Motivational Interviewing in Adolescent Treatment

Sylvie Naar-King, PhD

This paper briefly reviews the research literature on motivational interviewing (MI) and behaviour change in adolescents and then discusses the implications of adolescent cognitive and social–emotional developmental processes for the relational and technical components of MI. Research suggests that MI is efficacious in improving substance use in adolescents. Research has been slower to emerge in other behaviours, but available randomized controlled trials suggest that MI has great promise for improving mental and physical health outcomes in this developmental period. The relational and technical components of MI are highly relevant for the adolescent developmental period, and studies have shown that these components are related to outcomes in this population. There are several ways to include MI in clinical interventions for adolescents, ranging from MI in brief settings to using MI as a platform from which all other treatments are offered. Future research is necessary to test the effects of MI in adolescent group settings and the full integration of MI into other adolescent treatment approaches.


Clinical Implications

- Research suggests that MI is efficacious in improving substance use in adolescents and has great promise for improving mental and physical health in this developmental period.
- The relational components (for example, supporting autonomy) and technical components (for example, eliciting and reinforcing change talk) of MI can be adapted for the adolescent developmental period.

Limitations

- More empirical studies are needed to confirm the efficacy of MI for improving mental health symptoms and health risk behaviours.
- Future research should test the effects of MI in adolescent group settings and the full integration of MI into other adolescent treatment approaches.

Key Words: adolescent, motivational interviewing, psychotherapy

Motivated adolescents’ intensity and capacity for change can make the challenges worthwhile. After infancy, adolescence is the period of the greatest biological, psychological, and social role changes. The constant flux of change experienced during this period provides a prime opportunity to intervene and positively alter a trajectory of unhealthy behaviours and poor outcomes. This paper will briefly review the research literature on MI and behaviour change in adolescents and then discuss the implications of adolescent cognitive and social–emotional developmental processes for the relational and technical components of MI (Table 1).

Research on MI and Adolescents

Several meta-analyses of MI have been published, and few have found any differences based on age. Lundahl et al found that while there were no age differences in MI effects when comparing MI to weak treatments or no treatment, MI had stronger effects among older samples when compared with a specific treatment condition. There is only one published meta-analysis addressing MI and adolescents, and this paper included only studies of substance use, as this is the focus of most adolescent clinical trials. Results suggested small but significant and lasting effects sizes for MI across numerous substance use outcomes, including tobacco, alcohol, marijuana, and other illicit drug use.
MI targeting other behaviours in adolescents has received far less attention, but results of available studies show promise. LaBrie et al found that a brief decisional balance intervention (a component of MI) was effective in promoting condom use among a sample of heterosexual college males. For example, Ingersoll et al found that a brief single MI session was effective in reducing alcohol consumption and increasing contraception use among college-aged women. A 4-session MI intervention delivered to adolescent females with cervicitis or pelvic inflammatory disease was effective in reducing sexual intercourse and increasing condom use with nonmain partners. Similarly, a 4-session MI intervention targeting multiple health behaviours in youth living with HIV found initial and lasting effects on reducing unprotected sex acts. Finally, MI delivered by outreach workers was successful in increasing rates of HIV counselling and testing in African-American young men who have sex with men. These studies, combined with previous research supporting MI for improved substance use outcomes, suggest that MI is effective in reducing risky behaviours in adolescents and in preventing HIV and other sexually transmitted infections.

MI has also shown promise in improving health outcomes of youth diagnosed with HIV or with other chronic medical conditions. In a multisite RCT, Naar-King et al showed that a 4-session MI intervention with individualized feedback improved health outcomes in young people living with HIV. Channon et al found that adolescents with diabetes receiving an average of 4 MI sessions during 12 months showed significantly greater improvements in average blood glucose level (HbA1c) than adolescents receiving nondirective, supportive counselling. Naar-King et al reported that young adults receiving 2 sessions of MI from a peer mentor or from a master’s-level clinician improved their attendance at HIV primary care appointments. All 3 studies had relatively small sample sizes (less than 100 participants), but provide promising initial evidence of the clinical utility of MI in enhancing the management of chronic medical conditions.

The application of MI to the treatment of psychiatric disorders is a new area of research. To date, one study compared MI with CBT to psychoeducation with CBT for youth with OCD. Youth in the MI + CBT group demonstrated faster treatment gains. To date, 2 studies have focused exclusively on adolescents with eating disorders. Schmidt et al found that MI combined with CBT was more cost-effective than traditional family therapy treatment for adolescents with bulimia. In another RCT, MI in combination with CBT was more cost-effective than standard treatment for adolescents with anorexia. Finally, pilot work has shown the feasibility and acceptability of workshops to teach caregivers MI skills to use with patients with eating disorders, but further research is needed to determine the efficacy. In summary, research suggests that MI is efficacious in improving substance use in adolescents and has great promise for improving mental and physical health in this developmental period.

Relational Components of MI With Adolescents

Miller and Rose describe the relationship components of MI in terms of both the practitioner’s expression of accurate empathy and the interpersonal spirit of MI. Accurate expressions of empathy are especially critical in encounters with adolescents, as it is common for the adolescent to experience a lack of acceptance and understanding from adults, and communication with parents can deteriorate. Adolescents may feel loved only conditionally, depending on their behaviour and compliance with external demands. The practitioner is often initially perceived as another adult who does not understand, does not listen, and does not believe the adolescent has something worthwhile to say. In MI, reflective statements are used to communicate accurate empathy and to allow the adolescent to respond to the practitioner’s hypotheses about how the adolescent experiences the world.

The interpersonal spirit of MI focuses on supporting autonomy, taking a collaborative approach to treatment, and evoking, rather than instilling, motivation for change. Recent research has demonstrated the link between MI spirit in sessions and substance use outcomes in adolescents. The development of autonomy is one of the key tasks of adolescence, and this independence of thoughts, feelings, and decisions is a basic human need. When the need is blocked, reactance or resistance typically emerges. Thus the practitioner must make special effort to avoid pressuring for change or premature problem solving and find opportunities for choice, even within a constrained environment (for example, “You have a choice to discuss the rules with your parents and see if there is room to compromise, or you can decide to break the rules and deal with your parents’ reaction.”)

MI spirit is collaborative—a partnership between the practitioner and the adolescent. This is in contrast to prescriptive approaches where the practitioner is the expert handing down wisdom. While the practitioner needs to collaborate with parents regarding goals, behaviour change will not occur in the absence of a partnership with the adolescent. Finally, an MI practitioner skillfully evokes arguments for change from the adolescent rather than imparting unsolicited advice. Thus evocation may run counter to the natural instinct to help the adolescent by correcting what is construed as flawed reasoning or poor decision making. However, premature advice or problem solving can stifle autonomy and engender rebellion.

Abbreviations

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CBT</td>
<td>cognitive-behavioural therapy</td>
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<td>HIV</td>
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<td>MI</td>
<td>motivational interviewing</td>
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<td>RCT</td>
<td>randomized controlled trial</td>
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La Revue canadienne de psychiatrie, vol 56, no 11, novembre 2011
Demonstrating the Relational Components in the First Session

The first statement in an MI intervention should encompass the MI spirit. The key is to convey that treatment will support the adolescent’s desired changes (guiding, rather than directing, which changes should be made). For example, “Our time today may be different than with other people who have talked to you. I am not here to tell you what to change or how to change, but rather to find out what is going on in your life and help you make the changes that you decide to make.” A possible response to the use of such an opening strategy is disbelief, particularly when the adolescent is in trouble with authorities. Rather than taking these statements personally, or making attempts to provide a rationale for treatment, the MI practitioner provides an honest and forthright response that allows the adolescent to take responsibility for their decision to engage in the encounter (or not). For example, “I can’t change what happened that made others think you need to be here, but I can help you explore what’s going on and how you decide you want to handle it.” To roll with resistance, it is important to further elicit the young person’s point of view. For example, “You expect people to make you do things. Tell me more about that.”

Agenda Setting

After setting the tone of treatment with an opening statement, the spirit of collaboration can be expressed by agenda setting with the adolescent. Agenda setting can be as simple as offering the choice of what to discuss first, “Would you prefer to talk first about marijuana, alcohol, or what’s going on in school?” A more comprehensive approach involves eliciting the adolescent’s view of his or her situation, and then placing these ideas in the context of collaborative goals for treatment.

Asking Permission

A primary strategy for conveying MI spirit in all encounters is to ask for permission before engaging in a task. Asking permission not only shows respect for the adolescent’s autonomy but also serves to increase engagement as it requires the adolescent to verbally agree to engage in the task. This can be done as a preface for conversational tasks. For example, “If it’s OK with you, I would like to find out more about your substance use.” It can also be done more formally for more intensive tasks, such as written activities. For example, “Would you be willing for us to write down the behaviours we just agreed to focus on in our sessions?” Of course, the young person can always choose not to engage, but it is ultimately more likely to increase alliance.

Providing Information With Elicit-Provide-Elicit

Rollnick et al suggest the technique of Elicit-Provide-Elicit when providing information or feedback. First, the practitioner asks and (or) elicits permission for the adolescent’s ideas. The second step is to provide information. Last, the practitioner elicits the young person’s point of view regarding the information provided, such as “How does this sound to you?” or “Does this make sense or not?” As a point of reference, do not provide more than 2 or 3 sentences of information without eliciting the person’s thoughts or feelings about that information.

Technical Components of MI With Adolescents

The technical components of MI focus on the differential elicitation and reinforcement of change talk instead of statements in favour of sustaining the behaviour. Indeed, although the research on links between change talk and

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<th>Table 1 Summary of adolescent developmental processes and MI implications</th>
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behaviour in adolescents are in its infancy, increases in change talk and reductions in sustain talk have been associated with behaviour change in adolescents and young adults in 2 studies.25,26

Open-Ended Questions
When the practitioner has a strong alliance with the adolescent, the most direct way to elicit change talk is to ask for it. For example, “If you decided to make a change, how would you do it?” or “What difficulties have you experienced with your diabetes?” Emphasizing your interest in the young person’s perceptions avoids the rehashing of others’ opinions about “what” and “how” they should change can facilitate this process. However, inquiring about others concerns (for example, “Why is your mother so worried?”) can sometimes elicit change talk, even when the adolescent is not willing to explicitly recognize a problem.

Another type of question to elicit change talk is to ask the adolescent to imagine what life would be like, or the worst thing that would happen, if the problematic behaviour were to continue. These questions often elicit reasons for change. Similarly, asking the adolescent to imagine their life before the problem behaviour, or the best thing that would happen if the behaviour were to change, can often elicit change talk. Another approach is to ask the adolescent to look ahead by envisioning hopes for the future, and how their current behaviours can help or hinder goal attainment. If the adolescent cannot see that far ahead, try shorter windows of time. For example, “What would your life look like 1 year from now?” The practitioner must be careful here not to slip into the trap of giving unsolicited advice or well-intentioned warnings that often do little but evoke resistance.

Adolescents may enjoy experiential versions of these questions, such as drawing what they are imagining. Two other experiential activities that elicit change talk involve card sorts for values and for personal strengths. With permission from the adolescent, a stack of cards is provided with a value printed on each one, along with an extra blank card so a value can be added. Next, the adolescent sorts the cards into more important and less important values. From the important pile, he or she chooses the top 3 values that matter most to him or her. To elicit change talk, the practitioner asks open-ended questions regarding how the chosen values correspond with how the adolescent is currently living his or her life, paying particular attention to any discrepancies between the value and the problematic behaviour (for example, valuing strength but smoking a pack of cigarettes a day). Open-ended questions can focus on elaboration about the value’s personal meaning (for example, “What does being strong mean to you?”). Although a very young adolescent may have difficulty with abstract concepts such as values, Resnicow et al27 have edited the values card sort with words that adolescents from diverse backgrounds and cognitive ability can understand.

Instead of an abstract value, the cards may contain personal strengths. After choosing the top 3, the practitioner can ask questions about how these qualities are currently evident in the young person’s life, both in relation to past successes and possible behaviour change options. For example, “You mentioned you’ve always been pretty smart. How might being a smart person help you if you decided to do something about drinking?” Note that there are times when an adolescent may be stymied in the face of a very open-ended question, such as, “What do you make of all this?” An alternative to open-ended questions in these situations is to provide a multiple-choice question, such as “Do you feel upset by this, fine with it, or maybe something else?” In this way, the practitioner provides structure for the conversation while still offering choice. However, too many questions can make the adolescent feel interrogated and feel like the answers do not really matter. Moyers et al28 suggest that a ratio of at least 2 reflective statements to every question is optimal to promote behaviour change.

Reinforcing Change Talk
Reflections are used to build rapport and show the adolescent that someone is listening and understands. Unique to MI is the use of reflections to selectively reinforce change talk, even in the context of ambivalent statements. When change talk is elicited with the above questions or activities, the practitioner responds by reflecting it, which increases the likelihood of continued change talk.29 In ambivalent statements, the practitioner will explicitly reinforce the change talk component. For example, if an adolescent remains hesitant to try out a new behaviour, but offers a statement about ability to change (for example, “I know what to do to cut back on smoking, but I am not sure I am ready”),

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<th>Table 2 MI to enhance CBT</th>
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<td><strong>CBT</strong></td>
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<td>Treatment begins with an overview and rationale for treatment followed by a functional assessment of the target behaviour.</td>
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<td>Functional assessment is completed in an interview fashion (typically a series of questions).</td>
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<td>The practitioner chooses skills modules based on functional assessment of triggers and consequences</td>
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you reinforce the change talk embedded in ambivalence by reflecting it. For example, “You really believe you can do this when you are ready.” When reflecting change talk, the incorporation of “you” statements, as in the example above, clearly emphasizes personal choice in the change process.

Note that MI distinguishes between simple reflections (repeating and paraphrasing) and complex reflections (reflecting both sides of ambivalence and using metaphors). While more complex reflections help to explore ambivalence and guide the adolescent toward change, there must be an awareness of cognitive level so that complex reflections are not too abstract for the adolescent to understand. Reflections of feeling are important as the discussion of emotions may be necessary for change to occur. However, the reflection must be closely tied to what the adolescent has expressed or implied, and he or she still has the choice to either accept the reflection or clarify if the reflection was inaccurate. When reflecting emotions, consider the timing of the reflection. For example, if rapport has not yet been established, a lower intensity word (a little sad) may be better than a higher intensity word (really depressed). However, do not underestimate the anger that adolescents may feel, particularly if their autonomy is blocked. For example, an adolescent who is bursting with emotions of anger may feel misunderstood if you say, “You were a little angry,” if, in fact, they were “steaming mad.”

Affirmations, positive statements about the adolescent’s characteristics or behaviours, are also useful to reinforce change talk. The key to affirmations with adolescents is honesty and specificity. A more challenging adolescent may especially disengage from generic, cheerleader type statements. However, affirmations that target a specific strength, effort, and (like reflections) that are close to what the person has already said, are generally accepted. For example, instead of “You’re smart” try “It’s smart that you decided to cut back on your drinking,” the adolescent may rebelliously stop the change process. To avoid this pitfall, affirmations alternatively can be framed without the use of “I” statements, such as “It’s great that you decided to cut back on your drinking.”

Careful consideration should be given to the timing of affirmations. Affirmations about a specific behaviour may be more acceptable when the adolescent is more ready to change (“It’s great that you want to cut back on your drinking”), whereas affirming strengths and values may be more beneficial when change talk statements are embedded in ambivalence (“You are willing to consider difficult decisions to make the best choice for yourself”).

**Integrating MI With Other Treatment Approaches**

MI can be used as a prelude to a more intensive treatment or as an approach to switch to when ambivalence or resistance is blocking progression in another ongoing treatment. More recently, there has been a focus on using MI as the platform on which other interventions are provided. Most studies demonstrating the efficacy of MI integrated with other behaviour change methods for adolescents have focused on behavioural treatments and CBT (see Erickson et al. and Suarez and Mullins for review). In CBT, MI may be used at the onset of treatment to elicit motivation for the skills training component of the intervention, and throughout the treatment to solidify commitment to therapy goals and completion of homework. Table 2 describes specific examples of what MI can add to CBT with adolescents.

Many behavioural treatments for adolescents include strategies to target extrinsic motivation. Examples include contingency management, token economies, and parent-delivered behaviour plans. Contexts and treatment settings operating from an extrinsic motivational system often are limited in the amount of choice and decision-making responsibility afforded to the adolescent. The integration of MI into these settings holds promise for improving engagement, personal responsibility, and intrinsic motivation. Investigations about intrinsic and extrinsic motivation have shown them to be separate phenomena, not inversely related, so that targeting both aspects of motivation may have a synergistic effect. Ambivalence may be reduced, even if temporarily, with an extrinsic reward, while simultaneously using MI skills to promote the identification of internal reasons for doing the new behaviour. Extrinsic motivators offered as a menu of options may support autonomy when the adolescent experiences some choice. MI strategies could be used to elicit change talk (motivational statements) and solidify commitment throughout the extrinsic motivational treatment to increase the internalization of motivation. Examples of clinician statements that may be heard in such a treatment would be: “I know that right now you are only doing this to get off probation. What would life be like if you continued this behaviour change?” or “You completed 30 minutes of exercise so you could get your prize and you said that you felt stronger when you did it. How does that fit with what you said about being a strong, independent person?”

**Conclusion**

MI provides a framework for adolescent treatment by marrying client-centred approaches that promote collaboration and support autonomy with goal-directed approaches that guide patients toward reaching maximum human potential. The relational and technical components of MI can be adapted for the adolescent developmental period. There are several ways to include MI in clinical interventions, ranging from MI in brief settings to using MI as a platform from which all other treatments are offered. Research has shown the efficacy of MI and substance use in adolescents, and emerging research suggests the clinical utility of MI to improve mental and physical health. Future research is necessary to test the effects of MI in adolescent group settings and the full integration of MI into other adolescent treatment approaches.
Acknowledgements
I thank Maryann Suarez, coauthor of our book Motivational Interviewing with Adolescents and Young Adults, for her ideas, enthusiasm, and support.

The Canadian Psychiatric Association proudly supports the In Review series by providing an honorarium to the authors.

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Manuscript received, revised, and accepted June 2011.

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Résumé : La technique d’entrevue motivationnelle dans le traitement des adolescents

Cet article passe brièvement en revue la littérature de la recherche sur la technique d’entrevue motivationnelle (TEM) et le changement de comportement chez les adolescents, puis présente les implications des processus développementaux cognitifs et socio-émotionnels des adolescents pour les composantes relationnelles et techniques de la TEM. La recherche suggère que la TEM est efficace pour améliorer l’abus de substances chez les adolescents. La recherche est plus lente à apparaître dans d’autres comportements, mais les essais randomisés contrôlés disponibles suggèrent que la TEM est très prometteuse pour ce qui est d’améliorer les résultats de santé physique et mentale dans cette période de développement. Les composantes relationnelles et techniques de la TEM sont très pertinentes pour la période de développement de l’adolescence, et les études ont révélé que ces composantes sont liées aux résultats dans cette population. Il y a plusieurs façons d’inclure la TEM dans les interventions cliniques auprès d’adolescents, allant de la TEM dans des contextes de brèves interventions jusqu’à l’utilisation de la TEM comme plateforme à partir de laquelle tous les autres traitements sont offerts. La recherche future est nécessaire pour vérifier les effets de la TEM dans le contexte de groupes d’adolescents et la pleine intégration de la TEM dans d’autres approches de traitement des adolescents.