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REVIEW PAPER

The Promise of Motivational Interviewing in School Mental Health

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Abstract In recent years, the science of developing and implementing interventions addressing school-related risk factors has produced many advances. This article addresses the promise of a cross-disciplinary practice approach known as motivational interviewing in school settings. Specifically, the supporting evidence as well as the process and principles of motivational interviewing are described for those unfamiliar with motivational interviewing nomenclature. A description of recent school-based innovations using the principles of motivational interviewing is then provided. Next, some potential applications for applying the motivational interviewing approach in educational settings to enhance the adoption, development, and implementation of effective school-based interventions designed to promote academic achievement and prevent or ameliorate challenging behavior are proposed. The article concludes with a discussion of future directions of motivational interviewing approaches within the context of school mental health.

Keywords Motivational interviewing · Intervention research · Fidelity

Introduction

The field of mental health has recently developed a larger presence in schools as educators, policy makers, legislators, and the general public have recognized the social support and technical assistance needs of a substantial number of students who experience school, community, and family risk factors jeopardizing the likelihood of school success. These risk factors include parent–child conflict; lack of bonding and social connectedness with peers, teachers, and family; weak school engagement; inconsistent classroom and/or family management practices; association with antisocial peers; bullying and harassment, and toxic school or classroom cultures (Frey, Walker, & Perry, 2011). Without systematic interventions, these conditions may (a) disrupt learning and achievement, (b) place children at substantial developmental risk, and (c) create concerns for the safety of teachers and classmates (e.g., Burns & Hoagwood, 2002). In recent years, the knowledge base to guide educators and school mental health providers has increased exponentially, and at the same time our ability to effectively adopt and apply effective practices with fidelity remains limited (Fixsen, Naoom, Blase, Freidman, & Wallace, 2005).

This article examines the promise of a cross-disciplinary practice approach known as motivational interviewing (MI) within school mental health (Miller, 1985; Miller & Rollnick, 2002). Motivational interviewing is defined as "a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (Miller & Rollnick, 2002, p. 25). MI is founded on the belief that how one interacts with people has significant effects upon intrinsic motivation that leads to better change outcomes. The approach builds upon non-directive approaches developed by Rogers' (1959) theory regarding the critical counselor skills necessary to facilitate change. Specifically, Rogers advocated a client-centered approach whereby the counselor provides an ideal atmosphere for change by expressing empathy, warmth, and genuineness.

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MI is infused with positive regard for the client along with a spirit of caring and concern. MI expands Rogers's theory by adding directive strategies that target specific behavior and has demonstrated evidence for increasing motivation as a vehicle to behavior change in a variety of contexts.

Herein, the evidence supporting MI is presented, followed by a description of the approach for those unfamiliar with MI nomenclature, and a summary of recent innovations in school-based mental health using an MI approach. Next, some potential uses for the motivational interviewing approach in educational settings are examined, followed by a discussion of the future directions of MI approaches in school mental health.

Evidence Supporting Motivational Interviewing

Three systematic reviews of the efficacy of MI across substantive domains have been published (Dunn, DeRoo, & Rivara, 2001; Miller & Rollnick, 2002; Noonan & Moyers, 1997). In all three reviews, evidence suggests that the use of MI, even in an abbreviated format (e.g., 1–4 sessions), can encourage adult behavior improvements that are significantly more favorable than no treatment, generate gains that are maintained after the intervention and sustained over time, and produce effects that are equally as effective as credible alternative treatments. Interestingly, effect sizes for MI adaptations followed by another type of treatment were similar to offering MI adaptations as stand-alone interventions. Finally, these results must be regarded as tentative or preliminary given that the internal validity of many of the studies was highly variable.

This growing literature base has allowed for review of the evidence from a meta-analytical standpoint, providing an aggregated view of MI effectiveness (see Burke, Arkowitz, & Menchola, 2003; Hettema, Steele, & Miller, 2005; Vasilam, Hosier, & Cox, 2006). In the most recent meta-analysis, Lundahl, Tollefson, Kunz, Brownell, and Burke (2010) provide continued support for the use of MI with many problem behaviors (alcohol, drug and tobacco use, various risky behaviors, and medication and treatment adherence).

Within the substance abuse literature, several studies have shown that adult clients who are exposed to MI as a supplemental, "front-loaded" intervention (e.g., preceding a standard intervention), are more likely to stay in treatment, put forth more effort during treatment, adhere more closely to the intervention protocol or recommendations, and experience significantly improved outcomes than those who receive identical treatment without the MI component (Aubrey, 1998; Bien, Miller, & Boroughs, 1993; Brown & Miller, 1993; Saunders, Wilkinson, & Phillips, 1995). These effects have been documented across diverse treatment approaches, which highlight the flexibility of MI. The majority of MI adaptations, including the Drinker's Check-Up (Miller & Sovereign, 1989) and Project MATCH (Project MATCH Research Group, 1997) utilize the principles and techniques of MI to guide communication and include a feedback routine in which assessment results are shared with the client in a non-directive fashion. Adaptations have been applied to addictions (Miller, Zweben, DiClemente, & Rychtaric, 1992), prenatal counseling (Handmaker, Miller, & Manicke, 1999), diabetes management (Smith, Heckemeyer, Kratt, & Mason, 1997), and relationship distress (Marriage Check-Up, Cordova, Warren, & Gee, 2001).

MI investigations have primarily centered on the study of adults, with studies of its effectiveness for youth and children focusing on adolescent and pre-adolescent youth rather than preschool or elementary aged children (e.g., Flattum, Friend, Neumark-Sztainer, & Story, 2009). Lundahl et al. (2010) provide a plausible explanation for the lack of direct study with young children; "Considering developmental issues, MI is conducted within a cognitive medium and requires some degree of abstract reasoning that should be present after the age of 12 years [based on Piaget's (1962) model] and thus may not be as helpful for preteen children." (p. 153). Atkinson and Amesu (2007) caution against the use of MI with young children as MI is largely language based, relying "on the ability of young people to express their feelings about a particular set of circumstances" (p. 36). Studies that involve preschool and elementary aged children suggest that MI can be used with parents and teachers, who play a significant role in the life of the child (e.g., Channon et al., 2007; Freudenthal, 2008; Freudenthal & Bowen, 2010) and control home and school environments. In the context of school mental health, MI is promising as a vehicle to change adult's behavior, while mediating changes in the child's behavior. However, the study of MI with young children is only just beginning. It may be plausible that MI could be utilized with young children with some effectiveness (Nage, 2010). More likely, continued research in this area could reveal a continuum of MI requisite skills that are appropriate for certain developmental levels.

The Process and Principles of Motivational Interviewing

Miller and Rollnick (2002) describe two phases of MI, including a Phase 1, pre-commitment, in which ambivalence is resolved, and a Phase 2, post-commitment, in which intrinsic motivation for change is activated to drive a collaborative change planning process. The MI environment or treatment context is represented by three

underlying constructs, and four motivational counseling principles that are skillfully combined to direct a client toward change.

During the pre-commitment phase, priority is given to understanding the client's motives for change—the client's primary values, important goals, and ideals of self and life. These motives then become a central focus of the ensuing dialogue, based on the hypothesis that articulating the argument for change further clarifies these motives and moves the client toward change. *Change talk*, as identified by Miller and Rollnick (2002), is the conceptual opposite of resistance or client's talk that sustains their current condition. A primary task of the counselor is to produce change talk. Change talk is defined as recognizing disadvantages of the status quo, understanding advantages of change, expressing optimism about change, and expressing intention to change. To this end, counselors facilitate dialogue and avoid taking an "expert role," instead emphasizing choice and responsibility for change to the client who remains the resident expert on themselves. Further, within the mechanism of change theory MI is supported by an ethos consisting of three underlying constructs: evocation, collaboration, and autonomy. These constructs are in place whether or not the counselor is using MI in a directive fashion (i.e., with a target behavior clearly identified) or not.

Evocation embodies the counselor's active elicitation of the client's personal reasons for change. The hypothesized mechanism of action is based upon self-perception theory that holds that the client's arguing for change has a powerful effect upon motivation.

Collaboration is exemplified when the client takes a lead role in the dialogue and when the nature of the interaction is substantially influenced by the client's ideas. As described by Moyers, Martin, Manuel, Miller, and Ernst (2007), "Clinicians [counselors] high in collaboration appear to be dancing with their clients during an interview—one moment leading, the next following—in seamless motion" (p. 6). This can only work when the behavior for change fits within the client's ideals of self and life.

The most pervasive theme is *autonomy*. Counselors explicitly support clients' value-driven choice(s) while also supporting the client's control of the change process. Working from a strength-based perspective, counselors express their belief that the client is capable of change, while acknowledging the client's agency to maintain the status quo (i.e., autonomous).

Motivational Counseling Principles

In addition to the three underlying constructs, four counseling principles infuse the techniques and strategies used (Miller & Rollnick, 2002): *express empathy, develop discrepancy, roll with resistance,* and *support self-efficacy.* Empathy is demonstrated through counselor reflections of client meaning that can clarify, reinforce, amplify, and produce change talk. In working with clients, counselors often 'take for granted' the meanings embedded in their communications. Reflective listening, according to Miller and Rollnick (2002), "is a way of checking, rather than assuming, that you already know what is meant" (p. 70). Reflections are not questions but rather statements that indicate the counselor's assumption of their meaning and that "elicit more talk from the client, particularly change talk" (p. 71). Miller and Rollnick suggest MI diverges from classic client-centered counseling primarily because it is directive; it intentionally attempts to direct a client toward the resolution of ambivalence.

Developing discrepancy, the second general principle of MI, is viewed as an effective way to "present an unpleasant reality so the person can confront it and be changed by it" (Miller & Rollnick, 2002, p. 38). Within the context of an intervention, discrepancy is the cognitive linkage between a present behavior and the person's important goals or values. Festinger (1957) referred to this gap as "cognitive dissonance." The theory suggests that when a behavior is perceived as conflicting with important goals or values, the person is more likely to change. Developing and amplifying discrepancy can create greater internal conflict or ambivalence related to a status quo behavior. Increasing discrepancy increases *importance*, which is one of two critical requirements for change; the second critical requirement is *confidence*, which is discussed below. Discrepancy is the vehicle by which the importance for change is increased. During the MI process, a counselor's challenge is to develop and increase discrepancy within the context of MI without confronting, educating, or selling behavior change. This avoids creating a sense of being coerced or manipulated. The client weighs pros and cons of change in a decisional argument and becomes convinced the status quo is too inconsistent with their most important goals or values to be maintained. It is important that the client, rather than the counselor, be in the position of evaluating the argument between maintaining the status quo or changing given that people are more likely to be intrinsically motivated, persuaded, and to invest in change by their own internal voice than by that of any other (Miller & Rollnick, 2002).

The third principle of MI, roll with resistance, is based on the assumption that arguing is counterproductive. In the context of MI, resistance is viewed as "a signal of dissonance in the counseling relationship" (Miller & Rollnick, 2002, p. 46). When a client resists change that is clearly congruent with important goals and values, the counselor must exercise great constraint over himself. The counselor,

who wishes to push a change agenda that is clearly in the client's best interest, must avoid the natural inclination to educate or confront. Rather, the counselor must work to remain within the spirit and principles of MI. The counselor may be in touch with the human tendency to take up argument; however, in the context of change, this is a trap that will create transparent or veiled barriers to change. The counselor is encouraged to roll with the resistance by maintaining equanimity without confrontation or any attempt to 'sell' change—even allowing for a discussion of the cons of change. These strategies work to affirm the challenges faced by the client, strengthen the relationship between client and counselor, and lessen barriers that support open exploration of the decisional argument for change.

The fourth principle, support self-efficacy, is related to the second critical requirement for change, which is *confidence*. In support of a client's self-efficacy, a counselor might rekindle memories of success from the past, while remaining within the spirit of MI by minimizing authority and asking permission before educating or providing change plan options.

Embodiment of the three underlying constructs and application of the strategies associated with the four principles described above are central to Phase 1, pre-commitment, and builds a scaffold upon which the client moves toward a commitment to change. Commitment to change marks the beginning of Phase 2, which includes: (a) building a menu of choices, (b) collaborating on the creation of an action plan, (c) implementing and adhering to the plan, and (d) sustaining the relationship. Within Phase 2, the counseling environment is more relaxed and less strategic with counselor and client working collaboratively on a plan for change. As such, the counselor usually enjoys open permission from the client to educate on change plan options. The counselor is advised to avoid the "expert trap" with excessive educating and confrontation that violates the spirit of MI and which can erode rapport. Notwithstanding this caution, the counselor can suggest and aid a client in selecting any intervention or counseling approach required to achieve change, even those that contradict the spirit of MI, such as cognitive and behavioral approaches. It cannot be overemphasized, that in the post-commitment phase of MI, it is critical that the counselor monitor the interactions for signs of resistance or return of ambivalence. If sensed, the counselor should return to the requisite phase 1 strategies as necessary.

The flexibility with which MI can be utilized has led counselors, as well as a variety of other mental health professionals from a wide range of disciplines, to adapt these processes to various institutions, contexts, populations, and a wide variety of target behaviors. The following commentary includes various MI innovations that have led to more recent applications in the context of school mental health.

Motivational Interviewing Innovation and Applications in School Settings

Shinn and Walker (2010) suggest that we are in the midst of the largest school reform effort of the past 30 years. These authors argue that this reform, largely defined by the adoption of a Response to Intervention approach, involves the creation of comprehensive, coordinated, and effective service delivery systems. These systems are defined by: (a) a foundation of prevention in which evidence-based interventions represent primary, secondary, and tertiary levels; (b) data-based decision making; and (c) early intervention based on screening results. There are many ways MI could be used by school mental health professionals, several of which are directly related to the changing landscape of school reform efforts. Although the use of MI in educational settings is limited, there is a growing literature base demonstrating its efficacy in addressing the motivation of parents, teachers, and students across a variety of domains related to school mental health services.

Recent Innovations

Participation Enhancement Intervention

In a series of articles, Nock and associates (Nock & Ferriter, 2005; Nock & Kazdin, 2005; Nock & Photos, 2006) developed and tested a conceptual framework for the Participation Enhancement Intervention (PEI; see Nock & Kazdin, 2005), and the Parent Motivation Inventory (PMI). Their premise for the development of the PMI was that treatment attendance and adherence to treatment plans are the most basic necessities for effective treatment delivery. In regard to the treatment of youth, this necessarily concerns the parent's motivation to provide for their child's attendance and to support adherence to treatment plans. Until the development and subsequent testing of the PMI, no tools existed to measure a parent's motivation for their children's treatment. The PEI used elements of MI and the barriers to treatment participation model (see Kazdin, Holland, & Crowley, 1997) to provide a very brief (5–15 min) intervention targeting parent motivation at several points during their children's treatment process. Along with MI elements, the PEI included specific information about the importance of attending treatments and staying on track with treatment plans and helped parents develop plans for overcoming any barriers they faced in attendance and adhering to the prescribed

treatment. Using the PMI to evaluate the effectiveness of the PEI, Nock and Kazdin (2005) found that increases in parent motivation predicted parents' rating of fewer barriers to their participation in treatment and in turn greater treatment attendance. Furthermore, both parents and therapists reported greater adherence to treatment plans as a result of the PEI.

EcoFIT

Dishion and Stormshak (2007) have developed the Ecological Approach to Family Interventions and Treatment (EcoFIT) model, which includes an assessment-driven feedback component (Dishion, Stormshak, & Siler, 2010). A hallmark component of their model, the Family Check-Up (FCU), inspired by the Drinker's Check-Up (Miller & Sovereign, 1989), is designed to increase parenting behavior that promotes youth adjustment and competence. The FCU consists of specific motivational enhancement strategies including individual feedback to parents on observed parenting practices, identification of strengths, promotion of autonomy in the decision making process, and development of a menu of options based on effective family management practices. The results of a recent clinical trial provided preliminary evidence for the efficacy of this intervention, as mothers in the intervention group showed increased involvement in their child's behavior and their children showed corresponding decreases in conduct problems (see Shaw, Dishion, Supplee, Gardner, & Arnds, 2006). Dishion and Stormshak (2007) recommend that the FCU precede evidence-based interventions to increase parental compliance with treatment protocols and regimens. Shaw et al. (2006) detailed the first in a series of notable studies of the FCU program in early childhood. These studies demonstrated the positive longitudinal effects of the program on very young children who were identified as at-risk for early conduct problems (Connell et al., 2008; Dishion et al., 2008; Gill, Hyde, Shaw, Dishion, & Wilson, 2008; Lunkenheimer et al., 2008; Moilanen, Shaw, Dishion, Gardner, & Wilson, 2010; Shaw, Connell, Dishion, Wilson, & Gardner, 2009). Those children of low-income families, who were randomly assigned to the FCU condition, demonstrated improvements in school readiness (inhibitory control and language development) through the effects of the FCU on parents' provision of increased positive behavioral support. Further study of the program (see Gardner et al., 2009) demonstrated the program's effectiveness for families "with very high levels of distress and disadvantage compared with those who were more advantaged…" (p. 550). These effects were not as strong in single parent families.

Classroom Check-up

Building from the work of Miller and Rollnick (2002) and Dishion and Stormshak (2007), Reinke, Lewis-Palmer, and Merrell (2008) recently developed The Classroom Check-Up (CCU), which is designed to increase the extent to which teachers employ evidence-based classroom management strategies. The CCU consists of specific motivational enhancement strategies including: individual (visual) feedback to teachers on observed classroom behaviors (i.e., specific praise & reprimands), identification of strengths, promotion of autonomy in the decision making process, direct guidance (when requested), encouragement of teacher self-efficacy, and development of a menu of change options. Results from a single subject multiple baseline design study across classrooms indicated increased teacher use of specific praise and reduced reprimands and decreased classroom disruptive behavior (Reinke et al., 2008).

First Step to Success

The authors of this article, inspired, in part, by the work of the previously mentioned MI innovations in school mental health, have begun taking the existing First Step to Success (Walker et al., 1998) intervention and infusing it with the Family Check-Up (Dishion & Stormshak, 2007; Shaw et al., 2006), the wraparound planning process (Burns & Hoagwood, 2002; Eber, Sugai, Smith, & Scott, 2002), and the Classroom Check-Up (Reinke et al., 2008). First Step consists of three modules applied in concert with each other: (a) universal screening; (b) a school module called CLASS; and (c) a home module called homeBase. The two primary goals of the First Step intervention are to teach the at-risk child to get along with others (teachers and peers) and to engage assigned schoolwork in an appropriate, successful manner. The intervention is designed to achieve secondary prevention outcomes. The three modules of First Step are based on extensive research on school and home intervention procedures with aggressive, antisocial youth and over a decade of work related to the universal, proactive early screening of at-risk children to provide early detection (see Hops & Walker, 1988; Patterson, 1992). The homeBase module of First Step consists of a series of six lessons designed to enable parents and caregivers to build child competencies and skills in six areas that affect school adjustment and performance. The target skills that parents are asked to teach their children are as follows: (a) Sharing School, (b) Cooperation, (c) Limit-Setting, (d) Problem-Solving, (e) Friendship-Making, and (f) Developing Confidence. HomeBase contains lessons, instructional guidelines, and parent–child games and activities for directly teaching these skills.

The First Step program has been extensively evaluated across a range of methodologies, including: single subject (Carter, & Horner, 2007, 2009; Golly, Sprague, Walker, Beard, & Gorham, 2000; Overton, McKenzie, King, & Osborne, 2002; Sprague, & Perkins, 2009), longitudinal (Nelson et al., 2009; Walker et al., 1998), quasi-experimental (Diken, & Rutherford, 2005; Golly, Stiller, & Walker, 1998), and experimental designs (Walker, Golly, McLane, & Kimmich, 2005; Walker et al., 2009). These evaluations of the First Step program have demonstrated strong, positive effect sizes for a majority of the at-risk preschool and primary level, elementary school children who were treated, and parents, teachers, and administrators have consistently reported high levels of satisfaction with the intervention. While effective as a secondary prevention program, First Step to Success (Walker et al., 1998) is generally not sufficient to substantially decrease challenging forms of severe behavior and increase the prosocial and adaptive behavior of students at the tertiary level. As the parents of many young children with severe behavior problems also experience multiple stressors, the high levels of parental motivation and commitment necessary for change are often difficult to obtain. Additionally, while some teachers are motivated to adopt the classroom management practices on which the school component is based, teacher observation data suggests many do not.

Two MI enhancements to the First Step intervention have been added to begin addressing the needs of students at the tertiary level. The first, a modified version of Dishion and Stormshak's (2007) FCU is completed with parents, with homeBase parent training offerings used in the event that parents' deem them relevant to their child's school success. As can be seen in Fig. 1, the FCU begins with an initial intake session to examine the parents' perceptions of their child's school and home functioning in relation to their own values, goals, and ideals of self and life. Next, assessment data are collected from all intervention agents (parent, teacher, and the First Step to Success interventionist) to help identify strengths, potential discrepancies between child and/or parent functioning, and family values, goals and ideals. These discrepancies are amplified while parent autonomy and self-efficacy are strengthened, and change talk is evoked. If appropriate, the family develops a plan of action that focuses on family management practices and is tied to the parents' goals and values. This enhancement to the First Step intervention retains most features of the FCU; however, a formal parent values identification activity has been added and the assessment process has been simplified to employ concepts reflecting the interests of educators. The concepts also map onto the parent training content of the First Step to Success homeBase parent curriculum.

The second MI enhancement to the First Step intervention is the addition of a modified version of the CCU that has been infused into the school component (i.e., CLASS) to more effectively improve the teacher's use of positive classroom management strategies. The First Step version of the CCU focuses on the teacher's perceptions of the 'ideal' classroom and their beliefs in regards to behavior management practices, which are gathered during an initial interview. Exploring the teacher's experiences, perceptions, values and goals assists in the amplification of any discrepancies discovered within the information gathering process. The information gathering process includes an observational sampling of five teacher behaviors. The frequency of praise (both behavior-specific and general) and reprimands are recorded across three agents: the target child, any peer in the class, or the class as a whole. Additionally, the frequency of positive student–teacher interactions and negative teacher–student interactions are recorded across the target child and any peer in the class. The teacher and interventionist meet again following the observations for data review (provided in the form of graphs) and goal setting. During this meeting, teacher and interventionist share their perceptions of the observations and interpret the data. The goal is to influence the teacher's use of positive behavior-specific praise. The interventionist utilizes a directive MI approach to assess and manage resistance, cultivate importance and boost the teacher's confidence and feelings of self-efficacy for change. During this process options are discussed, a plan of action is developed and formalized (typically in writing), and commitments to change are made. The intervention process itself is self-selected and is also self-monitored by the teacher with support from the interventionist when requested. A menu of intervention options for teachers to facilitate a more positive climate through the use of increased positive behavior-specific praise is offered to the teacher. In order to build a sense of ownership, reduce complexity and support self-efficacy, teachers are encouraged to create or utilize simple intervention strategies of their own design. Often, the initial data review and feedback cycle (discussed below) are all that is necessary for teacher change. A feedback cycle of additional observations of teacher behavior (twice per week for 2 weeks) follow the data review and goal setting process, allowing the teacher to review progress and monitor the effectiveness of their self-selected interventions. Data from each additional observation of the feedback cycle are added to the original visual and provided to the teacher without elaboration, unless requested.

Potential MI Applications in School Mental Health

Although the innovative applications of MI within school mental health highlighted above involve the infusion of the MI approach into large-scale interventions, we believe MI

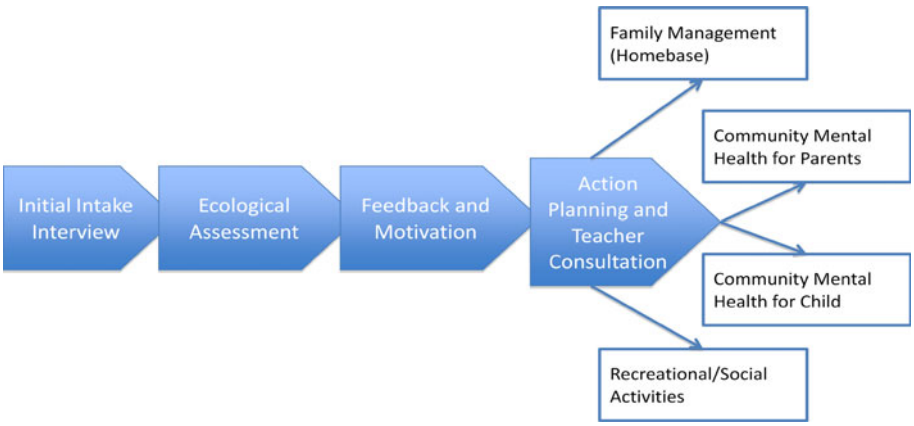

Fig. 1 The family check-up and change plan components. *Based on work by Dishion and Stormshak (2007)

has the potential to be used more generally. For example, McNamara (1996, 1998) has developed a system of MI, used in the Canadian Public Schools, to guide teachers in the development and implementation of pupil self-management skills. Additionally, Blom-Hoffman and Rose (2007) have provided written commentary on the use of MI in school-based consultation, proposing that MI could be used effectively to enhance a consultees' motivation to change, and address common barriers to the successful implementation of change plans. Atkinson and Woods (2003) and Kittles and Atkinson (2009) suggested MI might be used as an initial assessment tool for disaffected adolescents in schools. Utilizing a visual representation of MI, the authors explicitly involved the children in the process. Counselors are allowed to establish the needs of disaffected youth and identify suitable support strategies, while gauging the children's overall resistance to change. These authors report that the youth in their sample found the approach helpful in considering the implications of their own behavior, but that the intervention was most successful with children who were more ready for change than those who were not. Additionally, Connell and Dishion (2008) utilized a family-focused multilevel prevention program delivered within public middle schools to target parenting factors related to the development of behavior problems in early adolescence. The intervention demonstrated collateral effects inhibiting the increase of depressive symptoms in high-risk youth over a three-year period as compared with a control group.

MI techniques could also be applied informally in conversations with students, parents, and teachers, used to encourage teachers or administrators to embrace promising interventions, or employed to help increase the fidelity with which evidence-based interventions are implemented. In our work on training school mental health professionals to practice in an MI supportive fashion, we have found Fig. 2 (Cloud, Frey, Lee, Lyle, & Thompson, unpublished manuscript) useful, which is based on the eight stages forwarded by Miller and Moyers (2006). This Navigational Map allows those learning MI techniques to locate themselves within an objective based hierarchy across the pre-and post-commitment MI phases. The hierarchical structure indicates that the successful completion of higher-level objectives is, in part, contingent upon completion of those that precede them. The arrow on the side of the map reflects the fact that although the process is linear in general, lower level objectives should be revisited frequently. Additionally, bold text in Fig. 2 represents the principles that make up the MI ethos, located in shaded boxes near the objectives in which these principles are emphasized, although not exclusively applied only in these areas. As can be seen in Fig. 2, autonomy, collaboration, and evocation are emphasized equally across all objectives and phases. However, empathy is emphasized in the earliest stage of phase 1, and direction during the latter. The dotted lines around empathy and direction have been added to highlight the fact that these principles may be applied to any of the eight objectives within the navigational process. The specific interviewing techniques articulated by Miller and Rollnick (2002) can be mapped onto these objectives, and could guide school mental health professionals in conversations with students, parents, and teachers, in a general sense, to motivate them toward any specific targeted behavior.

Conversations with Students, Parents, and Teachers

Although an exhaustive list of the skills associated with MI practice is beyond the scope of this article, we recommend school mental health professionals begin with the three underlying constructs referred to by Miller and Rollnick (2002): evocation, collaboration and autonomy. As school mental health professionals approach students, parents and teachers with conversations about change, they can work to elicit personal reasons for change, recognize values, ideas and intentions, and support—even encourage—personal choice, while avoiding the expert role of educating or attempting to sell a change process. These efforts will

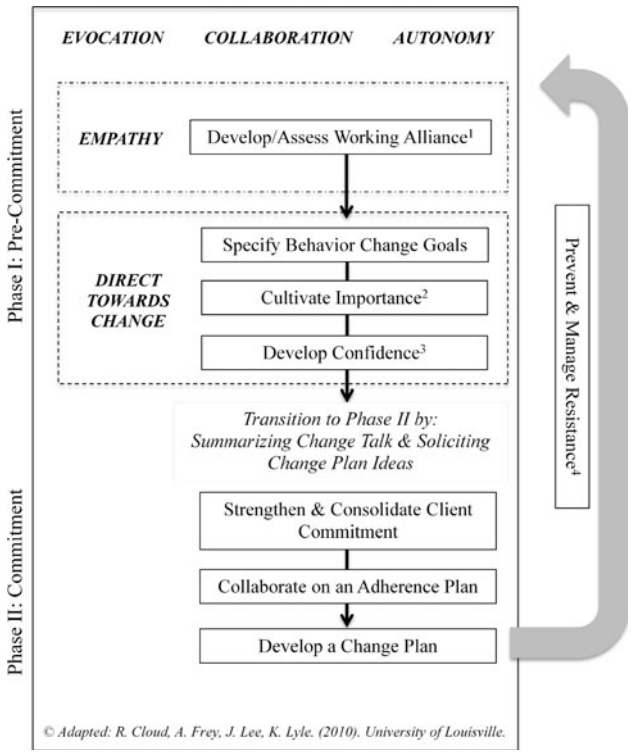

Fig. 2 MI navigational map. [1]Establish and maintain client centered environment for change: introduction, confirm autonomy, assure competence; discover important values underlying ideals of self and life, find relatedness of issue to life or values; affirmation with open-ended questions; transition with double sided + open ended question as summary. [2]Cultivate importance, raise discrepancy, elicit change talk by asking for the pros of change (desire, reason, need) then reinforce using complex reflections. Go back in time. Go forward in time. Use the importance ruler to assess importance on a scale of 1–10 then elicit change talk asking "why not a [lower number]?" [3]Develop confidence asking "how would you change if you were to decide to?" Rekindle memories and relive successful change from the past, elicit vivid details of facts and emotions. Assess confidence on a scale of 1–10 then elicit change talk asking "why not a [lower number]?" [4]Prevent resistance: use paradox (roll with resistance): remain neutral, minimize educ./never sell change or confront. If tense, transition with cons of change (use resistance response). Manage resistance: simple reflection: a universal strategy (lease risk). Special use reflections (in order of risk): double sided, emphasize power & control, amplify, come along side

support the establishment of a relationship based on respect and can communicate a sense of trust in the recipient's ability to change. From this foundation we recommend school mental health professionals attempt to employ those skills used to respond to resistance as a general practice during their interactions with students, parents and teachers. It is important to note that resistance within the context of MI includes arguments for sustaining the status quo or arguments against change. The front line of defense in these instances include: *simple reflection, emphasizing client-choice, double sided reflection, amplification, coming along side, shifting focus, reframing, or agreeing with a twist* (Miller & Rollnick, 2002). These strategies are illustrated in Table 1. It is important to note that MI is only indicated when the subject of the conversation has a well-developed sense of values, which typically develops in adolescence. There are two specific strategies in which school mental health professionals may want to employ MI practices: when trying to get a teacher or parent to embrace promising interventions and when attempting to increase the fidelity of implementation.

Embracing Promising Interventions

Fixsen et al. (2005) suggest that in all fields, but particularly education, there is a large gap between what is known to work and what is actually done. Maag (2001) suggests that teachers are negatively reinforced for punitive discipline practices, such as removing children from the classroom or advocating in- or out-of-school suspension. Thus, it is easy to see why school professionals may resist evidence-based practices, which are typically proactive and require changes in teacher behavior or the environment, which implies the problem does not reside within the child, but at the very least is shared (i.e., transactional) between the child and the adults who control the child's environment. In this case, it is quite clear that "buy in" among stakeholders is a critical ingredient across all stages of implementation of evidence-based practices. The literature supporting MI suggests it can be an effective mechanism to increase ambivalence between one's values or desired state and the status quo, which increases motivation and eventually commitment to an action plan—in this case the adoption of evidence-based practices. In relation to the navigation map (see Fig. 2), it may be that these professionals are being asked to implement a plan of action without an acceptable working alliance, or more likely when they do not believe change is important, and/or that they do not feel confident (i.e., self-efficacy) in their ability to implement the change plan. The principles of MI—*express empathy, develop discrepancy, roll with resistance, and support self-efficacy*—could be used to guide conversations with key implementation agents, with the change plan representing choice of relevant evidence-based practices.

In this way, MI can be used in a variety of settings when assessing an individual, group, or organization's motivation to change (Phase 1). For example, it could be used in individual consultation with teachers or when facilitating a group meeting (i.e., school- district- or state-wide positive behavior support leadership team; IEP team; or student support team). What remains critical is that the school mental health professional correctly assesses the individual or group's readiness to commit to a change plan (Phase 1 in Fig. 2) and match their approach to the current situation to

Table 1 Verbatim exemplifying responding to resistance

Speaker	Text	Strategy and rationale
Interventionist	Again, thanks very much for your obvious commitment to Angela, and supporting her here at home so that she can improve her behavior at school	Affirmation
	During our last visit you shared how Angela's poor behavior at school caused concern at your job, in your relationship with Ms. Smith and even with Angela herself. Because of this you were willing to explore what it might take to support Angela in changing her behavior at school. This would help you at work, in your relationship with Ms. Smith and with Angela	Summary
Parent	Yes, but I don't think anyone at school will listen	
Interventionist	You're not sure if Ms. Smith wants to help?	Simple reflection (responding to resistance with non-resistance)
Parent	Well, I do think she will help, but it won't be easy	
Interventionist	You've already shown a great deal of commitment to your child, I know you'll make a difference	Affirmation
	What were the most important values that you discovered from the values sorting activity?	Shift of focus
Parent	That was really hard, so many cards to sort through	
Interventionist	Thanks for hanging in there—your values are very important to this process	Affirmation
Parent	OK—But I don't know how this is going to help	
Interventionist	You think this process might be better if we didn't consider your values and the values you want for your child	Amplified reflection
Parent	No, I want what is best for my child. Honesty, hard work and family were my top three	
Interventionist	Why did you pick these cards?	Open-ended questions to encourage change talk
	What do these words mean to you personally, and for your child?	
	What do you see in your life, and your child's that convinces you this is important?	
	How does this relate to [the target behavior]?	
Parent	I think this was a waste of time	
Interventionist	So on one hand you are a committed parent who wants the best for his/her child; but on the other hand you find discussing the core values of your family to be a waste of time	Double-sided reflection
Interventionist	In the end, this is totally in your control. If you believe that discussing the core values of your family is a waste of time, let's move on to something more productive	Emphasizing personal choice and control

accelerate their progression toward or through the post-commitment phase, which addresses implementation fidelity.

Improving Fidelity of Existing Interventions

Too often implementation agents express motivation to implement an action plan through a verbal commitment, yet the resulting behavioral change necessary for effective outcomes is substandard. Anyone who has worked with a teacher on a behavior intervention plan can certainly appreciate this predicament, and research clearly demonstrates that even when plans are well written, adherence to the plan is often problematic (Conroy, Dunlap, Clarke, & Alter, 2005; Van Acker, Boreson, Gable, & Potterton, 2005). However, poor adherence to a change plan is by no means limited to behavior intervention planning, or to teachers for that matter. In relation to Fig. 2, this assumes Phase 2 work has started yet a return to Phase 1 strategies is often necessary because resistance to implementation is present. Recent trends in school-based mental health, such as progress monitoring (Shapiro, Hilt-Panahon, & Gischlar, 2010) and classroom management consultation are likely to be difficult for teachers, and applying MI techniques associated with the pre-commitment phase may be beneficial long after commitment to the change plan is established.

Future Directions

We anticipate MI within the context of school mental health will expand in the next decade due to the flexibility of the process and its techniques along with the evidence base supporting its use. MI is a promising yet relatively untapped approach to potentially enhance the development and implementation of effective school-based interventions. In this article, we have discussed the principles of MI, summarized a number of school-based MI innovations, and highlighted how school mental health professionals

might adapt MI in educational settings to improve educational outcomes. We have highlighted the possibilities with regard to increasing parent involvement, building collaboration between home and school, addressing significant educational and mental health problems with relatively brief intervention, and increasing the fidelity of interventions that depends largely on changes in teacher or parent behavior.

Based on our initial attempts to use MI, the outlook for its use with children and families at the tertiary level is promising. Given the individualized, problem-solving nature of our approach to the enhancement of the First Step to Success intervention, it is imperative that counselors have well-established clinical skills to apply MI in differentiated environments (home and school), as well as across multiple agents (parents, teachers). Thus, the instructional design of training systems to adequately prepare school mental health professionals for the implementation of MI with fidelity and resourcefulness is critical to our current work and should be a focus of future research. Future research should also examine how MI strategies can be used to improve the reach and effectiveness of existing interventions. Additionally, the field would benefit from systematic study of the barriers and facilitators to effectively implementing MI approaches within the context of school mental health. For existing interventions, attention should be given to process measures, such as social validity, feasibility of high fidelity implementation, and satisfaction, as well as more rigorous designs to assess efficacy and effectiveness.

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