MAIN



What's wrong with motivational interviewing? I. Theoretical and methodological critiques

Lars G. Forsberg¹, Lisa Forsberg² and William R. Miller³

¹MIC Lab AB, Stockholm, Sweden, ²Uehiro Oxford Institute, University of Oxford, Oxford, UK and ³Department of Psychology, The University of New Mexico, Albuquerque, NM, USA

Corresponding author: Lisa Forsberg; Email: lisa.forsberg@uehiro.ox.ac.uk

(Received 22 December 2023; revised 22 February 2025; accepted 5 March 2025)

Abstract

Background: Motivational Interviewing (MI) has demonstrated significant effects in diverse areas of practice, with over 2,000 controlled clinical trials published. Some criticisms of MI have emerged along the way.

Aims: We examine theoretical and methodological critiques of MI.

Method: We discuss three significant theoretical and methodological criticisms of MI: (1) that MI lacks conceptual stability; (2) that MI lacks a theoretical foundation; and (3) that MI is just common factors in psychotherapy.

Results: It is true that definitions and descriptions of MI have evolved over the years. Mastery of MI clearly varies across providers, and when the quality of an intervention is unmeasured, it is unclear what has been trained or delivered. Reliable and valid tools to assess MI fidelity are available but often unused in outcome studies. It remains unclear what levels of proficiency are necessary to improve client outcomes. Some attempts to minimize variability in the delivery of MI appear to have reduced its effectiveness. In respect of the second critique is that MI lacks a theoretical foundation. It is unclear whether and how this is a disadvantage in research and practice. Various theories have been proposed and specific causal chain predictions have been tested. A third critique is that MI is merely common factors found among psychotherapists. The contribution of such relational skills is testable. There are specific aspects of MI related to client language that influence client outcomes above and beyond its relational components. Conclusions: The critiques reflect important factors to consider when delivering, training, and evaluating MI research.

Keywords: common factors; conceptualization; critiques of MI; MI learning; MI practice; MI theory; motivational interviewing; theoretical limitations; treatment integrity

Introduction

Motivational interviewing (MI) is 'a particular way of talking with people about change and growth to strengthen their own motivation and commitment' (Miller and Rollnick, 2023). Some MI skills are general and used in other forms of everyday communication. At the same time, MI is a complicated skill set that supports practitioners in conversations about behaviour change where the path towards change can be hard to see. Like downhill skiing, MI is easy to understand and difficult to learn to use skillfully. MI skills are best acquired by regularly practising with reliable feedback. MI has been widely used in treating a variety of health concerns, with more than 2000 controlled clinical trials published in the four decades since it was first described (Miller, 1983).

© The Author(s), 2025. Published by Cambridge University Press on behalf of British Association for Behavioural and Cognitive Psychotherapies. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

Meta-analyses have reported significant effects of MI for reducing complex behaviours where individuals are often ambivalent, seeing both advantages and disadvantages; for example in alcohol, tobacco, and cannabis use (Calomarde-Gómez et al., 2021; Lundahl et al., 2010), changing health behaviour in medical (Lundahl et al., 2013; Palacio et al., 2016) and dental care (Borrelli et al., 2015), and increasing treatment adherence, retention, and completion (Hettema et al., 2005; Lawrence et al., 2017; Wong-Anuchit et al., 2019). The broad diffusion of MI is reflected in controlled trials with significant effects as diverse as enhanced adoption of clean drinking water practices in Zambia (Thevos et al., 2000), improved communication skills for Swedish veterinarians in animal health management (Svensson et al., 2022), and improved academic performance of college students in New Mexico and Nigeria (Chike-Okoli and Okoli, 2018; Daugherty, 2003).

MI, then, is now widely used in many professions and contexts, nations and languages. However, various critiques of MI have also emerged through its continuing evolution (Miller, 2023). Critiques may help in understanding MI and in clarifying the method. This article summarizes and discusses three significant theoretical and methodological criticisms of MI: (1) that MI lacks conceptual stability; (2) that MI lacks a theoretical foundation; and (3) that MI is just common factors in psychotherapy. We plan to discuss further ethical critiques of MI in a subsequent article.

MI lacks conceptual stability

One prominent critique of MI is that it lacks conceptual stability. So, what *is* MI? How do we know whether what we are testing in studies and teaching practitioners really is MI?

Both Björk (2014) and Atkinson and Woods (2017) fault the conceptual stability of MI, describing how definitions of MI have changed over time. For example, Miller and Rollnick (1991) first set forth five principles of MI: express empathy, develop discrepancy, avoid argumentation, roll with resistance, and support self-efficacy. In their second edition (Miller and Rollnick, 2002) this was reduced to four principles, collapsing develop discrepancy and avoid argumentation into 'roll with resistance'. Next, they vacated the principles altogether, instead describing four processes of MI (engaging, focusing, evoking, and planning) and deconstructing their previously used concept of resistance (Miller and Rollnick, 2013). Atkinson and Woods also note other changes in the definition of MI, including that from 2003 onwards there was increased focus on client language by eliciting change talk and avoiding elaboration on the client's reasons for maintaining status quo behaviors (sustain talk), and later increased emphasis on avoiding MI-inconsistent responses. There also appeared a new description of the underlying 'spirit' with which MI is to be practised (Rollnick and Miller, 1995) that has received increasing emphasis through subsequent editions of the principal text (Miller and Rollnick, 2023). Whereas subtitles of the 1991 and 2002 texts described preparing people for change, subsequent versions removed this preparatory emphasis, focusing instead more broadly on helping people change.

Some of the changes made in how MI is defined and described have been carefully explained with reference to data from emerging research. One such example is how client speech came to feature more prominently in descriptions of MI after 2003, particularly influenced by the psycholinguistic research of Paul Amrhein (Amrhein, 2004; Amrhein *et al.*, 2003). Different categories of client change talk (and sustain talk) were recognized, and MI practitioners were advised how to respond to client speech as a result of emerging research showing that client insession speech and how MI practitioners respond to it predict whether behaviour change will happen. It became clear from correlational, sequential, and experimental studies that counsellors influence the balance of clients' change talk and sustain talk (Apodaca and Longabaugh, 2009; Gaume *et al.*, 2010; Glynn and Moyers, 2010; Walthers *et al.*, 2019) which in turn predicts subsequent client behaviour change (Gaume *et al.*, 2013; Lindqvist *et al.*, 2017; Magill *et al.*, 2018).

Other changes to MI's definition or description, however, have not been explained in relation to research findings. Atkinson and Woods note, for example, that no clear explanation was given for the transition from describing MI in terms of *principles* to describing it in terms of *processes*. Another example of an unexplained theoretical shift is the varying relationship between MI and the transtheoretical model of change (TTM; Prochaska and DiClemente, 1984) that seemed central in early descriptions of MI (Miller, 1983; Miller and Rollnick, 1991), then more distant in later editions. Frustration with such conceptual changes is understandable. They lead to uncertainty regarding what is in fact being tested in studies and what is being taught in MI training. TTM (Prochaska and DiClemente, 1984) supports clinicians' understanding of different types of ambivalence and responding to them appropriately. TTM's formulation of change as a multi-faceted process including many types of ambivalence, rather than seeing change as a dichotomous process may have contributed to MI's spread to areas where more complicated change is the focus, such as smoking, alcohol use, etc. Different types of ambivalence require different MI skills. However, TTM's theoretical foundation in MI has been toned down and the reasoning for doing so has been unclear.

Atkinson and Woods also point out that available treatment manuals tend to describe not MI on its own – or 'pure' MI – but rather how MI can be combined with other interventions as in motivational enhancement therapy (MET; Miller *et al.*, 1992) or a combined behavioural intervention (Miller, 2004). Similarly, other researchers have described how MI should be done in concert with another study intervention (e.g. Naar *et al.*, 2021), often referred to as adaptations of MI (Burke *et al.*, 2003). 'Pure' MI had not been manualized until recently (Hurlocker *et al.*, 2023). It is indeed the case that by far the most common use of MI in controlled clinical trials has been in combination with other evidence-based treatment, sometimes as a pre-treatment intervention (Westra *et al.*, 2009) but more often integrated in less specified ways. In the largest randomized trial of treatments for alcohol use disorders (Project Match, Babor and Del Boca, 2003), MI in combination with objective health feedback was associated with behaviour change, with developing discrepancy on the basis of negative objective health feedback being an important ingredient.

In MI, the focus now is on how ambivalence is expressed in language, even if ambivalence can also be expressed in feelings, body language, silence, and behaviour. The concept of ambivalence can be seen as having been given an operational definition in MI in client speech concerning change versus client speech favouring the status quo.

Atkinson and Woods' criticism that MI lacks a stable definition and a manual for its use is echoed by Björk (2014) who noted that there is often no definition of MI in the scientific studies that have been conducted on its efficacy and effectiveness. Björk, too, notes that when defined in research study manuals, MI tends to be used in combination with another intervention rather than as 'pure MI'. Both argue that the absence of clear definition gives rise to important methodological and practical problems for the method and its practice, as well as for research on its efficacy and effectiveness. For example, the lack of definition makes it uncertain exactly what has been delivered in different studies and to what extent MI is the same across studies. Changes in how MI was described in the early 1990s versus 20 years later may have caused differences in how MI was done in studies. MI is often described as an evidence-based method for changing behaviour. However, it is likely that the intervention referred to as 'MI' has been done differently across the many studies that make up its evidence basis. This concern was also raised by Miller and Rollnick (2014) with regard to MI and behavioural interventions more generally.

Björk also notes, however, that while MI has lacked a clear and consistent definition, the method has been stabilized by other kinds of efforts. One such effort is the development and widespread use of MI fidelity assessment tools, the first of which was the Motivational Interviewing Skills Code (MISC; DeJonge *et al.*, 2005; Miller and Mount, 2001). A simplified Motivational Interviewing Treatment Integrity (MITI) code followed, with demonstrated reliability and validity, and which continues to be updated (Moyers *et al.*, 2016), with practice

samples more recently subjected to automated machine coding via voice recognition (e.g. Tanana *et al.*, 2016). It remains unclear what levels of proficiency practitioners need on such measures in order to improve clients' outcomes. It is also clear that in most research and clinical applications of MI to date there has been little or no use of such tools to document fidelity (Lundahl *et al.*, 2013), so their overall effect on stabilizing MI practice may be minimal (Atkinson and Woods, 2017).

In psychotherapy, the idea of a standardized treatment manual is a relatively recent by-product of funding for clinical trials that require specification of the interventions to be evaluated. When developing new psychological treatments, it has become common to first develop a step-by-step therapist manual to guide practice and later the dissemination of the intervention. Such homogenization of practice is neither common nor particularly welcome in most clinical service settings, but is it a good idea? Atkinson and Woods note that in the Lundahl et al. (2013) metaanalysis of trials in health care settings, studies that measured MI fidelity produced lower effect sizes compared with those that did not document fidelity. Another meta-analysis (Hettema et al., 2005) found that intervention effect size was significantly lower when the delivery of MI was manual-guided. These two findings indicate that attempts to stabilize the fidelity of MI and minimize its variability may reduce its effectiveness. In a clinical trial for which William Miller personally wrote the standardized treatment manual and personally trained and supervised the therapists, there was no effect of MET on client outcomes (Miller et al., 2003). One explanation could be that treatment integrity measured in terms of fidelity to a manual or treatment integrity assessment tool might miss important MI skills. Perhaps process studies can shed some light on this issue, highlighting a need to understand MI better. The fidelity issue may be a signal that manuals have lacked a component that is otherwise easier to perform, and that what we measure in MI perhaps does not correlate enough with well-performed MI. Clearly there is more to learn about the content of MI.

In his critique, Björk observes that in contrast to manual-guided treatment, MI has evolved in a manner similar to how technological innovations are often developed and disseminated (cf. Rogers, 2003). Such innovations are often co-created by many people using a methodology that seeks to understand how the innovation works and why. Björk notes that the invention of a technology is seldom an isolated event but rather a long-term process whereby people involved in research and in practical applications test applications in new areas. Technological innovations often begin with attempts to measure features that are hypothesized to be active components. MI seems to mirror this in the way in which researchers and practitioners of MI have both been involved in developing the method and applying it in many different fields and contexts.

In MI, this broad diffusion has happened by training people to teach others in how to use the method. A first Training of New Trainers (TNT) was offered by Miller and Rollnick in 1993. In 1995, a loose network of MI trainers was formed that would later be formally organized as the Motivational Interviewing Network of Trainers (MINT). As Björk notes, MINT established ties between researchers, trainers, and practitioners, developing a culture that encourages its members to 'give more than you take'. Materials and methods were freely shared to facilitate MI practice, training, and research. First on an email listserv and later on a web-based platform, many kinds of MI-related challenges and solutions were discussed among MINT members. Once a year, new MI trainers were trained, and in connection with the TNT there developed an informal MI conference known as the MINT Forum, where members shared updates, views, and innovations. As new research findings emerged these, too, were disseminated via MINT, influencing future training, practice, and research. This organized collaboration between practitioners, trainers and researchers for more than 30 years has stabilized what MI is and supported the practice and training of MI in a unique way for a psychotherapeutic intervention and its development.

In essence, MI has been analogous to open-source software – freely available for those who are interested in trying it. The authors made no attempt to trademark, franchise, copyright, or otherwise control or restrict its use (Miller, 2023; Miller and Rollnick, 2023). This may account in part for its widespread adoption across different problems, settings, practitioner groups, nations,

and languages (Bjőrk, 2014). Atkinson and Woods also note that MI as an intervention is flexible and capable of being applied in many different contexts with a wide range of clients. Like the person-centred approach of Carl Rogers on which it is based (Miller and Moyers, 2017), MI has been applied in many fields including education (Herman *et al.*, 2021; Rollnick *et al.*, 2016), negotiation (Amador, 2022), pastoral care (Clarke *et al.*, 2013; Miller *et al.*, 2008), leadership and management (Marshall and Nielsen, 2020; Organ, 2021), and social work (Forrester *et al.*, 2021; Hohman, 2021).

A necessary consequence of open sourcing is a lack of consistency and quality assurance in MI delivery and training. No permission or certification is required to practise MI or claim to do so. The same is true, of course, for nearly all forms of therapy, counselling, and coaching. Even if it were desirable for a treatment method to be unilaterally defined and unchanging, that is not the reality of psychotherapies. Their processes and outcomes vary with the person providing them (Miller and Moyers, 2021).

The MINT offers to practitioners and trainers updated training methods and exercises, new research findings, and innovative applications of MI. MINT's collaborative and supportive culture of sharing and giving back have contributed to the development and dissemination of MI. MINT also promotes interaction among professionals in research, practice, and training. As noted above, a potential downside of such free exchange is a lack of control over how MI is spread and used. In combination with conceptual changes over time, there is understandable concern about what is actually being delivered in practice, taught in training, and tested in studies of MI.

MI lacks a theoretical foundation

A second criticism of MI is that it has no consistent or coherent theoretical basis (Atkinson and Woods, 2017). Implicit in this critique is an ideal that a psychotherapy should be deductively derived from and guided by a pre-existing theory of personality or therapy. Proponents of this critique have been less clear about what disadvantages are bestowed by the lack of an *a priori* theoretical foundation. Are atheoretical therapies inherently more difficult to learn or more variable in practice? Effective medications are sometimes discovered by accident without a theoretical reason for or understanding of mechanisms of their efficacy.

In becoming President of the American Psychological Association in 1947, Carl Rogers argued that clinical psychology should be an empirical science with measurable therapeutic process and outcomes. His work was a nascent clinical science and a forerunner of current research on active ingredients and mechanisms of change in psychotherapy (e.g. Magill *et al.*, 2015). His personcentred approach was derived not from a pre-existing theory but abductively through close observation of clinical practice to develop and test hypotheses about what therapeutic factors actually help clients change (Kirschenbaum, 2009). Theories arose later to explain the results being observed (e.g. Gendlin, 1961; Rogers, 1959).

MI similarly began from close examination and discussion of therapeutic practice (Miller, 1983) stimulated in part by the incidental finding of an unexpectedly large effect of counsellor empathy on cognitive behaviour therapy outcomes (Miller *et al.*, 1980). There was no predominant theory guiding its development; MI has been described as quintessentially pragmatic (Carr, 2023). Early hypotheses were operationalized and tested in clinical trials (Brown and Miller, 1993; Miller *et al.*, 1988; Miller *et al.*, 1993; Moyers *et al.*, 2005), eventually integrating Amrhein's psycholinguistic findings (Amrhein, 2004; Amrhein *et al.*, 2003). Tentative theories began to emerge (de Almeida Neto, 2017; Markland *et al.*, 2005; Miller and Rose, 2009) along with the development of causal chain predictions of client outcomes (Magill *et al.*, 2010, 2018; Moyers *et al.*, 2009).

As with programmatic studies of the person-centred approach (Truax and Carkhuff, 1967), the above-described lines of research have provided increasingly clear guidelines for clinical practice

of MI. Has the absence of prior theory impaired delivery and learning of MI? Although MI can be simplified conceptually (Miller and Rollnick, 2023), the available evidence on training does indicate that MI can be challenging to learn, with large variability in mastery across individuals. One obstacle is that without reliable performance feedback, clinicians can substantially overestimate their proficiency with MI, undermining motivation to continue learning (Miller and Mount, 2001). Another challenge is difficulty in unlearning prior MI-inconsistent habits of practice (Dunn et al., 2016; Madson et al., 2009; Miller et al., 2004). These obstacles are not unique to MI, nor is the need for substantial time to develop mastery of a psychotherapy. Regardless of whether these are greater difficulties for MI and whether they have any connection to its lack of a theoretical foundation, the evidence that learning MI is both challenging and variable is reason enough to question whether it is indeed 'MI' that has spread widely to so many settings and practitioner groups. It remains unclear what elements of MI have been disseminated, and 'the efficacy of MI approaches is unclear given the inconsistency of MI descriptions and intervention components' (Morton et al., 2015).

MI is just common factors

If MI has lacked theoretical grounding, could it be nothing more than general components of good practice that are sometimes referred to as 'common' or 'non-specific' factors in psychotherapy? These two terms can themselves be misleading. Allegedly 'common' factors are not universal practices found in all therapies or therapists. Neither does 'non-specific' mean that these factors are unspecifiable or unmeasurable. The meaning of both 'non-specific' and 'common' is that these practices are not unique or limited to any particular theoretical orientation in psychotherapy. Perhaps a better term, then, would be *therapeutic* factors (Kivlighan and Holmes, 2004).

So, what are these skills of more effective therapists? Miller and Moyers (2021) reviewed 70 years of psychotherapy research to identify therapeutic skills that distinguish clinicians whose clients show better outcomes compared with those treated by their peer practitioners working within the same setting, theoretical orientation, or delivering the same specific and even manualized treatment. These therapist factors often have substantially more impact on client outcomes than specific treatment procedures that are being delivered (Imel *et al.*, 2008; Wampold and Brown, 2005). Miller and Moyers identified eight such factors empirically associated with more effective therapists: accurate empathy, acceptance, positive regard, genuineness, focus, hope, evocation, and offering information and advice.

Of these eight factors, seven have been explicitly described and taught in MI since its inception. Only genuineness was unmentioned, an omission corrected in the most recent edition of the source text (Miller and Rollnick, 2023). In this sense, MI does appear to embody what renders helpers more helpful, operationalizing and combining these common non-specific therapeutic skills. This is consistent with the finding in addiction research that MI can improve client outcomes when added to other evidence-based treatments (Hettema *et al.*, 2005). It also suggests testable hypotheses about what is actually being 'added' by MI, coming full circle to the aforementioned seminal finding that therapist empathy substantially improved outcomes of cognitive behaviour therapy (Miller *et al.*, 1980). MI calls attention to often ignored therapist factors that can improve client outcomes across a wide array of treatment methods and clinical problems.

Is MI *merely* a compilation of these non-specific therapeutic skills? This is a testable question. However, MI has something more in its treatment bag. Beyond the person-centred *relational* element of MI there is also a *technical* component related to client language known as change talk and sustain talk (Magill *et al.*, 2018; Miller and Rose, 2009). Specifically training this aspect of MI in addition to the relational skills has been shown to differentially impact clients' in-session speech that has been linked to subsequent change (Moyers *et al.*, 2017). The person-centred relational

skills of MI can themselves influence change and sustain talk (DeVargas and Stormshak, 2020). Three experimental trials have compared MI with a non-directive person-centred condition embodying the relational aspect of MI without seeking to evoke change talk. In two of these studies the MI condition (which included differential responding to change and sustain talk) yielded significantly greater (Sellman *et al.*, 2001) or faster change (Morgenstern *et al.*, 2012) whereas the third found no 8-week difference in outcome between the directive and non-directive conditions (Morgenstern *et al.*, 2017).

Discussion

We have considered three potential methodological and theoretical critiques of MI in order to understand more of what we don't know. The first is that MI has lacked conceptual consistency and stability. Definitions and descriptions of MI have indeed evolved across four decades as is common with technological innovations. It is also true that what is claimed to be MI in clinical trials and in practice has often been undefined and poorly described. A saving grace here is that there are well-developed MI fidelity measures that show improvement with training and do predict client outcomes. In the absence of such measures, it is difficult to know what has actually been delivered in research and practice.

A second critique is that MI has no theoretical moorings. This is also true in that MI was not derived deductively from a pre-existing theory but abductively from close examination of clinical practice to generate testable hypotheses. Various theoretical explanations have subsequently emerged for the observed processes and outcomes of MI, but the practice of MI has not been grounded in or limited to a particular theory of personality or psychotherapy. It is unclear whether and how this atheoretical nature of MI disadvantages research and practice. A good theoretical foundation would give the method a context that helps us understand when it should be used and how it can be taught in a pedagogical manner. The relevance of findings from MI research to other theories and methods might be clearer and promote new knowledge. However, in practice it is common to try things out in practice to see what works without an *a priori* theory.

A third potential critique is that MI is nothing more than general therapeutic skills that can be found in many different human services and theoretical orientations. Again, it is true that the relational components of MI do correspond closely to 'non-specific' but measurable skills that characterize more effective psychotherapists. It is surely not the case that all therapists are skillful in or practise these therapeutic attributes, and the extent to which they do can significantly affects their clients' outcomes. There are also specific technical aspects of MI related to client language that do appear to improve outcomes above and beyond its person-centred relational components.

There are other critiques related to specific theories that we have not discussed in this article. For example, Mylvaganam (2009) criticizes how MI is given limited anchoring in ambivalence theory and cognitive dissonance theory (cf. Draycott and Dabbs, 1998). Similarly, there have been attempts to link MI with other theoretical frameworks such as self-determination theory (Markland *et al.*, 2005). Exploring such junctions may inform future research and developments of MI. Our aim in this article has been to summarize some of the main theoretical and methodological critiques of MI that have emerged to date and what they teach us about the prospects of the method.

Data availability statement. Not applicable to this article.

Acknowledgements. None.

Author contributions. Lars Forsberg: Conceptualization (equal), Formal analysis (equal), Investigation (equal), Methodology (equal), Writing - original draft (equal), Writing - review & editing (equal); Lisa Forsberg: Conceptualization (equal), Formal analysis (equal), Investigation (equal), Methodology (equal), Writing - original draft (equal), Writing - review & editing (equal); William R. Miller: Conceptualization (equal), Formal analysis (equal), Investigation (equal), Methodology (equal), Writing - original draft (equal), Writing - review & editing (equal).

Financial support. L.G.F. and W.R.M. received no specific grant from any funding agency, commercial or not-for-profit sectors for this research. L.F. received funding from the Journal of Moral Education Trust, via the British Academy/Leverhulme Trust Small Research Grants scheme (award SRG2324\241695).

Competing interests. L.G.F. is one of the owners of MIC Lab, a company providing treatment integrity assessment and feedback on MI practice. L.F. has no competing interests. W.R.M. receives royalties from Guilford Press, Psychwire.com, and also from The Change Companies where he serves as a senior consultant.

Ethical standards. We have abided by the Ethical Principles of Psychologists and Code of Conduct as set out by the BABCP and BPS. No ethical approvals were needed for this research.

References

- Amador, X. (2022). I'm right, you're wrong, now what? Break the impasse and get what you need. Vida Press.
- Amrhein, P. C. (2004). How does motivational interviewing work? What client talk reveals. *Journal of Cognitive Psychotherapy*, 18, 323–336.
- Amrhein, P. C., Miller, W. R., Yahne, C. E., Palmer, M., & Fulcher, L. (2003). Client commitment language during motivational interviewing predicts drug use outcomes. *Journal of Consulting and Clinical Psychology*, 71, 862–878.
- Apodaca, T. R., & Longabaugh, R. (2009). Mechanisms of change in motivational interviewing: a review and preliminary evaluation of the evidence. Addiction, 104, 705–715.
- Atkinson, C., & Woods, K. (2017). Establishing theoretical stability and treatment integrity for motivational interviewing. Behavioural & Cognitive Psychotherapy, 45, 337–350.
- Babor, T.F., & Del Boca, F.K. (eds) (2003). Treatment Matching in Alcoholism. Cambridge University Press.
- Björk, A. (2014). Stabilizing a fluid intervention: the development of motivational interviewing 1983–2013. Addiction Research and Theory, 22, 313–324.
- Borrelli, B., Tooley, E. M., & Scott-Sheldon, L. A. (2015). Motivational interviewing for parent-child health interventions: a systematic review and meta-analysis. *Pediatric Dentistry*, 37, 254–265.
- **Brown, J., & Miller, W. R.** (1993). Impact of motivational interviewing on participation and outcome in residential alcoholism treatment. *Psychology of Addictive Behaviors*, 7, 211–218.
- Burke, B. L., Arkowitz, H., & Menchola, M. (2003). The efficacy of motivational interviewing: a meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology*, 71, 843–861.
- Calomarde-Gómez, C., Jiménez-Fernández, B., Balcells-Oliveró, M., Gual, A., & López-Pelayo, H. (2021). Motivational interviewing for cannabis use disorders: a systematic review and meta-analysis. European Addiction Research, 27, 413–427.
- Carr, E. S. (2023). Working the Difference: Science, Spirit, and the Spread of Motivational Interviewing. University of Chicago Press.
- Chike-Okoli, A., & Okoli, T. (2018). Investigating the effectiveness of motivational interviewing on the academic performance of senior secondary students in private schools in Niger State, Nigeria. *International Journal of Innovative Research & Development*, 7, 107–114.
- Clarke, P. B., Giordano, A. L., Cashwell, C. S., & Lewis, T. F. (2013). The straight path to healing: using motivational interviewing to address spiritual bypass. *Journal of Counseling and Development*, 91, 87–94.
- **Daugherty, M. D.** (2003). A randomized trial of motivational interviewing with college students for academic success. PhD dissertation, University of New Mexico, Albuquerque.
- **de Almeida Neto, A. C.** (2017). Understanding motivational interviewing: an evolutionary perspective. *Evolutionary Psychological Science*, *3*, 379–389.
- DeJonge, J. J. M., Schippers, G. M., & Schaap, C. P. D. R. (2005). The Motivational Interviewing Skill Code: reliability and a critical appraisal. *Behavioural & Cognitive Psychotherapy*, 33, 1–14.
- DeVargas, E. C., & Stormshak, E. A. (2020). Motivational interviewing skills as predictors of change in emerging adult risk behavior. *Professional Psychology: Research and Practice*, 51, 16–24.
- Draycott, S., & Dabbs, A. (1998) Cognitive dissonance 2: a theoretical grounding of motivational interviewing. British Journal of Clinical Psychology, 37, 355.
- Dunn, C., Darnell, D., Atkins, D. C., Hallgren, K. A., Imel, Z. E., Bumgardner, K., Owens, M., & Roy-Byrne, P. (2016).
 Within-provider variability in motivational interviewing integrity for three years after MI training: does time heal? *Journal of Substance Abuse Treatment*, 65, 74–82.
- Forrester, D., Wilkins, D., & Whittaker, C. (2021). Motivational Interviewing for Working with Children and Families: A Practical Guide for Early Intervention and Child Protection. Jessica Kingsley Publications.
- Gaume, J., Bertholet, N., Faouzi, M., Gmel, G., & Daeppen, J. B. (2010). Counselor motivational interviewing skills and young adult change talk articulation during brief motivational interventions. *Journal of Substance Abuse Treatment*, 39, 272–281.

- Gaume, J., Bertholet, N., Faouzi, M., Gmel, G., & Daeppen, J. B. (2013). Does change talk during brief motivational interventions with young men predict change in alcohol use? *Journal of Substance Abuse Treatment*, 44, 177–185.
- **Gendlin, E. T.** (1961). Experiencing: a variable in the process of therapeutic change. *American Journal of Psychotherapy*, 15, 233–245.
- Glynn, L. H., & Moyers, T. B. (2010). Chasing change talk: the clinician's role in evoking client language about change. Journal of Substance Abuse Treatment, 39, 65–70.
- Herman, K. C., Reinke, W. M., Frey, A. J., & Shepard, S. A. (2021). Motivational Interviewing in Schools: Stretegies for Engaging Parents, Teachers, and Students. Springer.
- Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology*, 1, 91–111. Hohman, M. (2021). *Motivational Interviewing in Social Work Practice* (2nd edn). Guilford Press.
- Hurlocker, M. C., Moyers, T. B., Hatch, M., Curran, G., McCrady, B., Venner, K. L., & Witkiewitz, K. (2023). Effectiveness and feasibility of a motivational interviewing intake (MII) intervention for increasing client engagement in outpatient addiction treatment: an effectiveness-implementation hybrid design protocol. Addiction Science & Clinical Practice, 18, 63.
- Imel, Z. E., Wampold, B. E., Miller, S. D., & Fleming, R. R. (2008). Distinctions without a difference: direct comparisons of psychotherapies for alcohol use disorders. *Psychology of Addictive Behaviors*, 22, 533–543.
- Kirschenbaum, H. (2009). The Life and Work of Carl Rogers. American Counseling Association.
- Kivlighan, D. M., Jr, & Holmes, S. E. (2004). The importance of therapeutic factors: a typology of therapeutic factors studies. In J. L. DeLucia-Waack, D. A. Gerrity, C. R. Calodner, & M. T. RIva (eds), *Handbook of Group Counseling and Psychotherapy* (pp. 23–36). Sage.
- Lawrence, P., Fulbrook, P., Somerset, S., & Schulz, P. (2017). Motivational interviewing to enhance treatment attendance in mental health settings: a systematic review and meta-analysis. *Journal of Psychiatric and Mental Health Nursing*, 24, 699–718.
- Lindqvist, H., Forsberg, L., Enebrink, P., Andersson, G., & Rosendahl, I. (2017). Relational skills and client language predict outcome in smoking cessation treatment. Substance Use & Misuse, 52, 33–42.
- Lundahl, B., Moleni, T., Burke, B. L., Butters, R., Tollefson, D., Butler, C., & Rollnick, S. (2013). Motivational interviewing in medical care settings: a systematic review and meta-analysis of randomized controlled trials. *Patient Education and Counseling*, 93, 157–168.
- Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D., & Burke, B. L. (2010). A meta-analysis of motivational interviewing: twenty-five years of empirical studies. Research on Social Work Practice, 20, 137–160.
- Madson, M. B., Loignon, A. C., & Lane, C. (2009). Training in motivational interviewing: a systematic review. *Journal of Substance Abuse Treatment*, 36, 101–109.
- Magill, M., Apodaca, T. R., Barnett, N. P., & Monti, P. M. (2010). The route to change: within-session predictors of change plan completion in a motivational interview. *Journal of Substance Abuse Treatment*, 38, 299–305.
- Magill, M., Apodaca, T. R., Borsari, B., Gaume, J., Hoadley, A., Gordon, R. E. F., Tonigan, J. S., & Moyers, T. (2018).

 A meta-analysis of motivational interviewing process: technical, relational, and conditional process models of change. *Journal of Consulting and Clinical Psychology*, 86, 140–157.
- Magill, M., Kiluk, B. D., McCrady, B. S., Tonigan, J. S., & Longabaugh, R. (2015). Active ingredients of treatment and client mechanisms of change in behavioral treatments for alcohol use disorders: progress 10 years later. Alcoholism: Clinical and Experimental Research, 39, 1852–1862.
- Markland, D., Ryan, R. M., Tobin, V., & Rollnick, S. (2005). Motivational interviewing and self-determination theory. *Journal of Social and Clinical Psychology*, 24, 811–831.
- Marshall, C., & Nielsen, A. S. (2020). Motivational Interviewing for Leaders in the Helping Professions. Guilford Press.
- Miller, W. R. (1983). Motivational interviewing with problem drinkers. Behavioural Psychotherapy, 11, 147–172.
- Miller, W. R. (ed) (2004). Combined Behavioral Intervention manual: A Clinical Research Guide for Therapists Treating People with Alcohol Abuse and Dependence (Vol. 1). National Institute on Alcohol Abuse and Alcoholism.
- Miller, W. R. (2023). The evolution of motivational interviewing. Behavioural and Cognitive Psychotherapy, 51, 616-632.
- Miller, W. R., Benefield, R. G., & Tonigan, J. S. (1993). Enhancing motivation for change in problem drinking: a controlled comparison of two therapist styles. *Journal of Consulting and Clinical Psychology*, 61, 455–461.
- Miller, W. R., Forcehimes, A., O'Leary, M., & LaNoue, M. (2008). Spiritual direction in addiction treatment: two clinical trials. *Journal of Substance Abuse Treatment*, 35, 434–442.
- Miller, W. R., & Mount, K. A. (2001). A small study of training in motivational interviewing: does one workshop change clinician and client behavior? *Behavioural and Cognitive Psychotherapy*, 29, 457–471.
- Miller, W. R., & Moyers, T. B. (2017). Motivational interviewing and the clinical science of Carl Rogers. *Journal of Consulting and Clinical Psychology*, 85, 757–766.
- Miller, W. R., & Moyers, T. B. (2021). Effective Psychotherapists: Clinical Skills That Improve Client Outcomes. Guilford Press. Miller, W. R., & Rollnick, S. (1991). Motivational Interviewing: Preparing People to Change Addictive Behavior. Guilford Press.
- Miller, W. R., & Rollnick, S. (2002). Motivational Interviewing: Preparing People for Change. Guilford Press.
- Miller, W. R., & Rollnick, S. (2013). Motivational Interviewing: Helping People Change (3rd edn). Guilford Press.

- Miller, W. R., & Rollnick, S. (2014). The effectiveness and ineffectiveness of complex behavioral interventions: impact of treatment fidelity. Contemporary Clinical Trials, 37, 234–241.
- Miller, W. R., & Rollnick, S. (2023). Motivational Interviewing: Helping People Change and Grow (4th edn). Guilford Press.
- Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. American Psychologist, 64, 527–537.
- Miller, W. R., Sovereign, R. G., & Krege, B. (1988). Motivational interviewing with problem drinkers: II. The Drinker's Check-up as a preventive intervention. *Behavioural Psychotherapy*, 16, 251–268.
- Miller, W. R., Taylor, C. A., & West, J. (1980). Focused versus broad-spectrum behavior therapy for problem drinkers. Journal of Consulting and Clinical Psychology, 48, 590–601.
- Miller, W. R., Yahne, C. E., Moyers, T. B., Martinez, J., & Pirritano, M. (2004). A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology*, 72, 1050–1062.
- Miller, W. R., Yahne, C. E., & Tonigan, J. S. (2003). Motivational interviewing in drug abuse services: a randomized trial. Journal of Consulting and Clinical Psychology, 71, 754–763.
- Miller, W. R., Zweben, A., DiClemente, C., & Rychtarik, R. (1992). Motivational Enhancement Therapy Manual: A Clinical Research Guide for Therapist Treating Individuals with Alcohol Abuse and Dependence (Vol. 2). National Institute on Alcohol Abuse and Alcoholism.
- Morgenstern, J., Kuerbis, A., Amrhein, P., Hail, L., Lynch, K., & McKay, J. R. (2012). Motivational interviewing: a pilot test of active ingredients and mechanisms of change. *Psychology of Addictive Behaviors*, 26, 859–869.
- Morgenstern, J., Kuerbis, A., Houser, J., Levak, S., Amrhein, P., Shao, S., & McKay, J. R. (2017). Dismantling motivational interviewing: effects on initiation of behavior change among problem drinkers seeking treatment. *Psychology of Addictive Behaviors*, 31, 751–762.
- Morton, K., Beauchamp, M., Prothero, A., Joyce, L., Saunders, L., Spencer-Bowdage, S., Dancy, B., & Pedlar, C. (2015). The effectiveness of motivational interviewing for health behaviour change in primary care settings: a systematic review. *Health Psychology Review*, 9, 205–223.
- Moyers, T. B., Houck, J. M., Glynn, L. H., Hallgren, K. A., & Manual, J. K. (2017). A randomized controlled trial to influence client language in substance use disorder treatment. *Drug and Alcohol Dependence*, 172, 43–50.
- Moyers, T. B., Martin, T., Houck, J. M., Christopher, P. J., & Tonigan, J. S. (2009). From in-session behaviors to drinking outcomes: a causal chain for motivational interviewing. *Journal of Consulting and Clinical Psychology*, 77, 1113–1124.
- Moyers, T. B., Miller, W. R., & Hendrickson, S. M. L. (2005). How does motivational interviewing work? Therapist interpersonal skill predicts client involvement within motivational interviewing sessions. *Journal of Consulting and Clinical Psychology*, 73, 590–598.
- Moyers, T. B., Rowell, L. N., Manuel, J. K., Ernst, D., & Houck, J. M. (2016). The Motivational Interviewing Treatment Integrity code (MITI 4): rationale, preliminary reliability and validity. *Journal of Substance Abuse Treatment*, 65, 36–42.
- **Mylvaganam, K.** (2009). The role of ambivalence and cognitive dissonance in motivational interviewing for alcohol problems. D.Clin.Psychol thesis, University of Leeds.
- Naar, S., Pennar, A. L., Wang, B., Brogan-Hartlieb, K., & Fortenberry, J. D. (2021). Tailored motivational interviewing (TMI): translating basic science in skills acquisition into a behavioral intervention to improve community health worker motivational interviewing competence for youth living with HIV. Health Psychology, 40, 920–927.
- Organ, J. N. (2021). Motivational interviewing: a tool for servant leadership. International Journal of Servant Leadership, 15, 209–234.
- Palacio, A., Garay, D., Langer, B., Taylor, J., Wood, B. A., & Tamariz, L. (2016). Motivational interviewing improves medication adherence: a systematic review and meta-analysis. *Journal of General Internal Medicine*, 31, 929–940.
- **Prochaska, J. O., & DiClemente, C. C.** (1984). The Transtheoretical Approach: Crossing Traditional Boundaries of Therapy. Dow/Jones Irwin.
- Rogers, C. R. (1959). A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In S. Koch (ed), Psychology: The Study of a Science. Vol. 3. Formulations of the Person and the Social Contexts (pp. 184–256). McGraw-Hill.
- Rogers, E. M. (2003). Diffusion of Innovations (5th edn). Free Press.
- Rollnick, S., Kaplan, S. G., & Rutschman, R. (2016). Motivational Interviewing in Schools: Conversations to Improve Behavior and Learning. Guilford Press.
- Rollnick, S., & Miller, W. R. (1995). What is motivational interviewing? *Behavioural and Cognitive Psychotherapy*, 23, 325–334.
- Sellman, J. D., Sullivan, P. F., Dore, G. M., Adamson, S. J., & MacEwan, I. (2001). A randomized controlled trial of motivational enhancement therapy (MET) for mild to moderate alcohol dependence. *Journal of Studies on Alcohol*, 62, 389–396.
- Svensson, C., Wickström, H., Forsberg, L., Betnér, S., von Brömssen, C., Reyher, K. K., Bard, A. M., & Emanuelson, U. (2022). Dairy herd health management activities in relation to training of veterinarians in motivational interviewing. Preventive Veterinary Medicine, 204, 105679.
- Tanana, M., Hallgren, K. A., Imel, Z. E., Atkins, D. C., & Srikumar, V. (2016). A comparison of natural language processing methods for automated coding of motivational interviewing. *Journal of Substance Abuse Treatment*, 65, 43–50.

- Thevos, A. K., Quick, R. E., & Yanjuli, V. (2000). Motivational interviewing enhances the adoption of water disinfection practices in Zambia. *Health Promotion International*, 15, 207–214.
- Truax, C. B., & Carkhuff, R. R. (1967). Toward Effective Counseling and Psychotherapy. Aldine.
- Walthers, J., Janssen, T., Mastroleo, N. R., Hoadley, A., Barnett, N. P., Colby, S. M., & Magill, M. (2019). A sequential analysis of clinician skills and client change statements in a brief motivational intervention for young adult heavy drinking. Behavior Therapy, 50, 732–742.
- Wampold, B. E., & Brown, G. S. (2005). Estimating variability in outcomes attributable to therapists: a naturalistic study of outcomes in managed care. *Journal of Consulting and Clinical Psychology*, 73, 914–923.
- Westra, H. A., Arkowitz, H., & Dozois, D. J. (2009). Adding a motivational interviewing pretreatment to cognitive behavioral therapy for generalized anxiety disorder: a preliminary randomized controlled trial. *Journal of Anxiety Disorders*, 23, 1106–1117.
- Wong-Anuchit, C., Chantamit-o-pas, C., Schneider, J. K., & Mills, A. C. (2019). Motivational interviewing-based compliance/adherence therapy interventions to improve psychiatric symptoms of people with severe mental illness: metaanalysis. *Journal of the American Psychiatric Nurses Association*, 25, 122–133.