s cognitions over a short period of time (Lambert et al., 2005). Its primary use is to assess the amount an individual has changed over the course of their treatment (Lambert et al., 2005). Lambert and associates also suggest that this questionnaire can be a useful tool to administer as a baseline measure, prior to treatment. This questionnaire may be administered throughout the treatment process to assess a change in daily functioning. Additionally, it is recommended that this questionnaire be implemented after programming, as a follow-up measure.

The Readiness to Change Questionnaire.

Developed by Rollnick, Heather, Gold, and Hall (1992), the Readiness to Change Questionnaire, based on the stages of change model proposed by Prochaska and DiClemente (1982), is an effective way to assess someone’s substance use. Rollnick et al. (1992) were able to create a self-report scale that was short and administrable to alcohol users. This scale was proven to be effective when working with this population (Rollnick et al., 1992). Vogelzang (2013) found that this particular questionnaire did not apply to drug users. He was then able to adapt the questionnaire to be more suited to all individuals suffering with an addiction. This new, revised, questionnaire assesses an individual’s current stage of change (Vogelzang, 2013). The questionnaire assesses only three of the five stages of change proposed by Prochaska and DiClemente (1982) precontemplation, contemplation, and action (Vogelzang, 2013).

Relationship between Literature Review and the Current Study

This review examined various articles and studies pertinent to the TTT group offered at Frontenac Community Mental Health & Addictions Services. It is important to understand how addictions develop, and how addicted people recover. Knowing this helps facilitators understand how to best treat each individual and create relevant content for the sessions. In addition, understanding how addictions can develop from trauma or past substance use is important. At Frontenac Community Mental Health & Addictions Services each client is asked if they have ever been involved with any sort of abuse. The theme of psychoeducational programming to alter substance use is extremely pertinent to this research study, as it is the main focus. The stages of change model is also significant because it is essential to evaluate what stage a person
is in when it comes to their own recovery. Last, the measures are a significant aspect of research, in which the validity, reliability, and efficacy will be later discussed.
Chapter III: Method

Participants
The sample consists of individuals who have been referred to the agency for substance related difficulties. The participants of the TTT group tend to be mandated by probation or parole to attend. Some participants may also be mandated to attend by the Children’s Aid Society. Consequently, they may not be motivated to attend sessions or change their substance use behaviours. They may be in the precontemplation or contemplation stages of change as proposed by Prochaska and DiClemente (1982). Although some individuals may be mandated to attend, other individuals attend the group voluntarily, in which they may be in the action stage of change.

The individuals included within this study were all identified as Canadian citizens. The sample comprised of 29 males and 3 females. The mean age was 34.22 years \((SD=9.74)\). Additionally, the median age was 31.5 with an age range of 19-60.

The TTT group is considered a closed group. The participants are the same each week and individuals may not join the group at any time once it has commenced. The only exception to this rule is if a participant from a previous TTT round needs to come back to complete the program. This means that in order to attend, all individuals must be referred into the program. Also, referrals can come from probation and parole officers, children’s aid workers, or staff at Frontenac Community Mental Health and Addictions Services. Prior to entering the group, participants are required to complete a short information sheet. This information page will be completed at their intake with their referral source and includes basic information such as date of birth, name, address, telephone number, and psychiatric diagnoses.

Inclusion criteria for the study are as follows: the individual may be male or female, but must be at least 18 years of age. Each individual will have successfully completed all questionnaires in the group and attended all four sessions consecutively. Those who have missed a session at any time will be omitted from the research. Additionally, if there were incomplete answers that were unable to be prorated, they would be removed from the research. Guidelines for prorating answers were given in manuals and/or publication of the measures.

In addition to current groups, data from 19 individuals who have participated in previous rounds of the TTT groups held in 2013 will be included in this research. All of these individuals will have completed TTT in the year of 2013, attended four consecutive sessions, are at least 18 years of age, and will have successfully completed all required questionnaires. These individuals were included within the research study to increase the sample size of the study.

For people completing the program with the researcher present, a signed consent form will be obtained (Appendix C). The consent form will be explained to the participants in the group setting. All individuals will be afforded the opportunity to read the consent prior to signing. A photocopy of the signed consent will be given to each person at the second session.

Design
For this study, a combination of archival data and current participant data will be used. There will be three rounds of the TTT group run with the researcher present. This study will use an AB design to assess the effectiveness of the TTT group in altering stages of change as well as, recognizing the participants overall distress. The design will consist of analyzing pre and post scores on the Readiness to Change Questionnaire and the Outcome Questionnaire 30.2.
The independent variable throughout this research will be the implementation of the psychoeducational group, while the dependent variable will be the results from the pre and post measures administered. Each individual will have a total of four scores from the completed questionnaires, which will be analyzed by the researcher using computer programming. In addition, two Pearson correlations will be completed. The first will assess a difference in an individual’s stage of change. The second correlation will distinguish the difference between the pre and post scores on the Outcome Questionnaire 30.2. Descriptive statistics for both the Outcome Questionnaire and the Readiness to Change Questionnaire will be analyzed using Microsoft Excel©.

**Setting and Apparatus**

All of the TTT sessions will take place at Frontenac Community Mental Health and Addictions Services, located in Kingston, Ontario. The TTT group will run once per week for 4 consecutive weeks. Each group session will be 2 hours in duration and occur on a Tuesday or a Wednesday morning each week. All of the group sessions will be held in a large training room within the agency with no more than 20 participants in one group.

For this study, there are various materials that are required. An overhead machine and overhead markers are used for the presentation of the materials to the participants. Pens are also necessary for individuals to fill out questionnaires, complete paperwork, sign consents, and take notes. During session 2, the standard drink materials and vision goggles are necessary for an interactive activity. A television is also required during the third session to watch a film surrounding the use of cannabis products. During the fourth session, completion certificates are required for all participants whom attended all four sessions consecutively.

For analysis of the findings, other materials are required. A computer equipped with Microsoft Excel© is necessary for correlation testing. All questionnaires completed by the participants will be scored and entered into a Microsoft Excel© data sheet. The scoring manual for the Outcome Questionnaire 30.2 will also be required to allow accurate representation of the data. Additionally, scoring sheets for the Readiness to Change Questionnaire developed by Vogelzang (2013) are required.

**Measures**

**Outcome Questionnaire 30.2 (OQ-30.2).**

The OQ 30.2 is comprised of 30 questions that are sensitive to change (Ellsworth, Lambert, & Johnson, 2006) (Appendix D). These questions assess a client’s change over a short period of time. Lambert and colleagues (2005) tested the OQ 30.2 on various populations for reliability and validity. They tested a sample of 157 students to assess test-retest reliability. They found that test-retest reliability yielded a score of .84 among the sample of students. They also suggested that the internal consistency score was a value of .93 for students (N=157) and a patient group (N=298). To assess validity, the Outcome Questionnaire was compared to the following scales; Beck Depression Inventory, Inventory of Interpersonal Problems, Social Adjustment Scale, and the Symptom Checklist-90-R (Lambert et al., 2005). The correlation was calculated using the Pearson Correlation and scores are as follows; Beck Depression Inventory (.609), Inventory of Interpersonal Problems (.621), Social Adjustment Scale (.593), and the Symptom Checklist-90-R (.698). Lambert et al. suggest moderately high concurrent validity compared to other scales measuring similar qualities.
It was found by Ellsworth, Lambert, and Johnson (2006) that the OQ 30.2 was more likely to assess an individual in a ‘dysfunctional’ state, whereas the Outcome Questionnaire 45 (OQ 45) would not. This suggests that items on the OQ 30.2 may be more sensitive to change than the previous Outcome Questionnaire. The authors also suggest that the OQ 30.2 and the OQ 45 are comparable with regards to reliability and validity.

**Readiness to Change Questionnaire.**

As previously discussed, the Readiness to Change questionnaire assesses an individual’s stage of change (Appendix E). This scale was developed to understand where an individual is situated along the Prochaska and DiClemente (1982) change model. Forsberg, Ekman, Halldin, and Ronnberg (2004) evaluated the Readiness to Change Questionnaire. They assessed the questionnaires reliability and validity. Since the Readiness to Change Questionnaire looks at three stages of change (precontemplation, contemplation, and action), internal consistency of each was assessed. They suggested the following values for the internal consistency of each subscale; precontemplation (.78), contemplation (.80), and action (.74). They also found that test-retest reliability was at a satisfactory level. It was also noted that the predictive validity was unable to be calculated, and the construct validity was calculated to an acceptable level. All three of these measures of validity or reliability were not assigned to numeric values.

Rodriguez-Martos et al. (2000) also assessed the Readiness to Change Questionnaire among a Spanish population. They yielded good values for test-retest reliability (precontemplation: 0.81, contemplation: 0.87, and action: 0.86). Crackau and colleagues (2010) also agreed that the value for test-retest reliability on the precontemplation scale yields a less positive response. Last, Heather, Rollnick, and Bell (1993) stated that the Readiness to Change Questionnaire had good predictive validity, in which it was able to correctly assess the appropriate stage of change that an individual is currently in.

It is important to recognize that the reliability and validity has not been assessed for the version of the Readiness to Change Questionnaire used by Frontenac Community Mental Health and Addictions Services. The measure used by the agency was altered based on the original questionnaire. Thus, the items may yield different results from the original questionnaire.

**Procedures**

Prior to program implementation, the researcher completed a research proposal, sample consent form, and a REC-P application. The research ethics board of St. Lawrence College reviewed the submission and approved the research project on October 7, 2013.

**Session One.**

In the first session of the TTT group, information was collected from the participants. All of the individuals were asked to fill out demographic questions to be entered into the computer system. The participants were given the option to sign the consent forms for inclusion within this research project as well as, disclosure of attendance to their referral source. Once all of these steps were complete, a small introduction to the program was given to the group. Some definitions surrounding substance use were discussed with the participants. These definitions included physical dependence, psychological dependence, tolerance, withdrawal, and blackout. This information was presented to the participants so that they were able to begin to start thinking about their own substance use, as most of the participants were mandated to attend the
sessions. Additionally, all participants were asked to fill out the Readiness to Change Questionnaire and the Outcome Questionnaire 30.2.

**Session Two.**

The following week participants had more of an interactive experience. The session began by discussing the definition of a standard drink. A couple of the group members were asked to pour a drink into a cup, in which it was measured later. Once the definitions of a standard drink were explained, the facilitator measured the amount of ‘alcohol’ in each person’s glass. After the standard drink exercise, the classifications of drugs were discussed with the participants. The goal of the exercise was to learn how different drugs react in the body and in the brain. The adverse effects of all psychoactive drugs were explored with the group. Another interactive learning experience was used to explore the negative effects of alcohol using ‘vision goggles’. The vision goggles caused the person wearing them to have some of the negative effects caused by alcohol. There were four sets of goggles that suggested various amount of alcohol that an individual would have to ingest to reach that level of intoxication. Each person wearing the goggles was asked to walk in a straight line, and catch a ball once thrown to them. The purpose of this exercise was to show the negative effects of alcohol and how it can affect someone’s daily functional tasks. The last portion of this session was to discuss routes of drug administration with the group. Routes of administration that were discussed are oral, inhalation, injection, and absorption through mucous membranes.

**Session Three.**

The third session allowed participants to address their own substance use. This session had an interactive component. During this session, the facilitator guided discussion surrounding the pros and cons of using and not using substances. By discussing various perspectives participants were able to make their own decision based on all factors presented. Each participant was asked to complete an exercise that shows the struggles of substance use that they place on themselves and those around them (family and friends). The last thing that was explored within this session was beliefs around cannabis products. A video about cannabis use was watched followed by a group discussion.

**Session Four.**

During the last session of the TTT group, the facilitator introduced how to begin a process of personal change. This session was largely focused on coping skills and personal values and beliefs. Goal setting and lifestyle changes were discussed, as well as relapse. Ways to prevent relapse and triggers for recognizing relapse were explored. Before the participants receive certificates of completion, the facilitator discussed other groups that these individuals may attend for continued support. The participants were once again asked to complete the Readiness to Change Questionnaire and the Outcome Questionnaire 30.2 in this session.

A workbook was provided for the individuals in each session. These workbooks included the topics covered throughout the group. Upon successful completion of the TTT group, all participants were given a certificate for their records and one copy of this was kept on file at Frontenac Community Mental Health and Addictions Services.
Chapter IV: Results

This research study examined the effectiveness of the TTT group offered at Frontenac Community Mental Health and Addictions Services. The overall scores on two questionnaires, The Readiness to Change Questionnaire and The Outcome Questionnaire, were evaluated using Microsoft Excel© to determine the efficacy of the TTT group. The current study analyzed current and past TTT groups all within the year of 2013.

Outcome Questionnaire Results

It was hypothesized that the participant’s distress would increase from baseline because the participants will be exposed to triggering situations during the group and participants are asked to evaluate their own substance use behaviours. A Pearson r correlation coefficient was calculated and statistical analyses were conducted to assess the overall score of each participant who completed the TTT program.

Figure 2 displays the results from the Outcome Questionnaire (OQ) scores in relation to increasing, decreasing, and equal scores from pre to post treatment. Specifically, it assesses the percentage of individuals who had an increased score on their OQ results, a decreased score on their OQ results, or yielded the same score on the OQ from pre to post treatment. Of the 32 participants (n=32), 22 individuals (69%) within the TTT group had a decreased Outcome Questionnaire score, indicating lower ratings of distress. Of the sample, 8 (25%) participants showed an increase of scores on the Outcome Questionnaire. This increase in score suggests that the participants experienced an increase in distress at the completion of the program. Finally, 2 participants (6%) showed no change in score on the pre and post measures.

Figure 2. Overall changes to participant scores on the Outcome Questionnaire.
The Outcome Questionnaire has a maximum score of 120, and a minimum score of 0. A higher score on the Outcome Questionnaire means the individual is indicating more perceived distress within their lives. On the pre measure, the maximum score indicated by the participants was 90 and the minimum score was 6. Alternatively, on the post measure the maximum score was 77 and the minimum score was 0. This resulted in a smaller range for the post measure as compared to the pre measure (77 and 84, respectively). The average grouped score reported prior to group implementation was 33. (SD= 19.7). The median was reported to be Mdn= 30.5. Following program implementation the average score decreased compared to baseline (M= 27.19, SD= 20.57, Mdn= 26). It is important to note that while the scores for the median and mean decreased from pre to post implementation, the standard deviation score increased.

Table 1
Descriptive statistics for the Outcome Questionnaire pre and post measure.

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
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<tr>
<td>M</td>
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<td>3.64</td>
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<tr>
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</tr>
<tr>
<td>SD</td>
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<td>s²</td>
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The correlation between the pre and post scores of the Outcome Questionnaire were calculated using Microsoft Excel 2010©. The correlation testing used was Pearson’s r correlation testing. Pearson r correlation resulted in a strong relationship, r (30) = .87, p < .05.

Last, Figure 3 displays each participants Outcome Questionnaire scores. Each participant has two scores for this measure. When looking at the graph, the dark grey represents the scores of the pre-test, while the light grey represents the scores of the post-test. This graph shows the fluctuation in each individual’s scores before and after programming.
Figure 3. Pre and post Outcome Questionnaire scores by participants.
Readiness to Change Questionnaire Results

It was previously hypothesized that the TTT group will alter the stage of change that a participant is in at the time of pre-treatment. Each individual’s score is representative to a stage of change that they were in at the time of assessment. A score that falls between 0-8 represents the stage of precontemplation; 9-16 signifies the individual is in the contemplation stage; and 17-24 indicates the action stage.

Table 2 represents the descriptive statistics that correspond with the pre and post implementation of this measure. The average score prior to group implementation was 15.88 (SD= 7.93); in comparison, the average score after group implementation was 15.59 (SD= 8.24). The average score slightly decreased, although remained in the contemplation stage, while the standard deviation score slightly increased. The median score for the pre and post measures were the same (Mdn= 20). In both pre and post data collection, there were individuals in all three stages of change.

Figure 4 represents the percentage of individuals in each stage of change designation prior and post treatment. Prior to treatment, there were 8 (25%), 6 (19%), and 18 (56%) individuals in the precontemplation, contemplation, and action stages, respectively. After treatment was completed, overall, one individual (3.13 %) moved from the contemplation stage to the precontemplation stage, and one individual (3.13%) also moved from the contemplation stage to the contemplation stage. Thus, post treatment there was 9 (28%) individuals in the precontemplation stage, 4 (13%) individuals in the contemplation stage, and 19 (59%) individuals in the action stage.

Table 2
Descriptive statistics for the Readiness to Change Questionnaire pre and post measure.

<table>
<thead>
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</tr>
<tr>
<td>Count</td>
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</tr>
</tbody>
</table>

Although Figure 4 suggests, as a group, there were two individuals who altered their stage of change, Figure 5 shows each individual’s changes. This figure states that there were 10 (31%) individuals that changed their stage of change throughout the program. Of these 10
individuals, 5 (15.5%) of them positively changed (meaning they moved up in the stages of change model), and 5 (15.5%) of them negatively changed (meaning they went backwards in the stages of change model). Finally, 22 (69%) of the participants remained in the same stage of change designation from pre to post treatment. The individuals who stayed in the same stage of change designation may have had minor fluctuations within their score, but remained within the current stage. Individual scores, stage of change designation, range in scores, and range in stages of change are displayed in Appendix F. Within the table, the maximum range was +19, and the minimum range was -16. This implies that one individual moved positively through the stages of change model by 19 points, and one individual was negatively impacted and decreased in the stages of change model by -16 points.
Figure 4. Pre and post scores for Readiness to Change Questionnaire divided into stages of change.
Figure 5. Individuals overall changes in the Stages of Change Model from pre to post treatment.

Note: positive indicates that the participants moved towards a more active stage, negative indicates they moved to a less active stage and neutral indicates that they remained at the same stage.

Figure 6 provides an overview of each individual’s scores. It is noticed that some individuals yielded the same score on both the pre and post measures. Although some people had the same score, others decreased their scores (moving backward in the stages of change model) and some others increased their scores (moving forward in the stages of change model). Lastly, the Pearson-r correlation was calculated for the Readiness to Change Questionnaire. A moderate correlation was yielded through the completion of this measure, $r(30) = .59, p < .05$. 
Figure 6. Pre and post Readiness to Change Questionnaire scores by participants.
Chapter V: Conclusion & Discussion

Summary of Findings
Examining the TTT program in greater detail furthers our understanding about the efficacy about the program when altering stages of change and distress within the addictions population. Furthermore, statistical tests have been completed to support the hypotheses of the project. It was previously hypothesized that the participants distress level would increase and their stage of change would fluctuate from pre to post test.

The result obtained from the Pearson r correlation yielded a strong correlation from pre-test to post-test. Thus, it is inferred that the scores of the post-test are related to the implementation of the TTT group itself. Most individual scores decreased on the Outcome Questionnaire at the completion of the group. In this case the alternate hypothesis was accepted. This means that, overall, the participants reported less distress after completing the group sessions compared to baseline.

The Readiness to Change questionnaire was also collected from each participant at the beginning and the end of the group. The Pearson r correlation coefficient resulted in a moderate correlation. This means that it was not probable that the changes in individual’s stages of change scores were related to the completion of the TTT group. Some individuals moved positively or negatively through the stage of change model, this resulted in a moderate correlation coefficient value. It is evident that after the TTT group was completed; there were fewer individuals in the contemplation stage, and more individuals in the action and precontemplation stages. Interestingly, the statistics do not show any major change from differing stages between the pre and post implementation. The original hypothesis was rejected because there were no overall findings that individuals changed stages through the course of the treatment process.

The scores on the Readiness to Change Questionnaire showed that there was not a strong correlation in changing an individual’s stage of change. Some participants moved positively through the stages of change model, some negatively, and the majority of them remained in the same change of stage designation. This is thought to be because these individual’s had no motivation for change at the beginning of the treatment. Many of these individuals were mandated to attend the group, thus they were there to please an outside person and did not recognize their substance use as being a problem for them.

Program Changes
The inclusion criterion of this study was quite rigorous. Each individual must have attended all four consecutive sessions in order to be included within the research study. Originally, the sample size was to have 50 participants. At the completion of the study, only 32 participants met inclusion criteria. This resulted in a smaller sample size than was originally intended.

It was first planned that questionnaires were to be completed at the beginning of the first session, and the end of the last session. However, it was found that the participants were rushing through the questionnaires on the last day of the group. So it was decided by the facilitator and researcher that the questionnaires were better suited at the beginning of the last session to ensure that they were filled out completely and accurately. There is one major implication with this. The information presented in the last session could potentially alter the individual’s stage of change. Thus, the participant’s may not be receiving all the information to influence their substance use prior to filling out the post questionnaires.
Strengths

This research project examined a concept delivered by Frontenac Community Mental Health & Addictions Services. It examined the concept of the TTT program to ensure the program was helpful for mandated clients.

An additional strength of this study was the information presented. This program utilized interactive activities, videos, group discussions, and information presented in a lecture style. This ensures that all participants were able to benefit from the group sessions in various ways. The program taught individuals useful information and addressed all types of learning styles.

Limitations

There were various limitations with respect to the design and implementation of this research project. The two questionnaires selected by the researcher were both self-report questionnaires. It was found that some individuals did not fill these forms out completely, which invalidated the questionnaire, meaning they were excluded from the study. The questionnaires did allow for some pro-rating of answers; although, sometimes this was not plausible. If there was an answer missing on the RTC Questionnaire, the instructions stated to multiply the entire questionnaire results by 1.33. This resulted in a smaller sample size for the study. This causes for a lack of generalizability between participants. It is unclear if this program would benefit individuals with various presenting problems.

Additionally, it is thought that evaluation apprehension could be a factor when utilizing self-report measures (Rosnow & Rosenthal, 2013). This concept refers to the fact that individuals may alter their responses with the fear of being evaluated by the individuals reviewing the materials (Rosnow & Rosenthal, 2013). Response bias is an issue with self-report measures because individuals may answer the questionnaires in a way that the researcher would prefer to see, rather than what they actually feel or believe. Therefore, self-report measures seemed to alter the values that were provided on measures, impacting the final statistics.

The fact that most individuals were mandated to attend the program is known as a limitation of the study. The lack of participation and attendance alters the environment on a weekly basis and causes for difficult treatment implementation.

Another limitation of this study was the population in which it was designed to measure. The individuals in the TTT group were largely probation mandated and were required to be in each session. This created for a lack of willingness to participate in the group sessions. Within the inclusion criteria of the research, all individuals must attend four consecutive sessions. This also created for a smaller sample size due to the lack of attendance during various sessions.

Multilevel Challenges to Service Implementation

Many of the clients that attend the TTT group sessions are on probation and mandated to attend. Applying the stages of change model to this participant group, one might expect that a large majority of the participants would be in the precontemplation or contemplation stages of change. Thus, participation and attendance may not be authentic in this group. Most of these clients may be quiet and withdrawn because they may not see their substance use behaviours as a problem. Thus, resistance is created for each individual and for the group as a whole. This affected the study because these factors may have influenced some individuals from not returning to the group, which decreased the sample size. Within the program level, there can be various challenges when attempting to alter substance use within a group situation. The clients in precontemplation and contemplation stages of change may affect the group structure as a
whole. The behaviours of each individual may affect others within the group in a positive or negative way. This is also seen at an organizational level in how it affects the facilitators’ abilities to implement the group and how other clients at Frontenac Community Mental Health & Addictions Services are affected.

**Implications for the Behavioural Psychology Field**

The results of this research have contributed to the field of addictions and how to effectively treat individuals in the precontemplation and contemplation stages of change. It was found that this intervention successfully decreased distress with a person’s life by providing basic psychoeducational programming to the individuals whom struggle with substance use. Additionally, this research has affected other agencies within the Kingston area. This has helped the probation office, because the outcomes of this group are known. The development of a drug treatment court in Kingston may also be affected by this research.

**Recommendations for Future Research**

It is recommended that more research should be completed on the use of psychoeducational programming and substance use. There appears to be some disagreement about the effectiveness of psychoeducational programming in the current literature. This has been well researched in the adolescent population, but has not been well researched in the adult population. This study could have been improved in multiple ways. The inclusion criteria may have potentially been altered to avoid a small sample size. Also, data from previous years of the group could be included. It is recommended that the agency continue to implement the questionnaires in this research study for further examination of the topic.

The topic of stages of change model has been well researched to date. However, it is unclear on what is the best-practice to aid an individual through this process. It would be helpful for many addiction treatment facilities to have an understanding about this to ensure the most appropriate treatments are available for their clients.
References


Frontenac community mental health & addictions services: Addictions services [Brochure].


Frontenac community mental health & addictions services: Thinking things through [Group Counselling]. September 2013.


Appendices
Appendix A: Consent Received for Use of Agency Name

St. Lawrence College

Date: November 27, 2013

Consent for Use of Agency Name

I, Amanda Shand, consent to the use of the name Frontenac Community Mental Health & Addictions Services in Courtney Laraby's applied thesis for the Bachelor of Applied Arts in Behavioural Psychology program at St. Lawrence College.

Amanda Shand
Agency Staff Signature

Courtney Laraby
Student Signature

Amanda Shand
Printed Name

Courtney Laraby
Printed Name
Appendix B: Frontenac Community Mental Health and Addictions Services Brochure

FRONTENAC COMMUNITY MENTAL HEALTH SERVICES

Mission Statement
Building on individuals’ strengths, Frontenac Community Mental Health Services supports recovery and community for persons with a mental illness and/or an addiction.

Vision Statement
We welcome and walk alongside people who have mental health and addiction concerns, and support recovery and life with dignity, hope and confidence.

There are no fees for our services.

We are located at:
552 Princess St.
Kingston, ON
K7L 1C7

www.fcmhs.ca

Phone:
(613) 544-1356 ext. 4200

Hours:
Mon. 8:30 am to 8:00 pm
Tues.-Thurs. 8:30 am to 4:30 pm

THINKING THINGS THROUGH PROGRAM
Options for Change Addictions Service

552 Princess Street
Kingston, ON., K7L 1C7
613-544-1356 ext 4200
Fax: 613-546-7267
This Program is aimed at:

- People who are not concerned about their own use, and/or may be attending to satisfy someone else’s request.
- People who have had concerns and are wondering whether their use is problematic.
- People who are preparing to change and are wanting to strengthen their commitment and increase their understanding of substance use issues.
- Regardless of your reasons for attending, you will gain some new information and

“What is the Thinking Things Through Program?”

This program consists of four (4) - two (2) hour sessions in a group format.

The sessions involve videos, participating in group discussions and personal reflection.

You will not have to disclose any personal information to the group unless you feel comfortable doing so. However, you may be asked for your opinion.

“What Will Be Expected of Me?”

- Attend all sessions and actively participate.
- If attendance is not possible, calling the facilitator prior to the group to explain your absence and devise a plan to make up the session.
- Abstinence from all alcohol and other drugs for 24 prior to each session. (excluding prescriptions taken as directed)
- Maintain confidentiality of other clients in group.
- Be respectful of other clients in the group.
- Applying some of the things you learn, between sessions.
Appendix C: Informed Consent

**Informed Consent**

**Project title:** Psychoeducational Programming to Alter Stages of Change and Distress with Regard to Substances

**Principal Investigator:** Courtney Laraby
**Name of supervisor:** Michelle Neljak
Amanda Shand
**Name of Institution:** St. Lawrence College

**Invitation**
You are being invited to take part in a research study. I am a student in my 4th year of the Behavioural Psychology program at St. Lawrence College. I am currently on placement at Frontenac Community Mental Health & Addictions Services. As a part of this placement, I am completing a research project (called an applied thesis). I would like to ask you for your help to complete this project. The information in this form will help you understand my project. Please read the information carefully and ask any questions you might have before you decide if you want to take part.

**Why is this study being done?**
My project is on the effectiveness of the Thinking Things Through group that is held at Frontenac Community Mental Health & Addictions Services. This program is designed to help people understand their substance use and how it affects their daily routines. By the end of this group it is hoped that you have thought about making a change with regards to your substance use. This is an educational program that is designed to guide people into considering making a change. A previous placement student has created a questionnaire that will be looked at to assess the effectiveness of this program. Also, another questionnaire will be used to determine the amount of distress each person feels.

**What will you need to do if you take part?**
If you choose to take part in this study you will be asked to attend all four of the Thinking Things Through sessions which are held on Wednesday mornings from 9:30 to 11:30. The sessions dates are as follows; October 23 & 30 and November 6 & 13. These sessions are all two hours long, and the program is four weeks long. All of the meetings will be at 552 Princess Street, Frontenac Community Mental Health & Addictions Services. Before the first session and after last session, you will be asked to fill out two questionnaires. Both of these questionnaires together will take approximately 15
These questionnaires will not require you to be at the agency past the scheduled times.

What are the potential benefits of taking part?
Benefits of taking part in this research study include considering making a change in your substance use patterns. This program could potentially change your views about your own behaviour.

What are the potential benefits of this research study to others?
The potential benefits of this research study to others include changing the program so that other people can benefit from it more. Additionally adding to existing research in substance abuse field and evaluating effectiveness of this group will help benefit others.

What are the potential disadvantages or risks of taking part?
Risks from taking part in this research study are minimal but may include emotional stress and loss of time. You may be required to take time off work, or out of your schedule, to make group meetings.

What happens if something goes wrong?
If you are feeling uncomfortable at any time, it is encouraged that you speak to Amanda or I. You can also speak to your individual counsellor, if you prefer. Additionally, you can withdraw from the project at any time as participation in this research study is voluntary.

Will the information you collect from me in this project be kept private?
We will do our best to keep any information you provide confidential, unless required by the law. Examples of this include; harm to yourself or others, disclosure of abuse to children ages 16 or younger, or your information is subpoenaed. You will be assigned a code number as your identification on questionnaires. This code will be assigned to you after the group is complete. It is asked that you please indicate your name on all questionnaires given to you. Any computer files will be encrypted and password protected to maintain confidentiality. All information you provide to Frontenac Community Mental Health & Addictions Services will be kept in a locked cabinet or room. Your personal information will not be identifiable in any reports, publications, or presentations resulting from this project. All of your information will be presented as cumulative data.

Do you have to take part?
Taking part is voluntary. It is up to you to decide whether or not to take part in this research project. If you do decide to take part, you will be asked to sign this consent
form. If you do decide to take part in this research project, you are still free to withdraw from the research project at any time, without giving any reason, and without incurring any penalty, or negative effects. If you decide to withdraw from the study at any point, during or after the program is complete, all of your information will be removed; however, as per agency operations/policy, data collected from your participation in the group will remain on file at Frontenac Community Mental Health and Addictions Services.

**Contact for further information**

This project has been approved by the Research Ethics Board at St. Lawrence College. The project will be developed under the supervision of Michelle Neljak, my supervisor from St. Lawrence College. I really appreciate your cooperation and if you have any additional questions or concerns, feel free to ask me, Courtney Laraby (claraby16@student.sl.on.ca). You can also contact my College Supervisor, Michelle Neljak (mneljak@gmail.com) or you may also contact the Research Ethics Board at reb@sl.on.ca.
Consent

If you agree to take part in this research project, please complete the following form and return it to me as soon as possible. A copy of this signed document will be given to you for your own records. An additional copy of your consent will be retained at the agency for 10 years in a secure location.

By signing this form, I agree that:

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

I hereby consent to take part.

Participant Name  Signature of Participant  Date

Student Printed Name  Signature of Student  Date
### OUTCOME QUESTIONNAIRE (OQ® -30.1) FOR ADULTS

**INSTRUCTIONS:** Looking back over the last week, including today, help us understand how you have been feeling. Read each item carefully and mark the box under the category which best describes your current situation. For this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have trouble falling asleep or staying asleep.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>2. I feel no interest in things.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>3. I feel stressed at work, school or other daily activities</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>4. I blame myself for things.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>5. I am satisfied with my life.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>6. I feel irritated.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>7. I have thoughts of ending my life.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>8. I feel weak.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>9. I find my work/school or other daily activities satisfying</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>10. I feel fearful.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>11. I use alcohol or a drug to get going in the morning.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>12. I feel worthless.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>13. I am concerned about family troubles.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>14. I feel lonely.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
<tr>
<td>15. I have frequent arguments.</td>
<td>□ 0</td>
<td>□ 1</td>
<td>□ 2</td>
<td>□ 3</td>
<td>□ 4</td>
</tr>
</tbody>
</table>

Over →
16. I have difficulty concentrating.

17. I feel hopeless about the future.

18. I am a happy person.

19. Disturbing thoughts come into my mind that I cannot get rid of.

20. People criticize my drinking (or drug use).
   (If not applicable, mark "never")

21. I have an upset stomach.

22. I am not working/studying as well as I used to.

23. I have trouble getting along with friends and close acquaintances.

24. I have trouble at work/school or other daily activities because of drinking or drug use. (If not applicable mark "never").

25. I feel that something bad is going to happen.

26. I feel nervous.

27. I feel that I am not doing well at school or in other daily activities.

28. I feel something is wrong with my mind.

29. I feel blue.

30. I am satisfied with my relationships with others.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**ID#__________________Session#________Date:____/____/____

Client’s Name: First ___________ Last ___________

\[ \sum = \]
Appendix E: Readiness to Change Questionnaire

Readiness to Change Questionnaire – Alcohol and Drug Treatment Version

Name____________________________________
Date__________________________

The following questions are designed to identify how you personally feel about your substance use right now. Please think about your current situation and using habits, even if you have given up using completely. Read each question below carefully, and then decide whether you agree or disagree with the statements. Please check the answer of your choice to each question. If you have any problems please ask the questionnaire administrator.

Your Answers are Completely Private and Confidential

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Unsure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It’s a waste of time thinking about my substance use because I do not have a problem</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I enjoy using substances but sometimes I use too much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. There is nothing seriously wrong with my substance use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sometimes I think I should quit or cut down on my substance use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Anyone can talk about wanting to do something about their use, but I’m actually doing something about it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I consider my substance use to be fairly normal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. My substance use is a problem sometimes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I am actually changing my substance use habits right now (either cutting down or quitting)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I have started to carry out a plan to cut down or quit my substance use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. There is nothing I really need to change about my substance use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Sometimes I wonder if my substance use is out of control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I am actively working on my substance use problem</td>
<td></td>
<td></td>
<td></td>
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</table>

Appendix F: Overall scores, stages of change, and difference in score from pre to post treatment

<table>
<thead>
<tr>
<th>Participant (N)</th>
<th>Pre Score</th>
<th>Pre Stage of Change</th>
<th>Post Score</th>
<th>Post Stage of Change</th>
<th>Difference of Scores</th>
<th>Change In Stages</th>
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<tr>
<td>1</td>
<td>11</td>
<td>Contemplation</td>
<td>12</td>
<td>Contemplation</td>
<td>-1</td>
<td>Neutral</td>
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<tr>
<td>2</td>
<td>24</td>
<td>Action</td>
<td>24</td>
<td>Action</td>
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<tr>
<td>3</td>
<td>3</td>
<td>Precontemplation</td>
<td>19</td>
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<td>+16</td>
<td>Positive</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>Action</td>
<td>23</td>
<td>Action</td>
<td>-1</td>
<td>Neutral</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
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</tr>
<tr>
<td>6</td>
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<td>Action</td>
<td>21</td>
<td>Action</td>
<td>+1</td>
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<tr>
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<tr>
<td>8</td>
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<td>Precontemplation</td>
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<tr>
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<td>20</td>
<td>Action</td>
<td>-2</td>
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</tr>
<tr>
<td>10</td>
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<td>Action</td>
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<td>Neutral</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
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<td>Action</td>
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<td>Positive</td>
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<tr>
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<td>Action</td>
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<td>Action</td>
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</tr>
<tr>
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<td>Action</td>
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<td>Action</td>
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<td>Action</td>
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