

Researching Motivational Interviewing

Summary

This document is for researchers who are new to MI research. While there are a broad range of methodologies not covered here, common guidelines are that researchers need to be clear about the content of the intervention, train the practitioners to proficiency, have methods to ensure quality assurance and treatment fidelity, and attend to the impact of practitioner-client processes on outcome. Given the complexity involved, consulting with an experienced MI researcher is highly recommended.

What have we learned from research into MI?

A large and increasing number of research studies have outcomes related to MI across different client populations, systems, settings, professions, modes of delivery, cultures and languages. Not all studies show positive results and variations exist across clinical trials, sites, and practitioners. Overall, the findings of outcome research are favorable. However, a significant limitation of many studies is understanding exactly what was delivered. In particular:

- **Understanding of MI:** Studies vary widely in their understanding of what MI is, with some even describing interventions that are unrelated or at odds with MI but still described as “Motivational Interviewing”.
- **Delivery of MI:** An intention to deliver MI doesn’t guarantee that MI was actually delivered with fidelity or delivered consistently across different clinicians or clients. The only way to know what treatment clients received is to record and code sessions to test fidelity, yet many studies have no assessment of fidelity or applied it with insufficient rigor (e.g. coding practice samples after the study was complete).

In recent years, process research has emerged to better examine how the method of MI works by examining in-session practitioner-client interactions to better understand the underlying mechanisms:

- **Relational factors** include practitioner MI spirit, person-centered application of MI skills, accurate empathy, and working alliance with the client.
- **Technical factors** include maintaining focus on a single change target during intervention, directional use of MI skills, differential reinforcing of “change talk” (the language of change) and sidestepping “sustain talk” (the language of no change).

Process research has established the importance of developing, monitoring, and measuring practitioner fidelity of MI through direct observation and systematic coding of practitioner practice samples within a broader process of quality assurance. Several standardized fidelity instruments exist for coding MI.

Choice of coding tool depends on a range of factors, including the objectives of the study, the mode of treatment delivery, skill of the coders and the resources available. A comprehensive list of coding tools can be found on the [MINT website](#).

MI research has also expanded beyond clinical trials, to investigate how people most effectively learn MI. These findings are valuable in informing how clinicians in the MI condition of a study are trained, coached and supported to both reach and maintain fidelity throughout the duration of the trial.

Another challenge within the research is the role of client autonomy and who defines what is considered a “successful outcome”. The nature of client-centered care in MI can also be problematic within research studies that prescribe a structure that would normally be negotiated between the client and practitioner.

Recommendations for research into MI

Several decades of research have informed the following recommendations for design and implementation of MI research:

- **Have a contemporary understanding of the MI method:**
 - Keep up to date with the latest thinking as MI is an evolving practice.
 - Be able to fully operationalize and describe MI for the purpose of training, practitioner monitoring, describing method, and reporting results.
- **Consider developing a detailed yet flexible protocol:**
 - Include practitioner training, supervision, and delivery of MI – there is evidence that manualized MI results in weaker outcomes.
- **Be thoughtful about selection of reliable and valid fidelity coding instruments:**
 - Be clear about the type and level of data required, where and how the MI will be delivered, who will do the coding and how coders will meet a consistent and reliable standard.
 - Consider the instruments best suited to your purpose – the most recent versions of the MITI or MISC are highly recommended but may not be suitable for all studies.
- **Consider careful selection of the research practitioners who will deliver MI:**
 - Consider using a pre-employment empathy screen – practitioners who score high are easier to train and advance more quickly in learning MI than those who score low.
- **Measure and assess research practitioner ability to meet specified fidelity standards:**
 - Ensure practitioners meet fidelity prior to the study commencing.
 - Fully report training, supervision, and monitoring methods as well as the measures and outcomes of practitioner fidelity.
- **Monitor fidelity as an ongoing process from start to finish:**
 - Ensure there are protocols to support practitioners to maintain consistency of skills across the study.
 - Have a protocol to address practitioners who fall below the required competency during the study – e.g. remove them from the study and provide coaching.
 - When comparing MI to other interventions, examine and document MI fidelity across all conditions in order to contrast the approaches.

- **Be clear about expectations for recording of practice samples:**
 - Check the level of familiarity or confidence with recording, particularly when recruiting an organization or practitioners who do not routinely observe staff practice.
 - Recognize practitioner discomfort and the possibility of decreasing practice samples across time if this is not addressed. Ideally all sessions are recorded to reduce sample bias.
 - Work with management to prepare participating practitioners.
 - Consider creative ways to incentivize practice sample submission if it is not a condition of employment in the trial.
- **Develop a plan for obtaining and coding practice samples:**
 - Ensure there is a clear method for recording (e.g. audio vs. video, length, technology).
 - Ensure there is a written client consent policy and procedure.
 - Have a procedure for practice sample collection and review (random vs. selected segments)
 - Manage security of the files and details (e.g. encryption, secure transmission and storage).
 - Ensure there is a procedure for training of coders to reach and maintain acceptable inter-rater reliability standards.
 - If there are several practice samples, mask the order of recording to reduce rater bias.
 - Assess and report inter-rater reliability.
- **Consider evaluating data within the MI condition:**
 - Analyze variation in outcome between practitioners.
 - Analyze variation in outcome for different practitioner behaviors,

MI research continues to advance. Some general areas of current and future interest include studying:

- **MI practitioner characteristics:** e.g. accurate empathy, warmth, compassion, responsiveness.
- **MI with diverse and under-served populations:** e.g. adaptations of MI across cultures.
- **Integrated therapies:** e.g. outcomes when MI is integrated into other evidenced-based practices.
- **Mechanisms of MI action:** e.g. change talk and sustain talk as predictors of change (or no change), client factors (e.g. perceived importance, confidence, self-efficacy) and relational and technical factors in predicting outcomes.
- **Practitioner-client interactions:** e.g. talk time, working alliance, sequential analysis of practitioner behavior and client response.
- **The setting in which MI is delivered:** e.g. group-based MI, organizational characteristics such as size, type, mission, resources, leadership.
- **Training and learning:** e.g. cost-effective methods, learning resources tailored and allocated based on practitioner need, group-based peer learning, peer mentors as coaches.

Further questions

1. How will you keep up to date on the latest thinking in MI?
2. What measures will you use to code fidelity?
3. How will the MI practitioners and coders be trained to proficiency?
4. How will you monitor quality assurance and fidelity across the study?
5. How will you document your processes?

References and Resources

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More resources including information on coding can be found on the [MINT website](#) and the [Center on Alcoholism, Substance Abuse, and Addictions \(CASAA\)](#).