Case Study: The Use of Brief Motivational Interviewing to Promote Change
in an Adolescent Female Offender in a Closed Custody Facility

by

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DEDICATION

I would like to dedicate this applied thesis to my father, Joe Sherwood, for supporting me 110% in everything I want to accomplish. Without his love and support I would not have been able to make it through the last four years. Thank you Dad, for everything!
ABSTRACT

The intent of this study was to decrease re-offending by increasing the participant’s motivation to change her high-risk behaviours. Brief motivational interviewing was used to generate internal motivators to change behaviour in the participant. This study examined the existing literature and critically reviewed the research regarding the potential success of using motivational interviewing with adolescent female offenders. The participant was a 16 year old female offender who served a 56-day sentence at the closed custody facility. She participated in a brief motivational interviewing treatment program while she was in the facility. The study found that brief motivational interviewing showed some success when used with high-risk adolescent female offenders. Further research needs to be completed regarding brief motivational interviewing with high-risk female adolescent offenders.
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**Chapter I: Introduction**

**Background**
Motivational interviewing has been shown to be effective in motivating change in individuals who are reluctant to change. To change behaviour it is necessary to modify the underlying attitudes and feelings associated with that behaviour (Bundy, 2004). Motivational interviewing is comprised of several counselling techniques to help a participant develop intrinsic motivation to change an unhealthy behaviour or lifestyle. It works in three ways: by resolving ambivalence that individuals may have about their problem behaviour, by being persuasive rather than coercive in developing discrepancies in the participant’s behaviour, and by supporting an individual through his or her change (Prochaska, Norcross, & DiClemente, 1991). Motivational interviewing facilitates a participant’s movement through the stages of change. These stages are pre-contemplation, contemplation, determination, action, maintenance, and relapse. Although motivational interviewing was not specifically developed for youth female offenders, it is established on the principles of helping individuals recognize that there is a need for change and their current behaviour is unhealthy. The latter has the potential to be successful with adolescent female offenders in closed custody (Miller and Rollnick, 1991).

**Rationale**
Generally youth experience a great deal of ambivalence not only towards their risky behaviours, but also towards general issues, such as identity and roles. This ambivalence is a healthy part of adolescence. Youth also have a tendency to challenge authority figures and often have difficulty taking advice about what they should do (Westra, Miller & Rollnick, 2008). For these reasons, treatment approaches, such as motivational interviewing, that recognize ambivalence, acknowledge choice, are non-confrontational and work collaboratively with youth have excellent potential of being successful.

The majority of female adolescents in custody at the closed custody detention centre that was studied were there as a result of their high-risk behaviours. Youth who present many high-risk behaviours as assessed by the revised Youth Level of Service/Case Management Inventory (revised YLS/CMI) are considered at high-risk to re-offend. This assessment tool measures a number of different areas in a youth’s life to determine if they are considered at high-risk to re-offend. Some of these variables include the youth’s developmental history, peer group, personality, behaviour, past education and employment, cognitions, and beliefs and attitudes surrounding antisocial activities (Hoge & Andrews, 2003). Youth who are at high-risk to re-offend would benefit from counselling to reduce the likelihood of future incarceration.

**Hypothesis**
High-risk behaviours as defined by Hoge and Andrews (2003) are directly linked to youth offending. If youth recognize that their current high-risk behaviours are dangerous and are willing to try to change these behaviours, it can be predicted that the probability of re-offending will decrease. It is hypothesized that individual motivational interviewing will help the participant move through the stages of change increasing their motivation to change their high-risk behaviour and thus, decrease re-offending.
Overview

This study reviews the effectiveness of using brief motivational interviewing with adolescent female offender to reduce recidivism. The following section reviews and summarizes a variety of past research with female offenders, adolescent offenders and motivational interviewing. The method reviews how the participant was selected, background information on the participant, an outline of the study and the informed consent procedures. The baseline results indicated that the participant was considering changing her negative behaviour but was not ready to actively work on a change. The final assessment indicated that the participant had made progress during the intervention and was ready to work on her negative behaviour.
Chapter II: Literature Review

This review examines the existing literature and critically reviews the research regarding motivational interviewing with adolescent female offenders. In addition, information on motivation, motivational interviewing techniques, measuring change, treatment of youth offenders, the importance of parental involvement, criminogenic risks, needs, and responsivity, the specific needs of female offenders, and substance use issues were reviewed in detail based on recent literature.

Motivation

Motivation is a frame of mind in which an individual is ready and eager to change (Bundy, 2004). There are two central types of motivation; intrinsic and extrinsic motivation. Intrinsic motivation is an internal desire to perform an activity, behaviour, or task through internal thoughts and self-reward, and not through external motivators such as tangibles (Aguilar-Cauz & Safra, 2005). Extrinsic motivation occurs when individuals are motivated to complete an activity, behaviour, or task through factors external to the individual that are unrelated to the task they are performing, such as tangibles (Aguilar-Cauz & Safra, 2005). Intrinsic motivation is essential in the change process. Once a person is self-motivated to change, a change is more likely to occur (Miller & Rollnick, 1991). Change is the active development of modifying one’s thoughts or behaviours. Change involves an individual making the decision to do something differently and then maintaining the new state (Capuzzi & Stauffer, 2008).

Motivation is a central concept in a participant’s willingness to engage in treatment. Among drug and alcohol abusers, it has been shown that participants who start treatment before they are ready to change their behaviour have a higher attrition rate (Saarnio & Knuuttila, 2007). It has also been shown that, in general, women are more likely to have a higher readiness to change than their male counterparts. This readiness is attributed to the fact that women often wait until a traumatic event related to their problem behaviour occurs in their lives before seeking treatment. The authors also attributed readiness to change being higher in women for cultural reasons, suggesting that women have a higher sense of responsibility (Saarnio & Knuuttila, 2007). It is suggested that readiness to change is assessed on an individual level with individual treatment plans, as participants will often vary greatly with respect to their readiness to change (Saarnio & Knuuttila, 2007). Overall, it is important that a participant is motivated for change before treatment begins so he or she can achieve the maximum gain from treatment. If a participant is not motivated to change his or her behaviour, steps should be taken to establish motivation before treatment begins (Stein, et al. 2006a).

Past research on treating offenders, in general, took the stance that “nothing works” with offenders. In recent years researchers have been studying more treatments that have had some success in treating offenders (Bernfeld, Farrington, & Leschied, 2001). Treating offenders is difficult because treatment is often mandated and the offender may not be ready for change, rather they co-operate with treatment to influence their parole (Miller & Rollnick, 2002). If offenders’ motivation to change is intrinsic rather than extrinsic, the effects of treatment have a higher likelihood of decreasing recidivism.

Motivational Interviewing

Motivational interviewing is a participant-centered, relationship-centered process in which counsellors use a variety of techniques and interpersonal skills to explore and resolve
ambivalence and encourage internal motivation to change (Capuzzi & Stauffer, 2008; Miller & Rollnick, 1991). Motivational interviewing follows the Stages of Change Model first developed by Miller in the 1980s. This model is transtheoretical, which means it can be used as a treatment by itself or in conjunction with other treatments (Capuzzi & Stauffer, 2008). This model allows for a very flexible type of counselling that can be used in all genres of therapy despite different theoretical backgrounds.

There are five main techniques that are used in motivational interviewing. The first is asking open-ended questions. This approach helps bring focus to areas that the participant views as important. The second is listening reflectively. This helps the participant know that the counsellor has listened and understood what has been said. The third technique is to affirm. This strategy involves supporting the participant’s pro-social ideas through positive praise. The fourth is summarizing, which involves repeating back to the participant an integration of their positive ideas and key points. The last technique is to elicit change talk. This strategy involves reflecting the participant’s statements in the direction of desire, need, ability, reasons, commitment, or readiness to change (Westra, Miller, & Rollnick, 2008).

Often when trying to treat a behaviour that a participant has not yet decided to change, counsellors experience participant resistance. Resistance to change often occurs for one of two reasons: the participant may lack the self-confidence required to make a significant change, or the participant is not aware that a change is needed (Capuzzi & Stauffer, 2008). Enhancing a participant’s self-efficacy builds confidence, which is important to help reduce resistance.

Motivational interviewing has many advantages. It encourages participants to explore their individual reasons for changing their behaviour and promotes intrinsically motivated change. Furthermore, motivational interviewing has been empirically validated in a number of studies, specifically with addictions and dependence (Capuzzi & Stauffer, 2008). Motivational interviewing also has disadvantages, in that it may not be optimally effective with participants who are low functioning or have intellectual disabilities. One explanation is that it is more challenging for this population to generate ideas as to why their behaviour may be damaging to their health and others around them. Additionally, this treatment is only as effective as the competency of the counsellor providing it (Capuzzi & Stauffer, 2008).

**Stages of change.** The Stages of Change Model works by identifying the stage of readiness that the participant is currently in. After the stage identification, specific treatment techniques are used to help the participant move through the stages to overcome the problem behaviour (Bundy, 2004). This model recognizes that people often do not succeed the first time they attempt to overcome a problem. For this reason the stages of change model is considered a cycle of change in which people can move forward and backward. Some researchers believe that people can go through this cycle up to seven times before finally and permanently changing (Bundy, 2004).

These change stages are pre-contemplation, contemplation, determination, action, maintenance and relapse. Pre-contemplation is the first stage at which participants have not recognized that they have a problem behaviour that is in need of change. The second stage is contemplation. In this stage participants are able to recognize that they have a problem but they are still not ready or sure they want to change it. The third stage is preparation or determination, which occurs when the participant is putting things in order to make a change. The fourth stage is action. In the action stage the participant is actively working on changing their behaviour. The last stage, but not always final, is maintenance, which involves the participant using strategies to continue the behaviour change. Often, if it is the participants’ first time trying to change their
behaviour, they will relapse. Relapse is expected and is discussed openly with the participant to emphasize that a relapse is not a failure (Miller & Rollnick, 1991).

**Principles of motivational interviewing.** Many studies have used the stages of change model as a successful treatment for adolescents with addictions problems, and with adolescent male offenders. A few of these studies have been reviewed throughout this study. The stages of change model uses many specific techniques. The five central techniques are called the “Principles of Motivational Interviewing” (Miller & Rollnick, 1991).

The first principle is to express empathy. The counsellor attempts to view the world from the participant’s point of view, thinking about things as the participant thinks about them, feeling things as the participant feels them, and sharing in the participant's experiences. Expression of empathy is a critical aspect of the motivational interviewing approach. The second principle is to develop discrepancy. This step consists of the counsellor helping the participants examine the discrepancies between current behaviour and future goals. The third principle is to avoid arguments. Using a collaborative approach to counselling will decrease tension and reduce arguments. If arguments do occur the participant will often become defensive and make no progress. The fourth principle is to roll with resistance. It is important in motivational interviewing for counsellors not to fight the participant’s resistance, but rather, use it to further explore the participant’s views and discover reasons for change. The last principle is to support self-efficacy. The participant's belief that change is possible is an important motivator in successful change. Helping the participant to develop a belief that he or she can make a change is essential to the success of this approach (Miller & Rollnick, 1991).

**Brief motivational interviewing.** Brief interventions, range from one to five sessions, demonstrate flexibility, and have been shown to be effective in a variety of settings (O’Leary, Tevyaw, & Monti, 2004). This flexibility is an important aspect when treating adolescent offenders, as custody sentences are often relatively brief. Motivational interviewing interventions with adolescents are most success when they are completed on a short-term basis. As few as two motivational interviewing sessions may be appropriate for this population (Miller & Rollnick, 2002). O’Leary, Tevyaw, and Monti (2004) completed a study reviewing the effectiveness of brief interventions with adolescents. Their findings suggested that brief motivational interviewing had the greatest effect size for the treatment of alcohol abuse and dependence when compared to other brief treatments for this population. They also found this treatment was more cost-efficient and equally effective when compared to other long-term treatments. The study reviewed many different types of brief intervention thoroughly examining the effectiveness of each treatment as compared to each other and to long term treatment.

Dennis, in 2000, conducted a study on Motivational Enhancement Therapy showed that brief motivational interviewing resulted in similar outcomes as compared to lengthy or more intensive therapies over a six-month follow-up (as cited in Miller & Rollnick, 1991). The same study found that the longer treatment, in which additional sessions were added, did not appear to increase treatment effectiveness in terms of substance use or substance dependence problems. Aubrey, in 1998, completed a study that added motivational interviewing to existing treatment services. In this study showed that adding a 30 to 60 minute session of motivational interviewing prior to a residential treatment program increased attendance in the program (as cited in Miller & Rollnick, 1991).

McCambridge and Strang (2004) explored how one session of motivational interviewing achieved success in starting the change cycle with adolescents who abused drugs and alcohol. They found that drug (marijuana) use among the treatment group decreased slightly (from 15.7
times per week to 5.4 times per week) compared to the control group, which showed an increase (13.3 to 16.9). The authors found that the alcohol consumption in the treatment group decreased (12.7 to a mean of 7.7 alcohol units), compared to the control group which demonstrated an increased (12.7 to 14.2) alcohol consumption. A study by Peterson, Baer, Wells, Ginzel, and Garrett (2006) also supported the use of brief sessions. They found that substance users who were the least likely to benefit from other treatments because of the severity of their dependence, showed the most benefit from brief motivational interviewing. These studies are significant as they demonstrate that even one session of motivational interviewing can have a positive impact on decreasing high-risk behaviours in adolescents.

Peterson et al. (2006) studied the short term effects of brief motivational interviewing with homeless adolescents. Homeless adolescents have a number of similarities to incarcerated adolescents. Both groups have an increased risk of substance use problems, and a past history of sexual and physical abuse. As well, they are more likely to be living a variety of unstable accommodations. In this study brief motivational interviewing helped to increase the participants’ perception of the risk of their current behaviours in a short period of time (Peterson et al. 2006). The results of the study showed that youth who received the treatment were more likely to have reduced the rates of their drug use at the one-month follow-up than the control group. Additionally, the intervention showed decreased drug use in youth who were resistant to counselling, or who disliked authority figures. The authors attributed this to the non-confrontational, rapport building approach of motivational interviewing.

A related study to the latter, by Baer, Garrett, Beadnell, Wells, and Peterson (2007), found similar effects as a result of brief motivational interviewing. They also found that giving the participants many different topics to discuss over the short time may have been confusing and counterproductive to treatment as youth were unable to make connections from session to session. They recommended choosing one topic of specific interest to youth as it may increase treatment engagement. Furthermore, their results were consistent with other research indicating that group therapy is not as effective in adolescence, since youth are negatively influenced by their peers. Stein, Colby, Barnett, Monti, Golembeske, & Lebeau-Craven (2006) found similar effects in their studies of group therapy with adolescents. They found the group therapy had little success and it may have even increase recidivism because of negatively influencing peers.

Measuring change. A study by McMurran, Theodosi, and Sellen (2006) examined the effectiveness of the University of Rhode Island Change Assessment in assessing offenders’ motivation to change (URICA; Prochaska, Norcroass, & DiClemente, 1991). The authors found limited results and stated that “whether this scale predicts behaviour change remains to be tested” (McMurran, Theodosi, & Sellen, p. 128, 2006).

The URICA is a thirty-two item scale that measures an individual’s readiness to change problem behaviour. The scale is rated by the individual on a five point Likert scale and the responses are scored in four categories. The categories are similar to the Stages of Change Model and are described as pre-contemplation, contemplation, action, and maintenance. A study done by Saarnio, and Knuuttila (2007) found that the URICA was the most widely used assessment tool for assessing change. For this reason the URICA was the assessment tool chosen to measure change in this applied thesis.

Treatment of Young Offenders

Criminogenic risks, needs and responsivity. Criminogenic risk factors, are associated with criminal conduct. When these factors are removed or changed, the probability of the youth
engaging in antisocial behaviours is often reduced; therefore, recidivism is reduced (Hoge, 2001). Criminogenic needs are those risk factors that are dynamic and can be changed through treatment (Andrews & Bonta, 2006). Criminogenic need factors as examined by Andrews and Bonta (2006) include antisocial personality and negative emotionality; antisocial attitudes and cognitions; social supports for crime; substance use; inappropriate parental monitoring and discipline; problems with school and work context; poor self-control; and lack of pro-social activities. A common goal for all youth treatment programs is assessment that classifies the youth into a specific risk, need, and responsivity category so that treatment can be tailored individually.

There are three main principles that are followed when treating youth offenders; these are called the “principles of classification” (Andrews & Bonta, 2006; Hoge, 2001). The first principle is risk, which involves assessing the youth’s risk of re-offending and then matching the services. Higher risk youth need more intensive treatment and low-risk youth receive minimal treatment or no treatment at all; as many studies show treating low-risk offenders actually increases their risk of re-offending (Hoge, 2001). The second principle is need. This principle involves matching treatment to the specific needs of each individual offender, to remove or decrease the youth’s dynamic factors related to offending (Hoge, 2001). The third principle is responsivity. This process involves matching treatment to the specific learning styles and other circumstances of the offender that will likely affect the offender’s response to treatment (Hoge, 2001).

An excellent classification assessment tool to assess a youth’s level of risk is the Youth Level of Services/Case Management Inventory (YLS/CMI). This tool is used at many youth detention centers across Ontario to identify the youths’ level of risk and facilitate the formulation of an individual treatment plan based on the youths’ risk, need, and responsivity (Hoge, 2001). This particular inventory is used at the closed custody facility that was studies as part of the intake assessment.

**Strategies used in treatment.** Miller and Rollnick (1991) defined five specific strategies that should be considered when working with youth. The first is that interventions with youth should be planned on a short-term basis, as research shows that short interventions work more effectively with youth. It is difficult to promote self-efficacy in youth through mastery of tasks in their everyday lives as their desires about decisions that affect them are not always taken into account by their caregivers. That is, parents often make decisions for their adolescents, without taking their desires into consideration. Because of this, adolescents may not have a chance to make independent decisions and accomplish success on their own. Thus, the second strategy recommended was to provide opportunities to promote self-efficacy during the counselling process (Miller & Rollnick, 1991). Third, youth in the justice system often have negative views of authority figures. Creating opportunities to develop self-efficacy and enhance the youths’ attitude in their abilities may decrease some of the resistance resulting from negative reactions to authority figures. Authority figures allowing youth to make their own decisions rather than having decisions made for them builds rapport with the youth, hence reducing resistance. Fourth, substance use problems with youth often revolve around their association with antisocial peers. Therefore, treatment should focus on creating motivation to change “social functioning and interpersonal relationships” (Miller & Rollnick, 1991). High-risk behaviour, such as substance use and drinking, are often reinforced within the peer group of the youth. The final strategy suggests counsellors focus on the individual circumstances of the youth and emphasize the
importance for the youth to change his or her behaviour despite the norms of their peer group (Miller & Rollnick, 1991).

It is also important to recognize that youth are different from adults in many ways. Youth have different thinking patterns and often engage in more risky behaviour. Although taking risks is generally seen as a normal part of development during adolescence, it is often unsafe (Miller & Rollnick, 2002). A statistical review conducted by Miller and Rollnick (2002) showed that “the leading cause of death among youth and young adults age 10-24 is motor vehicle crashes (31%), followed by homicide (18%), suicide (12%), and other injury (11%). Alcohol and other drug use have been implicated in all of these causes of death.” For these reasons, it is important to decrease or eliminate substance use in adolescents.

**Parent involvement.** While a negative parent-child relationship can be a risk factor for criminal behaviour, positive, supportive parenting can be a protective factor. The family can play an important role in treating young offenders (Raymond, 2007). Working with families to decrease the youth’s risk factors associated with re-offending can facilitate better generalization of treatment from the institution to the community (Slavert, et al. 2005). A study of the effectiveness of parent involvement in the youth treatment process conducted by Slavert, et al. (2005) found similar findings to previous research. These findings included the importance of setting up the home environment for success before the youth returns home, and resolving tension at home to reduce the confrontation and the potential of the youth running away. Additionally, raising motivation with parents and youth to address difficulties at home is important in reducing recidivism. The majority of female offences are related to truancy, supervision, or discipline problems, and running away from home (Chesney-Lind & Pasko, 2004). As these offences are directly related to the family, it is important to work with the youth’s family during treatment, providing that the youth consents to parental involvement.

**Motivational Interviewing with Female Offenders**

To date there has been relatively little research completed with adolescent female offenders even though there are an increasing number of girls arrested each year. There is little empirically based guidance for counsellors working with this population (Chesney-Lind & Pasko, 2004). Many treatment programs apply techniques that have been successful with adolescent males and adult women offenders to adolescent female offenders. Applying these treatments could be controversial, as there are specific needs that should be considered when working with this population (Stein, et al., 2006).

Past research has demonstrated that “scared straight” or “boot camp” programs are ineffective and can increase recidivism (Westra, et al., 2008). Treatment has been empirically shown as best practice when the goal is to reduce recidivism. Specifically, cognitive behavioural treatment (CBT) approaches have been found as the most effective in the correctional setting. Furthermore, there is progressive research on the motivational interviewing aspect of CBT. These approaches have shown a significantly larger effect size than other non-behavioural approaches to offender treatment (Westra, et al., 2008).
**Specific needs.** The limited research on adolescent females shows that confrontational treatment approaches often have limited success and more collaborative approaches have had greater success with this population (Capuzzi & Stauffer, 2008). Emphasizing self-efficacy is essential in the treatment of women, as many, especially adolescent females, have very low self-esteem. This low self-esteem often leads to their substance use problems (Capuzzi & Stauffer, 2008).

As well, females may have greater ambivalence about their problems as research shows that they are reluctant to seek treatment (Capuzzi & Stauffer, 2008). Female addictions counsellors have been found to be more effective than male counsellors in treating female participants; as they likely provide a positive role model for the participant (Capuzzi & Stauffer, 2008). Individual collaborative counselling appears to be the most effective treatment with female adolescents.

**Substance use issues.** Substance use and criminal behaviour are highly correlated in both adolescent and adult offenders (Hollin, 2001). Criminal risk assessments consider substance use when assessing an offender’s risk to re-offend. It is important to provide treatment for substance use in early adolescence to reduce recidivism in adulthood (Hollin, 2001). McKeganey, Neale, and Robertson (2005) examined the rates of physical and sexual abuse among adolescent drug users and found an increased risk of both among women. This research revealed that two-thirds of drug users who received drug treatment reported experiencing physically abuse, while one-third reported sexual abuse. Helping to motivate individuals to change their high-risk lifestyle will put them at a lower risk of future physical and sexual abuse. As substance use is a higher predictive factor for re-offending among females than males, it should always be considered during the development of a treatment plan (McKeganey, Neale, & Robertson, 2005). Substance use should also be considered as a factor that could reduce adolescent girls’ future risk of physical or sexual abuse.

**Summary**

Motivational interviewing is a transtheoretical model that can be adapted easily to a variety of settings and populations. Because it can be used in a relatively short period of time, it can be implemented during short custody sentences. As well, this approach is well suited for youth who show resistance towards authority figures and changing their behaviour. This treatment approach is empirically based as its effectiveness has been demonstrated with different populations. Although it has not specifically been empirically tested with youth female offenders, it has been effective with similar populations. Incorporating the specific needs of individual youth female offenders with motivational interviewing has the potential to improve treatment outcomes for this population. For these reasons, using an intervention that recognizes ambivalence, acknowledges choice, is non-confrontational, and works collaboratively with youth has an excellent potential of success.
Chapter III: Methodology

Participant Selection Criteria
All of the female offenders at the closed custody facility were given the opportunity to receive counselling. However, data was only collected on one participant. The participant was chosen based on her willingness to partake in the treatment program. She was the only participant who completed the initial pre-treatment assessment, at least three sessions of motivational interviewing, the post-treatment assessment and signed informed consent. As well, the participant was included because she was considered a high-risk to re-offend as assessed by the revised YLS/CMI. Of the three participants initially included, only one participant fulfilled all the requirements. While in custody, all of the young women at the facility were encouraged to utilize the counselling that was provided. A counsellor was on site Monday through Friday, but attendance at counselling was not mandatory unless it was designated by the court.

Background Information
The participant was 16 years of age and was serving a 56-day sentence at the facility. She was charged with breaching probation for running away from her group home and being unlawfully at large. Her previous convictions included assault on staff and breaches. She presented with a low level of intellectual functioning, but had no formal diagnosis. As a child she was removed from the home by the Children’s Aid Society (CAS). She generally resided with her grandmother except when otherwise mandated by the courts. Her mother and father had substance use problems. She reported that her father often made false promises which contributed to her lack of confidence in adults. Because of her truancy issues she obtained only a grade 9 education; however, she was able to do well at the school in the facility and received four credits. She reported being interested in basketball and dance; yet, she has had limited participation in any positive leisure.

She had difficulty getting along with female peers and most of her friends and acquaintances were drug and/or alcohol users. She had problems with alcohol and used a variety of hard drugs. She reported being easily influenced by peers and had difficulty with people of authority. She appeared to become verbally and physically aggressive easily. Additionally, she participated in risky sexual behaviour, such as prostitution to support her addiction.

This participant had a very negative attitude when she first arrived at the facility. She blamed others for her custody and justified her actions. She came to acknowledge her part in the circumstances of her crimes and took actions to prevent the same situation from occurring again. She showed a resilient personality, she was humorous, and she had the potential to make positive changes in her life. She had re-established ties with her grandmother and arranged for substance abuse counselling at a youth centre near her home.

Design
The present study was completed using a pre- and post-assessment design. The design was used to evaluate the effectiveness of using motivational interviewing to increase the participant’s motivation to change her high-risk behaviours.

Setting
The facility where the research was conducted was an all female secure custody and detention centre. A counsellor, medical faculty, cook, and teacher were available Monday
through Friday and residential staff were present at all times with the youth. There were twelve beds available at this facility and the facility was set up on a behaviour point system. The facility provided a variety of residential and rehabilitation programs. Counselling took place in the privacy of the Director’s office. The office was located in a quiet section of the building and counselling sessions were uninterrupted. There was a choice of seating, between a recliner and a regular chair. The chairs were set up in a triangle to avoid making the participant feel centered out and uncomfortable.

**Informed Consent**

The responsibility of reviewing consent with the participant was the duty of the Director. However, consent was obtained by the student to record and present the data collected during treatment. The participant was informed at the beginning of the first session that she had the right to withdraw from the treatment at any point during therapy but she was encouraged to discuss and work through any feelings of discomfort. The Director reviewed all the rights and the limits of confidentiality with the participant. The participant was not directly counselled by the student. Consent to complete this research study was obtained from the St. Lawrence College Research Ethics Board on October 29, 2008.

For the participant’s protection, all the data that were collected were stored on the student’s computer using a participant number. The student’s computer was locked with a fingerprint reader to which only the student had access. All names, dates, and identifying information were changed to protect the participant’s confidentiality. All original data sheets were kept in a locked filing cabinet located in the office of the Director of Residential Services, at the facility.

**Measures**

A revised version of the *Youth Level of Service/Case Management Inventory* (YLS/CMI) developed by Hoge, Andrews, and Leschied (2003) was used to identify the need areas of the participant. This assessment tool evaluated factors associated with risk, need, and responsivity. It is used to predict whether a youth offender is at a low, medium, high, or very high risk to re-offend. It is also used to target specific areas that should be the focus of an offender’s treatment. This assessment tool is based on three basic principles: risk, need, and responsivity (Hoge & Andrews, 2003). The original scale included a 42 item scale which is scored using information collected from many sources including: participant’s police records, school records, past assessments, a participant interview, and interviews with the parent or guardian of the participant. The revised version of the scale includes 41 items and some of the items have been re-worked to gather more information regarding specific need areas.

*The University of Rhode Island Change Assessment* (URICA; Prochaska, Norcroass, & DiClemente, 1991) (Appendix A) was used to assess whether there was a change in the participant’s motivation. The URICA was also used to help demonstrate treatment effectiveness by exhibiting the participant’s progression from one stage to another. The assessment demonstrated effectiveness if the participant’s pre-contemplation score decreased and the participant’s contemplation, action, and maintenance scores increased. The lowest score the participant could receive in any of the stages was eight, which would suggest that the participant had completely moved past that stage. The highest possible score the participant could receive in any stage was forty, which suggested the current stage of change for the participant.
Additionally, the initial intake assessment also included a brief summary of the participant, such as, age, current charges, the number of admissions, and a brief psychosocial history of the high-risk behaviours the participant displayed.

**Target Behaviour**

The identified target behaviour was to increase the participant’s level of motivation to change her behaviour. Motivation to change consisted of six stages of change. However, only the URICA only measures four stages of change. For this reason, only pre-contemplation, contemplation, action and maintenance were examined in this study.

**Procedures**

The brief motivational interviewing intervention was chosen based on an extensive literature review of effective programming for young female offenders. The intervention was based on the work of Miller and Rollnick (1991; 2002). A variety of motivational interviewing techniques, principles and strategies were utilized to invoke intrinsic motivation in the participant. Appendix B provides a broad overview of each stage of change, the challenges that may occur within each stage during treatment and strategies that could be used to address each challenge. As the participant was contemplating changing her behaviour the main strategies used included discussing reasons for changing behaviour and starting to challenge her thinking errors. Further techniques that were used with the participant are outlined in the second row of Appendix B. All of the counselling sessions were facilitated by the Director of Residential Services at the facility with the student present in a private office. The participant was able to complete six sessions of counselling. The URICA was administered by the student before treatment, when the participant first arrived at the facility. It was administered a second time after treatment, prior to the participants release from custody. The intervention was implemented by the Director of Residential Services M. A., for the facility. A visual analysis of the data was completed to evaluate the effectiveness of treatment.

**Note:** The Director and the student observed that the URICA may have overestimated the participant’s stage of change. This was significant to treatment as the Director used strategies to help the participant fully move from the pre-contemplation stage to the contemplation stage. Once the Director confirmed that the participant was in the contemplation stage her treatment strategies evolved to the next stage.
Chapter IV: Results

Pre-treatment - Baseline Assessment Results

The results of the revised version of the YLS/CMI identified the participant’s need areas as substance use, peer associations, depression, anxiety, poor coping skills, suicide, self-harm, and family difficulties. These areas were the focus of treatment for this participant during the intervention.

The results of the URICA revealed that the participant scored highest in the contemplation stage with a score of 29. She scored second highest in the pre-contemplation stage with a score of 24. The action and maintenance stage were similar with scores of 21 and 22, respectively. These scores indicated that the participant was considering that she may have some problem behaviours she wanted to change. However, indirect observation made by the Director and the student place the participant at the pre-contemplation stage; this indicated that she still did not fully recognize that she had problems she was willing to work on.

Post-treatment - Intervention Results

The URICA was administered at the end of treatment to determine whether the participant’s willingness to change had improved. As this assessment does not yet have established norms, there was difficulty determining if the gains were statistically significant.

The results of the URICA showed that the participant made changes in a positive direction. The participant displayed an increase in the contemplation, action, and maintenance stages. Her scores indicated a decrease in the pre-contemplation stage, as well. Specifically the scores indicated that the most improvement was in the action stage indicating that the participant was ready to actively work on her problem behaviours. These assessment results are in Table 1 and Figure 1.

Table 1: Pre- and Post-URICA Results of the URICA

<table>
<thead>
<tr>
<th></th>
<th>Pre-treatment</th>
<th>Post-treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Contemplation</td>
<td>24</td>
<td>18</td>
</tr>
<tr>
<td>Contemplation</td>
<td>29</td>
<td>35</td>
</tr>
<tr>
<td>Action</td>
<td>21</td>
<td>37</td>
</tr>
<tr>
<td>Maintenance</td>
<td>22</td>
<td>31</td>
</tr>
</tbody>
</table>
Figure 1. Pre- and Post-URICA Results.

Maintenance and Generalization

A strategy to cope with triggers that may occur once out of custody was discussed with the participant. The participant agreed to and was positive about pursuing further counselling from a different agency after her release. The participant was put in contact with an addictions counsellor so she would be able to receive addictions counselling once back in the community. As well, the Director was able to re-establish a more positive connection with her school and she was going to live with her grandmother. She worked through a generic relapse prevention package that was offered by the agency with the Director. The participant discussed what she believed may encourage her to relapse and what she could do to avoid these things. In addition, the Director and the participant discussed coping strategies that could be helpful if she were exposed to a situation or feelings that she identified as triggers.

Follow-Up

The participant re-offended within a few hours of release and was returned to custody two weeks later. She reported using a variety of drugs and drinking while in the community. She continued therapy with the Director after her return to custody.
Chapter V: Discussion

The purpose of this study was to decrease re-offending by increasing the offender’s motivation to change her high-risk behaviours. Brief motivational interviewing was used to generate internal motivators to change behaviour in the participant. A variety of strategies and techniques were utilized to increase motivation. The objective was to stop the participant’s cycle of crime by developing her self-motivation to change her behaviour.

Interpretation of Results

The participant showed excellent improvement during treatment. Before she was released from custody she reached the highest level available on the behaviour point system at the facility. Staff made verbal comments to the Director regarding the improvement in the participant’s mood and behaviour. However, upon release from custody she re-offended very quickly relapsing to her former behaviour. Although the participant relapsed she did make an improvement and the stages of change model is a cycle which accepts relapse as just one more step in the process of change. The participant may have had more success if she utilized the supports that were set up for her. However, she did not have any positive family or peer supports to help her. Rather, her family and peers were risk factors for her re-offending.

Strengths

The study was based on an extensive review of the literature which included many studies on treating high-risk youth offenders, the use of brief interventions, motivational interviewing, criminogenic need, the importance of parental involvement, and the specific treatment needs of adolescent females. Thus, the intervention focused on identified and relevant treatment approaches for this population. The intervention was provided by a trained professional in the correctional field, who established excellent rapport with the participant. The intervention was based on a well-established, effective form of treatment for adult and male adolescent offenders. The intervention was tailored to the participant founded on a detailed assessment of the participant.

Limitations

This study was limited by the fact that it was a case study. As well, the facility was limited in its ability to provide services after the participant was released from custody. Although the Director helped the participant establish a connection to addictions counselling and other supports, it was up to the participant to pursue them once released.

The URICA was the only assessment tool available and it overestimated the participant’s stage of change. As noted in the method section, this overestimation affected the way in which treatment was given. In addition, this assessment tool was still being tested. Because of this, there were no norms available to compare to the participant’s results. Thus, it was difficult to determine the overall effectiveness of treatment. The specific motivational interviewing techniques to be used with the participant were not predetermined and thus replicating this study would be difficult. However, this is not necessarily a weakness; one of the greatest aspects of motivational interviewing is that the treatment strategies are shaped to the participants needs as the needs change throughout treatment.
Conclusion

There was not sufficient evidence to support the initial hypothesis that individual, brief motivational interviewing techniques would help the participant move through the stages of change and increase her motivation to change her high-risk behaviour. The intervention was successful in increasing motivation; nevertheless, it was unsuccessful in decreasing re-offending. Her re-offending could be partially due to the lack of family and peer support rather than just her lack of intrinsic motivation to change.

She showed improvement in her motivation to change, yet she re-offended quickly. Her re-offending could possibly be due to the abundance of risk factors still active in her life. She did not return to school, she continued her drug and alcohol use, she continued to associate with the same negative peer group, and she also had very little support outside of the facility.

Contribution to the Field of Behavioural Psychology

This study has contributed to the limited literature available regarding motivational interviewing with adolescents and treatment for adolescent female offenders. This research may act as a starting point and contribute to future studies with this population. In addition, this study will provide detailed recommendations about where future research should proceed from this point. This was the first study done using brief motivational interviewing with an adolescent. As the participant demonstrated an improvement in motivation, this study has shown that motivational interviewing has the potential to be an effective treatment for adolescent female offenders.

Multilevel Challenges to Service Implementation

Challenges may arise in all areas of treatment planning, programming, and implementation. The multisystem perspective examines these challenges from a client, program, organizational, and societal level of analysis.

At the client level, the student experienced difficulty recruiting participants who met the inclusion criteria for the study. Participants were often away at court for hearings, some were only at the facility for a very short period of time, and others did not complete the necessary assessment. There were also a number of other time constraints. Participants were often willing to engage in treatment, but it was difficult for them to complete the predetermined number of sessions required for the study. For these reasons the study was a case study instead of a study with many participants.

At the program level, the student encountered challenges with participants meeting the program inclusion criteria. Only one participant met all of the criteria. Additionally, the participant was not randomly chosen due to the low number of participants.

At the organizational level, there was a lack of funding for treatment programs. As the facility is viewed as a custody and detention center and not a treatment center, adequate funding was not available. Without adequate funding it will be difficult to conduct similar research in the future.

At the societal level, there is a general misconception about the justice system. In general, the majority of the Canadian population would vote for longer prison sentences and more punishment over treatment programs. This was recently displayed in the media when Stephen Harper promised to impose more severe penalties in the form of extended jail time to appease the wants of his voters. This has been an ongoing problem in our society; it will continue to be a problem as long as the general public is unaware of the success of treatment.
Recommendations for Future Research

The study found that the use of brief motivational interviewing techniques showed some success when used with a high-risk adolescent female offender. It is recommended that in the future a larger, more random sample is used to decrease confounding variables and increase the validity of the study. A control group should be used to demonstrate that decreased offending is a direct result of treatment and not other factors. The effectiveness of treatment with and without family or other support should be tested as well. A more established, reliable assessment tool should be developed and used to more accurately assess the participant’s readiness to change behaviour. This will make the interpretation of results easier and more accurate. The Paulhus deception scale may be a useful tool as it would help determine how much the participant tried to influence the way others perceived her. The inclusion criteria that will be used should be established at the onset of the intervention. All participants that cannot meet these requirements should not be included in data or they should be recorded in a preordained control group.
References


Appendix A: URICA

University of Rhode Island Change Assessment – URICA (Long Form)
This questionnaire is to help us improve services. Each statement describes how a person might feel when starting therapy or approaching problems in their lives. Please indicate the extent to which you tend to agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel. For all the statements that refer to your "problem", answer in terms of what you write on the "PROBLEM" line below. And "here" refers to the place of treatment or the program.

There are FIVE possible responses to each of the items in the questionnaire:

1 = Strongly Disagree     2 = Disagree
3 = Undecided     4 = Agree
5 = Strongly Agree

1. As far as I'm concerned, I don't have any problems that need changing.
2. I think I might be ready for some self-improvement.
3. I am doing something about the problems that had been bothering me.
4. It might be worthwhile to work on my problem.
5. I'm not the problem one. It doesn't make much sense for me to be here.
6. It worries me that I might slip back on a problem I have already changed, so I am here to seek help.
7. I am finally doing some work on my problem.
8. I've been thinking that I might want to change something about myself.
9. I have been successful in working on my problem but I'm not sure I can keep up the effort on my own.
10. At times my problem is difficult, but I'm working on it.
11. Being here is pretty much a waste of time for me because the problem doesn't have to do with me.
12. I'm hoping this place will help me to better understand myself.
13. I guess I have faults, but there's nothing that I really need to change.
14. I am really working hard to change.
15. I have a problem and I really think I should work at it.
16. I'm not following through with what I had already changed as well as I had hoped, and I'm here to prevent a relapse of the problem.
17. Even though I'm not always successful in changing, I am at least working on my problem.
18. I thought once I had resolved my problem I would be free of it, but sometimes I still find myself struggling with it.
19. I wish I had more ideas on how to solve the problem.
20. I have started working on my problems but I would like help.
21. Maybe this place will be able to help me.
22. I may need a boost right now to help me maintain the changes I've already made.
23. I may be part of the problem, but I don't really think I am.
24. I hope that someone here will have some good advice for me.
25. Anyone can talk about changing; I'm actually doing something about it.
26. All this talk about psychology is boring. Why can't people just forget about their problems?
27. I'm here to prevent myself from having a relapse of my problem.
28. It is frustrating, but I feel I might be having a recurrence of a problem I thought I had resolved.
29. I have worries but so does the next guy. Why spend time thinking about them?
30. I am actively working on my problem.
31. I would rather cope with my faults than try to change them.
32. After all I had done to try to change my problem, every now and again it comes back to haunt me.

Scoring

| Precontemplation items | 1, 5, 11, 13, 23, 26, 29, 31 |
| Contemplation items     | 2, 4, 8, 12, 15, 19, 21, 24 |
| Action items            | 3, 7, 10, 14, 17, 20, 25, 30 |
| Maintenance items       | 6, 9, 16, 18, 22, 27, 28, 32 |
## Appendix B: Strategies for Possible Challenges

<table>
<thead>
<tr>
<th>Stage Of Change</th>
<th>Possible Challenges</th>
<th>Strategies</th>
</tr>
</thead>
</table>
| Pre- Contemplation       | Youth not interested in change is resistant to the suggestion of change.             | - Resistance  
- Denial of Problem  
- Not interested in change  
- Defensive                  | - Raise Doubt  
- Increase participants perception of risk associated with problem  
- Raise awareness of problem  
- Explore youths current perceptions  
- Identify discrepancies  
- Give feedback  
- Present the possibility of change  
- Avoid giving advice at this stage  
- Allow the youth to talk and tell you about the problem even if they do not recognize it as a problem  
- Validate lack of readiness  
- Clarify: decision is theirs  
- Encourage re-evaluation of current behaviour  
- Encourage self-exploration, not action  
- Explain and personalize the risk |
| Contemplation            | Youth might consider but still reject change. This stage is characterized by ambivalence. | - Make excuses for behaviour  
- Justification  
- Attempt to avoid discussion  
- Minimization  
- May try to talk self out of realization that there is a problem  
- Sway back and forth between motivations to change and continue to stay the same | - Tip the balance in favour of change  
- Avoid giving advice for strategies to facilitate change at this stage  
- Evoke reasons for change  
- Help participant discover the risk in not changing  
- Teach “ends-means reasoning skills”  
- Start challenging thinking errors by using conscious raising contemplation  
- Validate lack of readiness  
- Clarify: decision is theirs  
- Encourage evaluation of pros and cons of behavior change  
- Identify and promote new, positive outcome expectations |
| Determination            | Temporary stage where the youth wants to change but may not know how to begin and most likely cannot do it alone | - Youth may go back and forth from determination to contemplation several times  
- Reiterate the benefits of change | - Help youth determine best course of action in seeking a change  
- Refer the youth for other services which they previously resisted towards  
- Offer help in developing a realistic, achievable plan for change  
- Develop short and long term goals with the youth  
- Help the youth to be very specific  
- Reiterate the benefits of change |
<table>
<thead>
<tr>
<th><strong>Action</strong>&lt;br&gt;Youth is doing things to bring about positive change (attending counseling, new supports, and avoiding negative peer influences)</th>
<th>- Youth may be ready for change but can be influenced by negative peers once out of custody</th>
<th>- Encourage youth in change process&lt;br&gt;- Be a support, set up ongoing supports&lt;br&gt;- Encourage to develop new more positive peer relationships&lt;br&gt;- Disconnect for peers who continue to participate in high-risk life style&lt;br&gt;- Help promote balance&lt;br&gt;- Break tasks into small steps and reward success with positive feedback in a 4-1 ratio&lt;br&gt;- Focus on restructuring cues and social support&lt;br&gt;- Strengthen self-efficacy for dealing with obstacles&lt;br&gt;- Combat feelings of loss and reiterate long-term benefits</th>
</tr>
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<tr>
<td><strong>Maintenance</strong>&lt;br&gt;Building different skills needed for long term success. Sustain the change accomplished in the action stage and prevent relapse.</td>
<td>- New skills and good intentions are not enough to sustain change&lt;br&gt;- Skill building</td>
<td>- Providing encouragement, guidance and assistance to develop a relapse prevention plan&lt;br&gt;- Help youth develop new skills to prevent relapse&lt;br&gt;- Help youth anticipate difficulties that may be involved with change and develop strategies to work through difficult situations&lt;br&gt;- Referrals to other groups&lt;br&gt;- Develop community support system&lt;br&gt;- Staff involvement is very important in this stage as well as all others</td>
</tr>
<tr>
<td><strong>Relapse</strong>&lt;br&gt;Youth may be discouraged and demoralized and may fear consequences. They doubt their abilities to make a lasting change.</td>
<td>- Doubt themselves&lt;br&gt;- Youth is engaging in high-risk behaviours again which may endanger their life</td>
<td>- Provide assistance to revisit earlier stages of change including contemplation, determination and action&lt;br&gt;- Encourage youth to try again&lt;br&gt;- Work through and analyze why the relapse occurred&lt;br&gt;- Evaluate trigger for relapse&lt;br&gt;- Reassess motivation and barriers&lt;br&gt;- Plan stronger coping strategies</td>
</tr>
</tbody>
</table>