An Intervention Protocol for Pathological Gambling Using the Gambling-Related Cognition Scale
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Dedication

I would like to dedicate my thesis to the staff I worked with at Frontenac Community Mental Health and Addiction Service. Without their guidance and support throughout the process, this would not be possible. As time progressed, the staff made me feel part of the team rather than a placement student. They involved me in their lives and shared their experiences without hesitation. Furthermore, each staff member helped me grow as an individual and for that I am internally grateful. One day, I aspire to become an accomplished and self-assured counsellor just like each member. Thank you for being a part of this wonderful experience.
Abstract

Pathological gambling is developed and maintained through cognitive distortions. When individuals undergo treatment, identifying and understanding the distortions that influenced the maladaptive behaviour is an essential component for treatment effectiveness. At the time of this thesis, gambling counsellors at the addiction service wanted to implement the Gambling-Related Cognition Scale (GRCS) into their practice. There are five cognitive distortions identified by the scale: gambling expectancies, illusion of control, predictive control, inability to stop gambling, and interpretive bias. The purpose was to utilize the scale and provide the agency a form of resource that supports the GRCS. In addition, an intervention protocol that comprised of different forms of treatment modalities and techniques was developed for clients seeking help with pathological gambling. By challenging cognitive distortions during the assessment, counsellors are able to focus on matching service delivery to the client’s presenting complaints. The final product of the thesis consisted of a compilation of current literature on applying the GRCS with gambling addiction and treatments that addressed pathological gambling. The protocol is hypothesized to increase treatment effectiveness by customizing a treatment plan for clients after identifying cognitive distortions. It is suggested that the intervention protocol be evaluated by counsellors at the agency to increase positive behaviour change.
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Chapter I: Introduction

The rules and regulations of gambling have changed over the course of time and have impacted social behaviours (Ashley & Boehlke, 2012). Initially, gambling was a prohibited leisure-activity for individual involvement, however, in the 1960s, it was legalized as a socially acceptable activity (Jacobsen, Knudsen, Krogh, Pallesen, & Molde, 2007). According to Ashley and Boehlke (2012), 85% of Americans have engaged in a gambling activity over their lifetime and 65 to 80% reported to have gambled within the last year.

Gambling involves risking something of value to potentially gain something of greater value (Ashley & Boehlke, 2012). Gambling behaviour varies with each individual; gambling can be an occasional or pleasurable activity or it can be detrimental or become an addiction (Brevers et al., 2012). There are different severities in gambling addiction, the most severe form is known as pathological gambling (Petry, 2005). This type of gambling refers to the inability to stop engaging in this maladaptive behaviour (Blaszczynski & Nower, 2002). According to Barrault and Varescon (2013), cognitive distortions influence the development and maintenance of pathological gambling. Distortions are unhelpful or exaggerated thought patterns that affect an individual’s mental state through negative reinforcement (Fortune & Goodie, 2012). The thoughts interfere with reality and influence them to perceive inaccurately by erasing, generalizing, and changing the behaviour. To develop a suitable intervention plan, individuals must identify and understand the function of their distortions (Sylvain, Ladouceur, & Boisvert, 1997).

The Gambling-Related Cognition Scale (GRCS) is an assessment tool that targets the cognitive distortions and determines the severity of pathological gambling (Grall-Bronnec et al., 2012). The GRCS contains five subscales that identify cognitive distortions along five themes: gambling expectancies, illusion of control, predictive control, inability to stop gambling, and interpretive bias (Raylu & Oei, 2004). According to Raylu and Oei (2004), the scale displays adequate validity and consistency in the results and can be useful for assisting in treatment planning and implementation. According to Sylvain et al. (1997), both cognitive and behavioural treatments improve pathological gambling. Depending on the individual’s cognitive distortions, different modalities can be applied (Grall-Bronnec et al., 2012). Motivational Interviewing (MI) allows the individual to discover ambivalence and resolve the gambling addiction (Hodgins, Currie, & el-Guebaly, 2001). Cognitive-Behaviour Therapy (CBT) repairs unhelpful cognitions that relate to gambling (Petry et al., 2006). Rational Emotive Behavioural Therapy (REBT) focuses on identifying and disputing self-defeating and unhelpful thoughts towards gambling by replacing them with some that are rational self-helping (Haaga & Davison, 1993). Dialectical Behaviour Therapy (DBT) focuses on accepting and changing gambling strategies by combining acceptance-based practice and cognitive-behavioural approaches (McMain, Korman, & Dimeff, 2001).

Summary of the Project

The project aims to evaluate and provide an intervention for pathological gambling while utilizing the GRCS to measure pre- and post-intervention change (Raylu & Oei, 2004). An intervention protocol (Appendix G) will be presented to clients who seek guidance and wish to overcome pathological gambling. The protocol establishes a clear understanding of the term pathological gambling and how the addiction interferes with daily functioning, and results in
negative psychosocial consequences (Blaszczynski & Nower, 2002). In addition, the GRCS questionnaire is administered in the protocol for clients to complete prior to commencing treatment. The questionnaire subscales help identify and measure cognitive distortions (Raylu & Oei, 2004). The subscale scores will be examined and targeted during treatment to address clients issues around pathological gambling. The scores are then associated with a treatment modality, as well as different techniques. Utilizing the techniques will allow clients to identify the antecedent leading to the gambling behaviour, and the related consequence. Challenging the cognitive distortions throughout the treatment process helps the individuals learn how to identify and manage their distortions (Raylu & Oei, 2004). The treatment techniques can help improve awareness around unhelpful thinking and reinforces rational thinking (Fortune & Goodie, 2012).

The purpose of the project is to provide the agency with an intervention protocol to assess and treat pathological gambling. The literature issues evidence-based research and informational reviews about the treatment modalities and techniques being utilized. Furthermore, both the project and literature supports the use of the GRCS questionnaire and explains how the cognitive distortions are challenged using the techniques.

Chapter Overview

The project consists of five chapters: the introduction reviews the subject and purpose of the project; the literature review contains research and evidence-based information regarding the treatments and techniques adapted in the protocol; the methodology explains the procedure when implementing the intervention protocol; the results describes the outcome of the project; and the discussion summarizes the research discussed throughout the project.
Chapter II: Literature Review

Gambling

Gambling is a growing industry that is gaining attention for researchers and clinicians due to the impact it has on individuals and families. The monitoring of gambling behaviours and development of treatment approaches are of paramount importance (Potenza, Fiellin, Heninger, Rounsaville, & Mazure, 2002). Gambling is defined as wagering something for potential gain with the probability of loss (Ashley & Boehlke, 2012). There are numerous gambling activities and they are classified as informal games, placing a bet on sporting events, or formal/legal games, playing in casinos or online games. According to Potenza et al. (2002), legalized gambling is increasing in popularity across the world and influencing maladaptive gambling behaviours. Ladouceur (2004) found that in 2002, the cost spent on gambling in Canada was $11.3 billion which indicated an increase of $2.7 billion within the last 10-years. Gambling is unrelated to drug user, however, if the behaviour develops into an addiction, the disorder is highly comorbid with substance use and other mental health conditions (Potenza et al., 2002).

Problem gambling and pathological or compulsive gambling are two different forms of gambling behaviours (Ashley & Boehlke, 2012). According to Ashley and Boehlke (2012), the basic principle of both forms are similar, the individual begins to lose control of their maladaptive gambling behaviour, and in result it consequently affects their daily functions. In order to differentiate between them, the behaviour is evaluated and falls within a spectrum in the Diagnostic Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). There are 10 diagnostic criteria for gambling disorders in the DSM-5 (Reilly & Smith, 2013). Each criteria is identified to have a negative effect on the individual such as, repeated, unsuccessful efforts to control, cut back or stop gambling, and feels restless or irritable when attempting to cut down or stop gambling. In terms of problem gambling, at least three of 10 diagnostic criteria must be identified. As for pathological or compulsive gambling, which is the most severe form must meet at least five of 10 diagnostic criteria (Appendix A).

Behavioural Addiction

There are a wide variety of behavioural addictions addressed in counselling with different forms of severity (Reilly & Smith, 2013). Individuals with problem or pathological gambling are one of numerous behavioural addictions classified in the DSM-5. Grant, Schreiber, and Odlaug (2013) define a behavioural addiction as being unable to resist an impulse, temptation, or drive to engage in an act that leads to a consequence. Repeated involvement in the behaviour inhibits the individual’s daily functioning in one or more aspects. The addictive behaviour provokes a pattern of relapse and the individual develops an uncontrollable need or urge to engage in the behaviour. Although pathological gambling is a challenging form of behavioural addiction, it can be managed through the course of professional treatment (Blaszczynski & Nower, 2002).

Pathological Gambling

Giorgetta and colleagues (2014) stated that individuals who engage in pathological gambling experience detrimental consequences that affect their quality of life. Pathological gambling is defined as repeated exposure to a maladaptive behaviour that induces incentive
salience to the reward-associated stimuli (Blaszczynski & Nower, 2002; Brevers et al., 2011). Thus, the brain impairs behavioural control over the desired behaviour. Brevers’s research team (2011) suggested pathological motivation is developed by Pavlovian conditioning through sensitization in the brain circuits. Once hypersensitivity is reached, the systems trigger incentive motivation that enforces the behavioural addiction (i.e., pathological gambling). Although detrimental consequences inhibit the individual’s behaviour, decreasing or managing pathological gambling can be difficult to achieve (el-Guebaly, Mudry, Zohar, Tavares, & Potenza, 2012).

For some, pathological gambling has been shown to increase maladaptive personality traits and comorbid psychiatric conditions (Milosevic & Ledgerwood, 2010). Common traits and conditions associated with pathological gambling are personality, anxiety, and mood disorders, as well as impulsivity control, and neuroticism. The etiology and management of these disorders vary depending on the individual and severity of the addiction (Blaszczynski & Nower, 2002). Research by el-Guebaly and associates (2012) demonstrated that deficits in the frontal lobe system contribute to the etiology of pathological gambling because of impairments in executive functioning. While the development of gambling is unique for each person, pathological gambling can be viewed as a general addictive behaviour or as a physiological predisposition (Jacobsen, Knudsen, Krogh, Pallesen, & Molde, 2007). According to Blaszczynski and Nower (2002), three-quarters of individuals with a gambling problem display symptoms of depression. It is thought that the individual suffering from depression engages in gambling activities to reduce or escape from the symptoms.

Despite the assumption that pathological gambling is a male’s disorder, studies revealed that females are a contributing factor to this pathology (Blaszczynski & Nower, 2002). According to Grant, Schreiber, and Odlaug (2013) 32% of the pathological gambling population consists of women. Although some individuals may frequently engage in gambling behaviours and may be perceived as an addiction, in order to be diagnosed with pathological gambling they must meet the diagnostic criteria.

**Cognitive Distortions**

Cognitive distortions are a fundamental component to the development and maintenance of pathological gambling (Barrault & Varescon, 2013). Cognitive distortions are general misconceptions towards gambling randomness; specifically, individuals believe they are controlling the gambling outcomes (Tavares, Zilberman, & el-Guebaly, 2003). Barrault and Varescon (2013) stated that pathological gamblers typically develop erroneous beliefs that make it difficult for the person to separate luck from chance. Individuals engaging in gambling activities are presented with a series of decisions and can be influenced by distortions in reasoning, errors in judgment, and cognitive biases.

Toneatto, Blitz-Miller, Calderwood, Dragonetti, and Tsanos (1997) developed a study that explored individual beliefs on gambling outcomes using different methods to increase the probability of successful gambling outcomes. The cognitive distortions that were measured included interpretive control, probability control, passive illusory control, active illusory control, and predictive control. Gambling-related activities utilized in the study slot machines and lottery games as they did not require any skills or previous knowledge. Results revealed 92% of the sample population showed signs of cognitive distortions. In addition, passive illusory control was reported as being the most frequent cognitive distortion with 84.2% of the sample endorsing
them. Participants high on passive illusory control believed they had control over the game or utilized good luck objects to gain a positive outcome. The least active distortion, interpretive control, was held by 31.6% of the sample. Participants focused on their wins and neglected to remember their losses by reframing the meaning or causes of the gambling outcomes.

**Gambling-Related Cognition Scale (GRCS)**

Cognitive distortions play a central role in the development and maintenance of pathological gambling. The GRCS was designed to identify the major distortions associated with gambling behaviours (Fortune & Goodie, 2012). The GRCS questionnaire (Appendix B) demonstrates internal reliability and proves to be satisfactory for identifying traits associated with gambling addiction; anxiety, depression, gambling behaviour, and motivations towards gambling (Goodie & Fortune, 2013). The questionnaire assesses gambling-related cognitions to determine the severity of pathological gambling (Grall-Bronnec et al., 2012). Individuals who receive high scores from the questionnaire have greater likelihood of relapsing compared to those with low scores. According to Raylu and Oei (2004), the GRCS can be used to help identify cognitive distortions before implementing treatment. The assessment tool is a self-report questionnaire that asks individuals to rate items on a seven point Likert scale, from strong disagree to strongly agree (Grall-Bronnec et al., 2012). The scale originally consisted of 59-items (Raylu & Oei, 2004). Following confirmatory factor analysis, the questionnaire was reduced to 23-items with five subscales. The subscales include: illusion of control (IC), predictive control (PC), interpretive bias (IB), gambling-related expectancies (GE), and inability to stop gambling (IS).

Individuals who score high on IC rely on behavioral superstitions (i.e., they believe using a lucky number or following a system influences the gambling outcomes; Raylu & Oei, 2004). Those scoring high on PC believe themselves to have acquired the skills to accurately predict gambling by previous wins or losses and salient cues. Individuals with high scores in on the IB subscale tend to reframe their gambling outcomes to encourage the gambling behavior, regardless of the consequences. Those with high scores in GE expect to have an effect that provides benefits and is influenced through gambling models (i.e. cultural rituals, media, and personal life experiences). Finally, individuals attaining a high score in IS are aware of their gambling behaviour; however, they continue the behaviour in hope of accomplishing a goal or activity.

Raylu and Oei’s (2004) study showed that the GRCS is a reliable and valid measure to screen for gambling related cognitions in pathological gambling. The research identifies three general categories that represent the five cognitive distortions: belief of controlling the outcome, belief of accurate predictions, and beliefs of reframing the outcome. A voluntary community sample was chosen to participate in the study and three different forms of validation were tested: concurrent validity, criterion-related validity, and predictive validity. The GRCS proved to be an effective measure for pathological gambling. Results revealed evidence of concurrent validity with the GRCS total scores correlating with related variables (i.e., gambling problems, gambling-related thoughts, and motivation concerning gambling scale). As for the criterion-related validity, the GRCS scores discriminated problem gambling with non-problem gambling. Predictive validity examined the subscale scores and four of five subscales in the GRCS are correlated with the scores from the South Oaks Gambling Screen (SOGS). The GE, IS, IB, and IC accounted for 16% of the variance in the SOGS score. Thus, the GRCS indicated accuracy while measuring problematic gambling.
Treatment Modalities

**Motivational Interviewing.** Motivational Interviewing (MI) is a client-centered approach that allows individuals to explore, reflect, and resolve their ambivalence about change (Burke, 2011). MI uses a non-confrontational approach that focuses on eliciting reasons for the individual to change (Kuentzel, Henderson, Zambo, Stine, & Schuster, 2003). MI was originally designed for substance abuse treatment; however, it has been shown to work for a wide range of health behaviours and mental health disorders (Hodgins, Currie, Currie, & Fick, 2009). According to Burke (2011), MI is 10-20% more effective while treating addictions compared to utilizing other treatment methods.

In a study examining treatment outcomes of MI and problem gambling, Hodgins and colleagues (2009) found that participants demonstrated a decrease in gambling behaviour, less distress, and less money spent per month at 12-month follow-up. Thus, MI proved to be effective at reducing problem gambling. Kuentzel’s (2003) research team completed a single-subject design that examined the effectiveness of MI with a male participant with pathological gambling and secondary depression. He engaged in a 12-week trial that involved 20mg of fluoxetine daily and attended four one-hour MI sessions. Before commencing treatment, the participant met 10 of the DSM-4 diagnostic criteria for gambling disorder. These results revealed that the participant fell into the spectrum for pathological gambling. On average he was spending $200-$300 per week within 8.5 hours. During his first MI session (week four), he had been utilizing fluoxetine for two weeks and revealed that he made minimal changes with his gambling behaviour; spent $288 per week on 5.2 occasions within a duration of 7.2 hours. However, he realized that he had a gambling problem through self-observation. As for the second MI session (week 6), although he had a strong desire to gamble, he managed to only spend $25.50 per week on seven occasions within a duration of two hours. By the third MI session (week 10), the participant continued to improve and spent $29.50 per week on three occasions within a duration of 1.7 hours. In the fourth and final MI session (week 12), his gambling behaviour averaged $26.50 per week on three occasions within a duration of 2.5 hours. In addition, the three month follow-up revealed that the participant spent $50 per week which is a significant improvement from baseline average spent and no longer met the diagnostic criteria for pathological gambling. Thus, the study demonstrates that MI is an efficient and effective treatment for pathological gambling.

**Cognitive-Behaviour Therapy.** Beck (1995) defines Cognitive-Behaviour Therapy (CBT) as a structured procedure that provides individuals an opportunity to contemplate the accuracy and practicality of their thoughts. Furthermore, CBT allows individuals to explore maladaptive beliefs, examine the positive and negative evidence associated with the beliefs, and test the validity of their belief systems using behavioural experiments. Using CBT as a treatment method for pathological gambling has been shown to significantly decrease gambling behaviours (Petry, Litt, Kadden, & Ledgerwood, 2007; Sylvian et al., 1997). Individuals view their behaviour from a different perspective while engaging in high-risk behaviours (Sylvian, Ladouceur, & Boisvert, 1997). They neglect to acknowledge the negative and fixate on the positive effects. Those who engage in pathological gambling tend to have poor coping responses and internal/interpersonal stressors increase the likelihood of gambling relapse.

Petry et al. (2007) conducted a study to determine the usefulness of applying CBT with pathological gambling. Participants were randomly referred to Gambling Anonymous (GA) or
GA and CBT. To assess the gambling behaviour, the Coping Strategies Scale (CSS) and South Oaks Gambling Screen (SOGS) were implemented during baseline and follow-up, two months after treatment. Participants assigned to the GA condition attended one hour weekly individual sessions for eight weeks. As for participants in the GA and CBT condition, they attended both group and one hour weekly individual therapy sessions for eight weeks. Results revealed the SOGS scores for gambling frequency and money spent per month decreased for both conditions. However, the scores for the GA and CBT condition reduced to a greater extent within the first and second CSS scores. Those involved in the GA condition showed a higher frequency in gambling for both CSS scores. After the intervention was complete, the conditions engaged in a follow-up session to examine treatment effectiveness. The CSS and SOGS scores revealed that the adaptive behaviours were maintained and adequate results were achieved. In addition, results indicated that coping responses helped those in GA and CBT develop successful gambling outcomes.

**Rational Emotive Behaviour Therapy.** Rational Emotive Behaviour Therapy (REBT) focuses on unhelpful beliefs and questions the actions or motive behind the individual’s behaviours (Haaga & Davison, 1993). During the process, the individuals are challenged to consider whether or not the belief is unhelpful. REBT focuses on the behaviours or beliefs that influence the antecedent or activating event opposed to the emotional or behavioural consequence. REBT is highly behavioural in its approach (Ellis, 1999); the treatment focuses on desensitization and exposure. In order to help individuals change their behaviours, REBT utilizes emotional-evocative, cognitive, and behavioural methods. The three methods help individuals make the necessary emotional behavioural changes. According to Turner and Barker (2014), REBT promotes logical and rational answers to life occurrences. Although REBT is not applied in research or studies involving pathological gambling, the treatment can be utilized with it.

**Dialectical Behaviour Therapy.** Dialectical Behaviour Therapy (DBT) is a principle-driven treatment that is commonly used with individuals displaying severe emotion dysregulation (Bedics, Korslund, Sayrs, & McFarr, 2013). In addition, the treatment focuses on awareness of problems, increasing coping skills, and impulsive behaviours (Courbasson, Nishikawa, & Dixon, 2012). A study by Courbasson and associates (2012) demonstrated the effectiveness of mindfulness meditation and identified mindfulness as an essential component of the treatment process. DBT concentrates on the antecedents and the consequences of maladaptive behaviours (Bedics, Korslund, Sayrs, & McFarr, 2013). The goal of DBT is to recognize the relationship between antecedents and consequences and alter the relationship between them to reduce the occurrence and frequency of problem behaviours. According to Bedics, Korslund, Sayrs, and McFarr (2013), DBT has been shown to be an effective treatment option for borderline personality disorder and suicidal behaviour. The success of DBT has led to its adaptation for treating other conditions. DBT recognizes acceptance and change, and develops a framework that integrates both positions. The treatment focuses on dialectical thinking in which challenges clients fixed thinking to become more flexible and balanced. Essential strategies involved in DBT are balancing treatment plans, as well as presenting dialectical worldview through modeling. Although DBT is not found in studies or research involving pathological gambling, it can be adapted. Consequences associated with pathological gambling are similar to DBT’s main focus.
Treatment Techniques

**Stages of Change Model.** Stages of Change Model (Appendix C) can be utilized when individuals are prepared to make a change (DiClemente, Schlundt, & Gemmell, 2004). The purpose of the model is to help individuals recognize different behavioural stages and identify what stage of change they are currently at (Hampton, Brinberg, Peter, & Corus, 2009). The model consists of six stages: (1) precontemplation, unwillingness to change or adapt a new behavior; (2) contemplation, considering to change a behavior; (3) preparation, planning to change or adapt a new behavior; (4) action, beginning to change a behaviour; (5) maintenance, regularly using the behavior; and (6) relapse, reverting back to old behaviour. The Stages of Change Model has numerous stages to allow individuals to progress at their own rate. Individuals utilizing it can be at different stages and might have already completed one or more stages thus, the model is formed into a cycle. This is intended to accommodate their needs specifically and allows for a chance of relapse. When a stage is successfully complete, individuals can proceed to the following stage however, if it is incomplete, they can reevaluate the behaviour and make the necessary adjustments before recommencing the stage.

**Thought Change Record.** A Thought Change Record (Appendix D) is a tool/resource that helps identify an individual’s automatic thoughts (De Oliveira, 2007). Automatic thoughts often develop naturally without effort or attention; thoughts that are revealed when a particular situation occurs. The purpose of the record is to identify unhelpful intermediate beliefs and associate negative emotions presented in the automatic thoughts. In addition, identify the disconfirmatory evidence regarding the beliefs (De Oliveira, 2012). The thought change record is separated into seven different columns to help analyze each step (De Oliveira, 2007). The first column explains the situation. The second column identifies an emotion or feeling and asks the client to rate the severity of the emotion. The third column reveals the purpose of the thought. The fourth column issues the accuracy in which the thoughts are supported. The fifth column addresses unsupportive thoughts. The sixth column provides alternative thoughts. The seventh column establishes the feelings or emotions once the previous steps are complete, and rate the severity. The Thought Change Record is used to facilitate thought change by modifying unhelpful intermediate beliefs in order to reprogram the thought process (2012).

**ABC Chart.** An ABC Chart (Appendix E) is used to analyze behaviours in order to gain an understanding of a target behaviour (Nijhof & Rietdijk, 1999). The purpose of the chart is to identify and recognize antecedents, behaviours (beliefs), and consequences to determine a more helpful alternative. Environmental cues or triggers are often ignored in determining the cause of a behaviour. An ABC Chart specifically considers the environment as a contributing factor in behaviour. The chart is divided into three sections: the antecedent, a person, thing, event, or place that encourages the behaviour to occur; the behaviour, is thoughts or images that arise and the meaning they attach to the trigger event/situation; and the consequences, the resulting emotions, physical sensations and behaviours. After identifying the cause of the unhelpful behaviour, changing the antecedents to produce different consequences is required before changing the behaviour.

**‘Wise Mind’.** ‘Wise Mind’ (Appendix F) is a concept of DBT that focuses awareness on rational thinking and decision making by combining emotions with reason (Heckwolf, Bergland,
The purpose of ‘Wise Mind’ is to develop a skill that allows individuals to acknowledge and understand the entire situation (Keuthen & Sprich, 2012). Mindfulness describes having complete awareness of a moment and putting divergent feelings and thoughts aside (Heckwolf et al., 2014). ‘Wise Mind’ consists of three parts: (1) Emotion mind, the individual’s behaviour and thinking are based on their emotions. (2) Reasonable mind, the individual addresses things through intellectual and logical thinking and focuses on observable or measurable facts. (3) Wise mind, the individual combines both emotion mind and reasonable mind to develop a balanced and wise response by adding intuitive knowledge and logic to emotional distress. Without developing behavioural awareness and addressing distressful emotions, mindfulness cannot be achieved.

Summary

The diagnosis for pathological gambling first appeared in the DSM in 1980 when it was referred to as an impulse control disorder (Sylvain, Ladouceur, & Boisvert, 1997). Despite early recognition of problem gambling as a mental health disorder, there is insufficient research regarding the treatment of pathological gambling. Research by Barrault and Varescon (2013) demonstrate that cognitive distortions significantly influence maladaptive gambling behaviours. In addition, the authors emphasize the importance of assessing pathological gambling to understand the severity and examine the variables impacting the behaviour. The GRC S questionnaire was created to screen and assess cognitive distortions that are influencing individuals pathological gambling (Raylu & Oei, 2004). Literature explains how cognitive distortions affect individuals and the importance of recognizing and managing the distortions (Hodgins, Currie, & el-Guebaly, 2001). CBT is generally used for pathological gambling; however, there are a variety of other treatments that are available and effective (Sylvain, Ladouceur, & Boisvert, 1997). Individual’s progression can be easily monitored while utilizing the techniques throughout treatment, as well as helping maintain a successful outcome.

This paper will examine pathological gambling and different modalities for treatment by also considering the cognitive distortions that prevent individuals from change. The GRC S questionnaire will be used as an assessment tool and the basis for implementing a particular treatment modality. Once the questionnaire is complete, the scores are calculated and associated with a specific subscale to identify the distortion of concern. Afterwards, the distortion is further examined throughout the intervention by engaging in a treatment modality and utilizing the technique assigned. The techniques will help the clients understand their maladaptive thoughts and learn how to alter them. Overall, this will reinforce treatment effectiveness and help guide the clients through the process.
Chapter III: Methodology

Participants

The intervention protocol is intended for both adult males and females, 18 years of age or older, who struggle with pathological gambling. The treatment protocol is aimed towards clients seeking professional help to determine the cognitive distortions associated with any form of gambling activity. These clients will be identified by counsellors within the agency. Clients are required to meet the DSM-5 criteria for pathological gambling to be eligible for the intervention.

Counsellors must be familiar with addiction and gambling behaviours to facilitate the intervention protocol. They are to maintain regular contact with the clients throughout the process. The protocol can be applied to individual or group counselling sessions. Treatment can be conducted in the counsellor’s personal office or group room. Once clients are given the protocol and have completed the Gambling-Related Cognition Scale (GRCS), both counsellor and client discuss which treatment modality and techniques best meets the cognitive distortions.

Design

The intent is to provide the agency with an intervention protocol that can be utilized for client’s engaged in pathological gambling. The protocol serves as an information package that includes definitions, examples, and explanations regarding the GRCS questionnaire, treatment modalities, and techniques. The protocol is designed to challenge cognitive distortions by tailoring treatment options suitable for pathological gambling. The GRCS questionnaire is the main component of the protocol, it highlights five different cognitive distortions: gambling expectancies, illusion of control, predictive control, inability to stop gambling, and interpretive bias (Raylu & Oei, 2004). The scores from the questionnaire identifies which distortion requires emphasis and helps determine a treatment plan. Administering the GRCS is efficient and allows more time for the counsellor and client to concentrate on bringing awareness and understanding cognitive distortions, managing triggers and urges to engage in gambling activities, developing and adapting new skills, and maintaining a successful outcome. Client’s participation is expected to increase engagement during treatment and willingness to complete assigned homework.

The protocol is designed to adapt different types of cognitive and behavioural therapies to cognitive distortions associated with pathological gambling. The intent of applying techniques in the protocol is to teach clients how to utilize them in their daily routine without interference. Despite being able to incorporate the intervention protocol in both individual and group treatments, the intervention is required to meet client’s individual needs. In individual sessions, the focus remains on a specific modality therefore, allowing significant time to analyze and review the assigned homework.

Setting and Apparatus

This is a manual/intervention protocol for use at FCMHAS. Counsellors at the agency will be providing the clients with the protocol in the privacy of their offices or conference rooms. Materials needed to conduct the intervention are: the intervention protocol (Appendix G), which contains the GRCS questionnaire (Appendix B), and explanation of the treatment modalities:
Motivational Interviewing (MI), Cognitive-Behaviour Therapy (CBT), Rational Emotive Behaviour Therapy (REBT), and Dialectical Behaviour Therapy (DBT), and the techniques: Stages of Change (Appendix C), Thought Change Record (Appendix D), ABC Chart (Appendix E), and ‘Wise Mind’ (Appendix F). Counsellors are expected to keep clinical case/progress notes on clients, as well as a record of completed homework assignments.

Measures

The GRCS questionnaire is a measure utilized in the project that determines the course of the intervention. The questionnaire consist of a variety of questions that relates to different cognitive distortions. Each question is scored and associated with a specific cognitive distortion. The distortion with the highest score highlights the focus of treatment. Once the questionnaire and scoring is complete, counsellors provide the clients with information regarding the protocol. Furthermore, the counsellor’s help the client’s determine what treatment option best suits their cognitive distortions and needs. From there, the counsellors explain the treatment step-by-step using an example related to their cognitive distortions associated with pathological gambling. Clients are encouraged to utilize the techniques when triggering thoughts or situations occur in their daily routine. Throughout the next sessions, clients are required to bring their homework regardless if they have successfully completed the assigned homework. Counsellors are to review the work and discuss with the clients the outcomes and make the necessary adjustments. Documenting the cognitive distortions helps client’s observe their thoughts and behaviours from a different perspective before engaging in gambling activities.

Procedures

The intervention protocol defines key terms in relation to pathological gambling in order to ensure clients have awareness and understanding. Terms defined are gambling, behavioural addiction, pathological gambling, problem gambling, and cognitive distortions. The GRCS questionnaire is also included in the protocol. The purpose of the questionnaire is to determine where clients are situated with their distortions and which is of high concerns. Once revealed, clients can proceed to the next step; the protocol consists of four treatment modalities that help clients acknowledge their cognitive distortions associated with pathological gambling and guides them through the process. Moreover, clients will be drawing on techniques from empirically-supported treatment modalities. The Stages of Change Model is a technique applied with MI; this approach helps clients work through their ambivalence by changing their behaviour using different steps (Hodgins, Ching, & McEwen, 2009). The Thought Change Record is utilized with CBT; the technique is used to help identify and alter maladaptive coping skills and helps form new skills (Petry, Litt, Kadden, & Ledgerwood, 2007). The ABC Chart is another technique that is associated with REBT; the Chart teaches clients how to debate their unhelpful beliefs by questioning the intent of their belief and reasons for unwillingness to change (Haaga & Davison, 1993). The 'Wise Mind' technique relates to DBT; the purpose of using this technique is to increase mindfulness and acceptance of maladaptive behaviour (Bedics, Korslund, Sayrs, & McFarr, 2013).
Chapter IV: Results

Protocol Manual

The final product of this thesis is presented in the form of an intervention protocol for individuals seeking help for pathological gambling (Appendix G). The purpose of the protocol was to establish a treatment plan for clients once the Gambling-Related Cognition Scale (GRCS) has scored and identified the cognitive distortions. The different treatment modalities and techniques provided in the protocol are intended to challenge the distortions. In result, the scale determined which distortion is the primary in contributing to pathological gambling.

The protocol used the GRCS as an assessment tool before and after treatment commenced, and the treatment modalities and techniques helped guide clients through the recovery process. The techniques assisted clients to understand the cognitive distortions that contributed to their pathological gambling. The techniques increased awareness of triggers and helped learn how to control their gambling behaviour.

Feedback Received

The intervention protocol was reviewed by selected agency counsellors in order to receive feedback on the content and design. Overall, the feedback focused on the importance of covering the effectiveness of the GRCS questionnaire. The agency confirmed that the protocol was clear and could easily be applied in individual counselling sessions. Although minor adjustments were to be made, the protocol met the proposed objectives.

In the original draft, the agency staff noted concerns with providing a specific treatment modality and technique to a cognitive distortion. Depending on the distortion, several different treatments can be effective. Therefore, providing different modalities and techniques benefits counsellors and clients while determining the course of treatment. Time efficiency is a benefit to having different treatment plans; moreover, if clients do not respond well to the chosen techniques, alternative techniques are provided.

Changes to the Treatment Protocol

Based on the feedback received by the agency, adjustments were made to the protocol in an effort to ensure a well-developed treatment plan. In addition, the DSM-5 criterion for pathological gambling was added to the protocol, as well as complex definitions. Several changes were also made to improve sentence structure and design to create a clear and detailed protocol for both counsellors and clients.
Chapter V: Discussion

Thesis Summary

The purpose of this thesis was to identify cognitive distortions associated with pathological gambling and to determine an effective treatment plan using the Gambling-Related Cognition Scale (GRCS). The intervention protocol provided several techniques drawn from well-validated treatment modalities for clients with pathological gambling to utilize during individual or group counselling sessions. A counsellor at the agency was interested in integrating the GRCS into their practice, as well as creating a protocol to increase treatment effectiveness.

The intent of the intervention protocol was to also increase client engagement throughout the process by providing them with an informal resource. It was anticipated that the protocol would help clients with pathological gambling be more involved throughout the treatment process. In addition, the GRCS would be time efficient for counsellors and assist in guiding the counselling sessions after the cognitive distortions are identified. In order to select which treatment modalities and techniques would help address cognitive distortions, research was accumulated based on empirical evidence and literature reviews. Furthermore, modifications were made to the treatments based on feedback received by counsellors at the agency after reviewing the collected research.

Strengths

A major strength of this thesis is the development of the intervention protocol being supported by an extensive literature review on topics related to the GRCS for pathological gambling and positive treatment outcomes. A second strength of this thesis is the intervention protocol provides a new treatment delivery for counsellors to present to clients and allow clients to be more involved throughout the process. A third strength of this thesis is the protocol can be utilized as a resource for clients throughout the process to understand each step of treatment. A fourth strength of this thesis is that it serves to benefit the counsellors by acting as an aid to their existing practices. Having a developed treatment plan prepared in advance will help counsellors be more involved with the client’s needs and perhaps increase treatment effectiveness.

Limitations and Challenges

Although the intervention protocol has the potential to be a valuable asset to the agency, several limitations are presented. Time constraint was a major limitation to the protocol, as there was insufficient amount of time to properly evaluate and test the effectiveness of the protocol. Treatment effectiveness could not be verified and improvements could not be made to the protocol. Feedback was another limitation to the protocol. Feedback on the final product could not be obtained by counsellors utilizing it. Thus, the protocol could not be considered an effective or suitable treatment plan for counsellors to practice it within the agency. Overall, the protocol would require further study to ensure successful outcomes.
**Multilevel Challenge Perspective**

Throughout this thesis, challenges occurred while developing the intervention protocol. A major challenge that presented itself was determining what treatment modalities would be most effective in treating pathological gambling. Although there are numerous treatment methods that would be effective, finding sufficient research that supports the use of the treatment with pathological gambling was difficult. Future testing of the chosen modalities would be required in order to consider the protocol an effective treatment plan.

Although some of the research in the review does not involve pathological gambling, the treatments and techniques can be adapted. Once properly tested with clients, the intervention protocol may require further adjustments to increase treatment effectiveness.

The intervention protocol was developed at an agency that is familiar with the modalities however, are not regularly practiced with clients. Before utilizing the different forms of treatment, knowledge and understanding of the procedure is important. The counsellor’s role after administering the Gambling-Related Cognition Scale (GRCS) is to ensure the right treatment technique is chosen for a specific cognitive distortion.

In regards to client engagement throughout the process, they must give approval of the type of treatment before developing the plan of action. Treatment will not be effective if clients are unwilling to participate in the counselling sessions and refuse to complete the assigned technique. Therefore, mutual agreement by both counsellor and client roles must be reached. This would increase client engagement during the course of treatment.

**Contribution to the Behavioural Psychology Field**

In contribution to the Behavioural Psychology field, this thesis reinforces the effectiveness of applying different techniques in order to increase positive behaviour change. Even though each technique focuses on a different cognitive distortion, the overall goal remains the same. The purpose of the techniques were to reduce pathological gambling by having clients become aware of their distortions, learn how to detect triggering signs, and develop skills to prevent future gambling. The intervention protocol is delivered as a resource manual to ensure clients receive sufficient information regarding pathological gambling, the GRCS to help assess gambling-related cognitive distortions, as well as techniques to address them. Furthermore, this thesis provided an extensive review of the GRCS and a variety of treatment techniques to add to the growing field of Behavioural Psychology.

**Recommendations for Future Research**

The intent of this thesis was to design a manual for clients seeking help with pathological gambling; therefore, there was an insufficient amount of time for the final product to be tested. To ensure the intervention protocol would be useful for the agency to utilize in their practice, an extensive literature review was important. It is recommended that the intervention protocol be properly evaluated by counsellors directly implementing it with clients. Based on the counsellors’ results, it is suggested that the changes be made to the protocol. This will increase the likelihood of counsellors utilizing the protocol for treatment in their counselling sessions. Although this thesis focused on pathological gambling, the treatment modalities and techniques are shown to be effective with other forms of addiction.
References


And Clinical Psychology, 74(3), 555-567. doi:10.1037/0022-006X.74.3.555
Appendix A: DSM-IV Diagnostic Criteria for Gambling Disorders

1. A preoccupation with gambling (e.g., preoccupation with reliving past gambling experiences, handicapping or thinking of ways to get money with which to gamble).

2. A need to gamble with increasing amounts of money in order to achieve the desired level of excitement.

3. Repeated, unsuccessful efforts to control, cut back or stop gambling.

4. Feels restless or irritable when attempting to cut down or stop gambling (withdrawal symptoms).

5. Uses gambling as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of hopelessness, guilt, anxiety and depression).

6. After losing money gambling, often returns another day to get even (“chasing” one’s losses).

7. Lies to family members, therapist or others to conceal the extent of one’s involvement with gambling.

8. Has committed illegal acts such as forgery, fraud, theft or embezzlement to finance gambling.

9. Has jeopardized or lost a significant relationship, job or educational or career opportunity because of gambling.

10. Relies on others to provide money to relieve a desperate financial situation caused by gambling.
Appendix B: Gambling-Related Cognition Scale

Please indicate (by writing) the extent to which you agree with each statement:

1 = strongly disagree; 2 = moderately agree; 3 = mildly disagree; 4 = neither agree nor disagree; 5 = mildly agree; 6 = moderately agree; 7 = strongly agree

1. Gambling makes me happier.
2. I can’t function without gambling.
3. Praying helps me win.
4. Losses when gambling are bound to be followed by a series of wins.
5. Relating my winnings to my skill and ability makes me continue gambling.
6. Gambling makes things seem better.
7. It’s difficult to stop gambling because I am so out of control.
8. A series of losses will provide me with a learning experience makes me continue gambling.
9. A series of losses will provide me with a learning experience that will help me win later.
10. Relating my losses to bad luck and bad circumstances makes me continue gambling.
11. Gambling makes the future brighter.
12. My desire to gamble is so overpowering.
13. I collect specific objects that help increase my changes of winning.
14. When I have a win once, I will definitely win again.
15. Relating my losses to probability makes me continue gambling.
17. I’m not strong enough to stop gambling.
18. I have specific rituals and behaviours that increase my changes of winning.
19. There are times that I feel lucky and thus gamble those times only.
20. Remembering how much money I won last time makes me continue gambling.
21. I will never be able to stop gambling.
22. I have some control over predicting my gambling wins.
23. If I keep changing my numbers, I have less chances of winning than if I keep same numbers every time.
Scoring

- To obtain the raw subscale scores add values of items for each subscale.

- To obtain total raw GRCS score, add the view raw subscale scores.

- To obtain mean subscale score divide each of the raw subscale scores by the number of items in each of the raw subscale scores by the number of items in each subscale.

- To obtain a total mean GRCS score add the five means subscale scores. The items that belong to each subscale are as follows:

  1. **Gambling Expectancies**: 1, 6, 11, 16
  2. **Illusion of Control**: 3, 8, 13, 18
  3. **Predictive Control**: 4, 9, 14, 19, 22, 23
  4. **Inability to Stop Gambling**: 2, 7, 12, 17, 21
  5. **Interpretive Bias**: 5, 10, 15, 20
Appendix C: Stages of Change Model

Stages of Change Model

- Precontemplation
- Contemplation
- Preparation
- Action
- Maintenance
- Relapse
Appendix D: Thought Change Record

<table>
<thead>
<tr>
<th>Situation / Trigger</th>
<th>Feelings: Emotions – (Rate 0 – 100%) Body sensations</th>
<th>Unhelpful Thoughts / Images</th>
<th>Facts that support the unhelpful thought</th>
<th>Facts that provide evidence against the unhelpful thought</th>
<th>Alternative, more realistic and balanced perspective</th>
<th>Outcome Re-rate emotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>What happened? Where? When? How?</td>
<td>What emotion did I feel at that time? What else? How intense was it?</td>
<td>What went through my mind? What disturbed me? What did those thoughts/images/memories mean to me, or say about me or the situation? What am I responding to? What “button” is this pressing for me? What would be the worst thing about that, or that could happen?</td>
<td>What are the facts? What facts do I have that the unhelpful thoughts are totally true? Is it possible that this is opinion, rather than fact? What have others said about this?</td>
<td>What facts do I have that the unhelpful thoughts are NOT totally true? What is another way of seeing it? What advice would I give someone else? Is my reaction in proportion to the actual event? Is this really as important as it seems?</td>
<td>STOPP! Take a breath… What would someone else say about this situation? What’s the bigger picture? Is there another way of seeing it? What advice would I give someone else? Is my reaction in proportion to the actual event? Is this really as important as it seems?</td>
<td>What am I feeling now? (0-100%) What could I do differently? What would be more effective? Do what works! Act wisely. What will be most helpful for me or the situation? What will the consequences be?</td>
</tr>
</tbody>
</table>

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Appendix E: ABC Chart

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activating / Triggering Event Situation</td>
<td>Beliefs</td>
<td>Consequences</td>
</tr>
<tr>
<td>(Trigger may also be a feeling)</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>• What was happening just before I started to feel this way?</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>• What was I doing? Who was I with? Where was I? When was it?</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>• Thoughts and/or Images</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>What was going through my mind at that time?</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>• Meanings &amp; interpretations</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>What did this say or mean about me? What was the worst thing that could happen?</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>• Emotions</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>Describe as in one word/s &amp; rate intensity 0-100%</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>• Physical sensations</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>What did I feel in my body?</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>• Behaviours: actions &amp; urges</td>
<td>思</td>
<td></td>
</tr>
<tr>
<td>What did I do? What did I feel like doing?</td>
<td>思</td>
<td></td>
</tr>
</tbody>
</table>

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Appendix F: ‘Wise Mind’

‘Wise Mind’ Chart

Reasonable Mind

Emotional Mind

Wise Mind
AN INTERVENTION PROTOCOL FOR PATHOLOGICAL GAMBLING USING THE GAMBLING-RELATED COGNITION SCALE

Developed by Brianna Bruyère

Bachelor of Applied Arts in Behavioural Psychology
St. Lawrence College
2015
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SECTION 1: INTRODUCTION
GAMBLING

- Gambling involves risking something of value to potentially gain something of greater value.
- Gambling behaviour varies with each individual; gambling can be an occasional or pleasurable activity or it can be detrimental or become an addiction.
- There are numerous gambling activities and they are classified as informal games, placing a bet on sporting events, or formal/legal games, playing in casinos or online.
- There are two different types of gambling behaviours: problem gambling and pathological or compulsive gambling.

BEHAVIOURAL ADDICTION

- Behavioural addiction is defined as being unable to resist an impulse, temptation, or drive to engage in an act that leads to a consequence.
- Repeated involvement in the behaviour inhibits your daily functioning in one or more aspects.
- The addictive behaviour provokes a pattern of relapse and you develop an uncontrollable need or urge to engage in the behaviour.

PROBLEM GAMBLING

- Problem Gambling is when gambling activities inflict harm or have consequences when you engage in the behaviour, as well as your family or community.
- Gambling behaviour must meet three of the 10 criteria of the Diagnostic Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria.

PATHOLOGICAL GAMBLING

- Pathological gambling refers to the inability to stop engaging in the maladaptive behaviour.
- Pathological gambling develops erroneous beliefs that make it difficult for you to separate luck from chance.
- Gambling activities elicit detrimental consequences that affect your quality of life.
- Cognitive distortions influence the development and maintenance of pathological gambling.
• Gambling behaviour must meet at least five of 10 criteria of the DSM-5 criteria.

COGNITIVE DISTORTIONS

• Cognitive distortions affect your thought process by erasing, generalizing, and changing their perception to give meaning to the behaviour.

• Distortions are general misconceptions towards gambling randomness; specifically, believing that you are controlling the gambling outcomes.
SECTION 2: IDENTIFICATION OF PATHOLOGICAL GAMBLING
DSM-5 DIAGNOSTIC CRITERIA for GAMBLING DISORDERS

1. A preoccupation with gambling (e.g., preoccupation with reliving past gambling experiences, handicapping or thinking of ways to get money with which to gamble).

2. A need to gamble with increasing amounts of money in order to achieve the desired level of excitement.

3. Repeated, unsuccessful efforts to control, cut back or stop gambling.

4. Feels restless or irritable when attempting to cut down or stop gambling (withdrawal symptoms).

5. Uses gambling as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of hopelessness, guilt, anxiety and depression).

6. After losing money gambling, often returns another day to get even (“chasing” one’s losses).

7. Lies to family members, therapist or others to conceal the extent of one’s involvement with gambling.

8. Has committed illegal acts such as forgery, fraud, theft or embezzlement to finance gambling.

9. Has jeopardized or lost a significant relationship, job or educational or career opportunity because of gambling.

10. Relies on others to provide money to relieve a desperate financial situation caused by gambling.
GAMBLING-RELATED COGNITION SCALE CRITERIA

• The Gambling-Related Cognition Scale (GRCS) is a self-report questionnaire that asks you to agree or disagree with the statement on a Likert scale ranging from one to seven.

• The GRCS identifies the major distortions associated with gambling behaviours.

• The questionnaire assesses gambling-related cognitions to determine the severity of pathological gambling.

• The questionnaire consists of 23-items with five subscales:

1. **Illusion of Control:** You believe using a lucky number or following a system influences the gambling outcomes.

2. **Predictive Control:** You believe to have acquired the skills to accurately predict gambling by previous wins or losses and salient cues.

3. **Interpretive Bias:** You reframe your gambling outcomes to encourage the gambling behaviour regardless of the consequences.

4. **Gambling-Related Expectancies:** You expect to have an effect that provides benefits and is developed through media personal experience, and cultural rituals.

5. **Inability to Stop Gambling:** You are aware of your gambling behaviour; however, you continue the behaviour in hope to accomplish a goal or activity.
GAMBLING-RELATED COGNITION SCALE

Please indicate (by writing) the extent to which you agree with each statement:

1 = strongly disagree; 2 = moderately agree; 3 = mildly disagree; 4 = neither agree nor disagree; 5 = mildly agree; 6 = moderately agree; 7 = strongly agree

1. Gambling makes me happier.
2. I can’t function without gambling.
3. Praying helps me win.
4. Losses when gambling are bound to be followed by a series of wins.
5. Relating my winnings to my skill and ability makes me continue gambling.
6. Gambling makes things seem better.
7. It’s difficult to stop gambling because I am so out of control.
8. A series of losses will provide me with a learning experience that will help me win later.
9. A series of losses will provide me with a learning experience makes me continue gambling.
10. Relating my losses to bad luck and bad circumstances makes me continue gambling.
11. Gambling makes the future brighter.
12. My desire to gamble is so overpowering.
13. I collect specific objects that help increase my chances of winning.
14. When I have a win once, I will definitely win again.
15. Relating my losses to probability makes me continue gambling.
17. I’m not strong enough to stop gambling.
18. I have specific rituals and behaviours that increase my chances of winning.
19. There are times that I feel lucky and thus gamble those times only.
20. Remembering how much money I won last time makes me continue gambling.
21. I will never be able to stop gambling.
22. I have some control over predicting my gambling wins.
23. If I keep changing my numbers, I have less chances of winning than if I keep same numbers every time.
SCORING

- To obtain the raw subscale scores add values of items for each subscale.

- To obtain total raw GRCS score, add the view raw subscale scores.

- To obtain mean subscale score divide each of the raw subscale scores by the number of items in each of the raw subscale scores by the number of items in each subscale.

- To obtain a total mean GRCS score add the five means subscale scores. The items that belong to each subscale are as follows:

  6. **Gambling Expectancies**: 1, 6, 11, 16

  7. **Illusion of Control**: 3, 8, 13, 18

  8. **Predictive Control**: 4, 9, 14, 19, 22, 23

  9. **Inability to Stop Gambling**: 2, 7, 12, 17, 21

  10. **Interpretive Bias**: 5, 10, 15, 20
SECTION 3: TREATMENT MODALITIES
**MOTIVATIONAL INTERVIEWING**

- Motivational Interviewing (MI) is a client-centered approach that allows you to explore, reflect, and resolve your ambivalence about change.

- MI uses a non-confrontational approach that focuses on eliciting reasons for you to change.

**COGNITIVE-BEHAVIOURAL THERAPY**

- Cognitive-Behavioural Therapy (CBT) is a structured procedure that gives you an opportunity to contemplate the accuracy and practicality of your thoughts.

- CBT allows you to explore maladaptive beliefs, examine the positive and negative evidence associated with the beliefs, and experiment belief systems to acquire validation.

**RATIONAL EMOTIVE BEHAVIOURAL THERAPY**

- Rational Emotive Behaviour Therapy (REBT) focuses on unhelpful beliefs and questions the actions or motive behind your behaviours.

- REBT challenges you to consider whether or not the belief is unhelpful.

- REBT focuses on the behaviours or beliefs that influence the antecedent or activating event opposed to the emotional or behavioural consequence; behavioural or emotional result from the antecedent.

**DIALECTICAL EMOTIVE BEHAVIOUR THERAPY**

- Dialectical Behaviour Therapy (DBT) focuses on awareness of problems, increasing coping skills, and impulsive behaviours.

- DBT concentrates on the antecedents and consequences of maladaptive behaviours.

- DBT’s goal is to recognize the relationship between antecedents and consequences and alter the relationship between them to reduce the occurrence and frequency of problem behaviours.
SECTION 4: TREATMENT TECHNIQUES
STAGES OF CHANGE MODEL

- The purpose of Stages of Change Model is to help you recognize different behavioural stages and identify what stage of change you are currently at.

- The model forms a cycle, therefore allowing you to utilize it anytime throughout treatment. When a stage is complete, you can proceed to the following stage however, if proven incomplete, relapse occurs and adjustments are required before restarting the process.

- The model consists of six stages:

1. **Precontemplation**: Unwilling to change or adapt a new behaviour.

2. **Contemplation**: Considering changing a behaviour.

3. **Preparation**: Preparation/planning to change a behaviour.

4. **Action**: Beginning to change a behaviour.

5. **Maintenance**: Regularly using the modified/changed behaviour.

6. **Relapse**: Revert back to old behaviour.
THOUGHT CHANGE RECORD

- The purpose of Thought Change Record is to identify unhelpful core beliefs and associate negative emotions presented in the automatic thoughts. In addition, identify the disconfirmatory evidence regarding the beliefs.

- After identifying the cause of the unethical behaviour, changing the antecedents to produce different consequences is required before changing the behaviour.

- The record consists of seven columns:

1. **Situation/Trigger**: Explain the situation.

2. **Feelings/Emotions**: Identifies an emotion or feeling and rate the severity.

3. **Unhelpful Thoughts/Images**: Reveals the purpose of the thought.

4. **Facts That Support The Unhelpful Thought**: Issues the accuracy in which the thoughts are supported.

5. **Facts That Provide Evidence Against The Unhelpful Thought**: Addresses unsupportive thoughts.

6. **Alternative, More Realistic and Balanced Perspective**: Provides alternative thoughts.

7. **Outcome**: Establishes the feelings or emotions once the previous steps are complete, and rate the severity.
**Thought Record Sheet – 7 column**

<table>
<thead>
<tr>
<th>Situation / Trigger</th>
<th>Feelings / Emotions – (Rate 0 – 100%) Body sensations</th>
<th>Unhelpful Thoughts / Images</th>
<th>Facts that support the unhelpful thought</th>
<th>Facts that provide evidence against the unhelpful thought</th>
<th>Alternative, more realistic and balanced perspective</th>
<th>Outcome Re-rate emotion</th>
</tr>
</thead>
</table>

What emotion did I feel at that time? What else? How intense was it?  
What did I notice in my body? Where did I feel it?  
What went through my mind? What disturbed me? What did those thoughts/images/memories mean to me, or say about me or the situation? What am I responding to? What 'button' is this pressing for me? What would be the worst thing about that, or that could happen?  
What are the facts? What facts do I have that the unhelpful thoughts are totally true?  
What facts do I have that the unhelpful thoughts are NOT totally true? Is it possible that this is opinion, rather than fact? What have others said about this?  
What am I feeling now? (0-100%)  
What could I do differently? What would be more effective?  
Do what works! Act wisely. What will be most helpful for me or the situation? What will the consequences be?  

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The purpose of the chart is to identify and recognize antecedents, behaviours, and consequences to determine an ethical alternative.

Environmental cues or triggers are often ignored in determining the cause of a behaviour.

An ABC Chart specifically considers the environment as a contributing factor in behaviour.

After identifying the cause of the unethical behaviour, changing the antecedents to produce different consequences is required before changing the behaviour.

The chart consists of three sections:

1. **Antecedent/Triggering Event or Situation**: A person, thing, event, or place that encourages the behaviour to occur.

2. **Behaviour (Belief)**: Thoughts or images that arose and the meaning behind the action.

3. **Consequence**: Emotions and events associated with an event that comprehends the behaviour (belief).
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
</table>
| **Activating / Triggering Event Situation**  
(Trigger may also be a feeling) | **Beliefs** | **Consequences** |
| • What was happening just before I started to feel this way?  
• What was I doing? Who was I with? Where was I? When was it? | • Thoughts and/or Images  
What was going through my mind at that time? | • Emotions  
Describe as in one word/s & rate intensity 0-100% |
| | • Meanings & interpretations  
What did this say or mean about me?  
What was the worst thing that could happen? | • Physical sensations  
What did I feel in my body? |
| | | • Behaviours: actions & urges  
What did I do?  
What did I feel like doing? |
‘WISE MIND’

- The purpose of ‘Wise Mind’ is to develop a skill that allows you to acknowledge and understand the entire situation.

- Mindfulness describes having complete awareness of a moment and putting divergent feelings and thoughts aside.

- ‘Wise Mind’ consists of three parts:

1. **Emotion Mind:** Behaviour and thinking are based on their emotions.

2. **Reasonable Mind:** Address things through intellectual and logical thinking and focuses on observable or measurable facts.

3. **Wise Mind:** Combine both emotion mind and reasonable mind to develop a balanced and wise response by adding intuitive knowledge and logic to emotional distress.
‘Wise Mind’ Chart
REFERENCES


