

Manual for the Motivational Interviewing Skill Code (MISC), Version 1.1:
Addendum to MISC 1.0
(As used in the Talking about Drinking study, 2008)

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Purpose, History, and What to Code

Purpose. The MISC 1.1 coding system serves as both an addendum to the MISC 1.0 (Miller, 2000) and as a stand-alone coding system. The sole purpose of the MISC 1.1 is to classify and quantify client language that is either change talk (CT) or counter-change talk (CCT). As such, MISC 1.1 focuses upon the types of in-session client language that have been predictive of future change (or non-change). When all that is of interest is how much CT and CCT are present in a Motivational Interviewing (MI) therapy session, we believe that this system represents an appropriate and efficient way to characterize these types of client language.

History. The MISC 1.1 system builds directly upon the work of Miller and colleagues (e.g., Miller, 2000; Miller, Moyers, Ernst, & Amrhein, 2008) and is an adaptation of the client-language portion of the MISC 1.0, which offers a simple coding scheme for in-session client language. Unlike the MISC 1.0, version 1.1 includes only two categories—Change Talk and Counter-Change Talk—and leaves the previously included Ask and Follow/Neutral categories uncoded. However, MISC 1.1 also adds upon MISC 1.0 by providing updated names and definitions for CT and CCT categories and sub-categories (although sub-categories are not coded individually) that are more specific and consistent with recent Motivational Interviewing research. Later versions of the MISC 1.0 (i.e., MISC 2.1 and MISC 2.5) are more complex than the MISC 1.1 and provide more extensive information about each session.

The benefits of MISC 1.1 are its simplicity, relative ease of training and use, and ability to calculate the Percentage Change Talk variable. Percentage Change Talk was the primary outcome variable of the Talking about Drinking study has been used in other studies conducted by CASAA; it is defined as change talk frequency over the sum of change talk frequency plus counter-change talk frequency ($\% \text{ CT} = \text{CT} / [\text{CT} + \text{CCT}]$).

To determine which coding system might be most appropriate for your purposes, please refer to Table 1, which compares the MISC 1.1 to other MI coding systems available free of charge from the CASAA Web site (<http://casaa.unm.edu/codinginst.html>).

Table 1.

Comparing and Contrasting Motivational Interviewing Coding Systems

System	Client Behaviors	Therapist Behaviors	Sequential	Whole Session	Detailed CT/CCT	Globals	Significant Other
MISC 1.0	X	X		X		X	
MISC 1.1	X			X			
MISC 2.1	X	X		X	X	X	
MISC 2.5	X	X	X	X	X	X	
MITI 3.0		X					
MISO				X		X	X
SCOPE	X	X	X	X	X	X	
GROMIT				X		X	

What to code. The following considerations will help to define the MISC 1.1 coding system and distinguish it from other ways of coding MI therapeutic interactions.

- MISC 1.1 is intended for use with audio (not video) recordings; if video recordings must be used, visual information should be disregarded, so we suggest obscuring the monitor.
- MISC 1.1 is coded aurally, and typically without the use of transcripts.
- This system is neither mutually exclusive nor collectively exhaustive: Only client CT and CCT are coded, and neutral client language and all therapist language are ignored.
- Unlike many of its coding-system counterparts, the MISC 1.1 is coded in just one pass.

- Only behavior counts are coded—not global ratings.
- MISC 1.1 is not sequential, so behaviors are coded using only tallies.
- The entire session should be coded (i.e., not just a 20-minute sample as in the MITI).
- Several types of CT and CCT are recognized, and each is counted as a separate utterance. However, utterances are not classified by their specific sub-categories—just by their valence (i.e., CT or CCT).
- Like most MI coding systems, a target behavior must be specified for the coding system to be meaningful.
- Transcripts are not used to code the MISC 1.1, and therefore utterances are not pre-parsed in this system; however, using transcripts might be useful when first introducing the concept of parsing.
- Please note that in the Talking about Drinking study tallies were calculated by quartile (i.e., each fourth of the timed session) and then summed overall, but only because the quartiles related to specific study hypotheses; the typical MISC 1.1 user will prefer to record tallies for the entire session using the MISC 1.1 Coding Sheet (see Appendix).

Coders, Training, and Reliability

Coders. Although we have not collected empirical data about the characteristics of an ideal Motivational Interviewing coder, CASAA has been successful in training coders from undergraduates to professionals. Training coders in any coding system requires a significant investment of time (and possibly of money), even when teaching a simple one such as MISC 1.1. For the Talking about Drinking study, coders were advanced undergraduate volunteers who made a year-long commitment to the project. We recommend training at least three coders at a

time so that you will still have two coders if one coder must leave the study early; this will allow you to calculate reliability analyses.

Training. Training novice coders to reliability in this coding system is expected to take roughly 5 instructional hours, 15 hours of individual coding practice per coder, and an hour of weekly group-coding practice throughout the project to minimize coder drift. Because MISC 1.1 merely collapses the sub-categories of CT and CCT, training coders already proficient in other MISC coding systems likely would take just a few hours. To teach the MISC 1.1, we suggest the following progression:

- Provide an overview of the system and its goals.
- Practice listening and parsing. (Reassure coders that the client-therapist interaction will seem to “slow down” as they become more comfortable with the system; in this way coding is much like learning a new language.)
- Introduce CT and CCT (and their sub-categories).
- Practice distinguishing CT and CCT from neutral client language.
- Code CT and CCT in a group setting.
- Have coders rate recordings independently. (Note: Do not use recordings from your current study for training or reliability checks!)
- Conduct statistical inter-rater reliability checks periodically.
- Meet as a group to give feedback, discuss independent codes, and resolve questions and disagreements.

Reliability. It is important to calculate coder reliability after every few recordings. To do so, we suggest the use of intraclass correlations (ICCs), which can be calculated easily in SPSS. According to Cicchetti (1994), ICCS of .75 – 1.00 are excellent, .60 - .74 are good, .40 - .59 are

fair, and below .40 are poor. When test reliabilities become consistently high, then administer an independent coding sample of approximately 5 – 10 tapes, which will serve as a “final exam”. Scores of approximately .60 or higher on both CT and CCT usually indicate that coders are ready to begin coding “real” study recordings. We suggest double-coding 20% of the study sample.

Parsing

Parsing refers to breaking up language into utterances—that is, meaningful units of speech. To parse client language using the MISC 1.1, first separate out client and therapist “volleys”—that is, speaking turns. Then divide each client volley into “utterances”—that is, complete ideas. Each complete client idea that is CT or CCT will receive a code (and therefore, a tally mark on the coding sheet). Typically, a new therapist utterance will end a client utterance.

Although parsing should be introduced prior to coding, how to parse skillfully will become more obvious after starting to learn how to code and to distinguish CT and CCT from neutral client language. Consider the parsing of the following dialogue. (Note: Brackets indicate parsed utterances. Superscripts following brackets indicate neutral client language (⁰), change talk (⁺), or counter-change talk (⁻.)

Example.

Therapist: What brings you in today?
 Client: [I got caught drinking in the dorms last weekend. My roommate said that I had, like, nine shots, so I guess I was pretty wasted that night. But I don't really even remember getting in trouble.]⁰
 Therapist: You're not even sure why you're here, then.
 Client: [No—just because I got a little drunk doesn't mean that I need to be in counseling.]
 Therapist: The punishment seems a little disproportionate to the crime.
 Client: [Exactly!] [Plus, none of my friends ended up here and most of them drink a lot more than I do.]
 Therapist: You drink less than everyone else you know.
 Client: [I wouldn't say less than *everyone*]⁺, [but I'm not an alcoholic, either.]
 Therapist: You haven't really noticed any problems with your drinking so far.

Client: [No—I never miss work because of drinking], [I make it to most of my classes,] [and I don't drive after I drink at parties.] [On a usual weekday night I have a couple of drinks and then go out with friends.]⁰ [Does that sound like a “problem” to you?]⁰ [I definitely don't think so.]

Coding

Target behavior. In order to code MISC 1.1, it is crucial that the topic of the conversation—that is, the “target behavior” that is to be changed—is known before beginning coding. In a substance-abuse-treatment setting, the target behavior change is usually obvious (e.g., decreasing alcohol use or abstaining from all drugs), but in other settings it might be less so (e.g., controlling blood sugars in primary care, increasing brushing and flossing at a dental office, or increasing physical activity in a weight-loss center). The target behavior change should be specified by your particular project or setting to avoid confusion; for example, the Talking about Drinking study specified the target behavior change as any movement away from problematic drinking or toward harm reduction, moderation, or abstinence, but client language about other drugs was ignored. In some cases, the target behavior change might be broader (e.g., any lifestyle changes that will prevent heart attack).

Neutral client language. Neutral, or non-change, client language, does not receive a code in MISC 1.1, it is important to be able to recognize it so that it can be distinguished from CT or CCT. Neutral client language includes:

- Questions asked of the therapist
 - “What do you think I should do?”
- Reporting of factual information (e.g., drinks per week)
 - “Sometimes on Fridays I'll go out to the bar.”
- Story-telling unrelated to current change in the target behavior

- “I was downtown with my girlfriend a while back and we ran into some old friends. We had a few beers and were going to catch a movie, but she was tired from work and just wanted to go home.”
- Behaviors/events occurring in the distant past (defined as more than approximately a week prior to the current therapy session)
 - “After I spent a month in juvie in high school, I was really determined not to drink.”
- Talking about someone else’s intentions to change/not change
 - “My brother is thinking about joining AA, and I think he really needs it. That guy drinks way too much and his life is a wreck because of it.”
- Language that indicates the client is following the therapist but does not indicate agreement with the therapist
 - “Uh huh.”
 - “OK.”
- Any other client language that is neither CT nor CCT
 - “I’m going to need to leave a little early today because my daughter has soccer practice.”
 - “I’d like a tissue.”

Counter-change talk. This type of client language refers to any movement away from change, or toward sustaining the target behavior. Note that “change” here is defined in reference to the target behavior. Within the context of treatment for problem drinking, for example, CCT is coded in relation to maintaining or increasing drinking behavior. Clients may express CCT on other subjects (e.g., change in a relationship, moving to a new apartment), but these are not

coded unless directly related to the identified target behavior change. CCT need not have an oppositional quality nor an emotional charge. The key is that the client language favors not changing the target behavior, representing status quo or movement backward. Endorsing or expressing agreement with CCT offered by the therapist should be coded as an instance of CCT.

Each *different* CCT statement counts as one instance of CCT. For example, if a client lists several different reasons against or disadvantages of change, each one is coded as CCT (e.g., a volley that included a Desire⁻, Need⁻, and Other⁻ would count as three CCT tallies, and a string of four Reason⁻'s would count as four CCT tallies).

Some sub-categories of CCT include:

- Reason⁻: A statement indicating a rationale for not changing or for why change is unnecessary.
 - “Dancing wouldn’t be any fun without doing a few shots first.”
 - “The kids stress me out too much when I’m not drinking.”
 - “My grades are fine.”
- Desire⁻: A special type of reason, expressing the client’s unwillingness to change or wish to partake in the target behavior.
 - “If I could, I would drink every day until I’m 90.”
 - “I love drinking.”
- Need⁻: A special type of reason stating a need not to change or to stay the same.
 - “Treatment isn’t something that I need right now.”
 - “I don’t need to quit drinking entirely.”
 - “I need to keep drinking if I want to keep these friends.”
- Ability⁻: A statement that client is unable or unconfident about change

- “It’s just too hard to change my drinking after so many years.”
- “I’m feeling pretty low on the confidence scale.”
- Commitment⁻: A statement that the client will not change, or an idea for how not to change/to stay the same.
 - “As soon as I get out of rehab I’m going to buy a case.”
 - “I’m not going to say that I won’t drink ever again.”
- Taking Steps⁻: A statement that the client is already resisting change; this represents steps taken in the recent past (within approximately the past week).
 - “I picked up another fifth over the weekend.”
 - “I quit my clean-and-sober housing today.”
- Other⁻: A statement that is clearly CCT but does not fit reasonably into the other categories. This includes minimization of problems and hypothetical statements about non-change.
 - “A DWI isn’t that big of deal to me.”
 - “If I were 21, I’d run out and buy a bottle of wine right now.”

Change talk. This type of client language refers to any movement toward change or away from the target behavior. As with CCT, “change” here is defined specifically in reference to the target behavior. The client makes a statement that directly or indirectly shows evidence of at least one of the following categories, which have the quality of moving forward in the direction of change in the target behavior. Within the context of treatment for problem drinking, for example, CT is coded in reference to reducing or stopping drinking behavior.

Each *different* CT statement counts as one instance of CT. For example, if a client lists several different reasons for or advantages of change, each one is coded as CT. As with CCT,

endorsing or expressing agreement with CT offered by the therapist should be coded as an instance of CT.

Some sub-categories of CT include:

- Reason⁺: A statement indicating a rationale for changing the target behavior.
 - “Quitting drinking would help me get up for work.”
 - “I hate the hangovers.”
 - “My family needs me to be home at night, not at the bar.”
- Desire⁺: A special type of reason stating the client’s willingness to alter the target behavior.
 - “I really want to get started with treatment.”
 - “I don’t even feel like drinking today.”
- Need⁺: A special type of reason stating the client’s need to change.
 - “I have to do this.”
 - “Therapy is what I need right now.”
- Ability⁺: A statement indicating that the client is able to change.
 - “I know that I can quit if I try hard enough.”
 - “This doesn’t seem so difficult.”
- Commitment⁺: A statement that the client will change, or an idea for how the client could change.
 - “I’ll do whatever it takes to cut down on my drinking.”
 - “I could start by tossing out everything in the liquor cabinet.”
- Taking Steps⁺: A statement that the client has already begun to change; this represents steps taken in the recent past (within approximately the past week).

- “At dinner last night I told my parents that I’m going to quit.”
- “I’ve already cut down this week.”
- Other⁺: Any other statement about changing the target behavior. Includes hypothetical situations or circumstances that would convince the client to change, and problem recognition.
 - “My drinking is out of control.”
 - “If I could get my own place I’d be less likely to feel the urge to drink.”

Making Difficult Decisions

Inherent in coding is the need to make difficult decisions, and often with limited time. Decision rules can be helpful in alleviating confusion and increasing inter-rater reliability. Our team identified some problematic situations that arose again and again, and created decision rules to deal with them:

- Following vs. agreeing: For “uh huh” statements, code as CT if you think that the client is agreeing with therapist-lended CT, but do not code anything if you think that the client is merely showing that (s)he is following the therapist.
- Coding in (close to) real time: Coding is supposed to be done on “the fly”. If you cannot decide whether to divide statements into two (or more) utterances, then only code the statement as one instance of CT or CCT.
- Coding a number. If the therapist asks the client to rate importance, confidence, or readiness on a scale, do not code the numerical answer as CT or CCT. However, if the client includes a qualifier for the number (e.g., “10. I know I can quit drinking if I want to.”), then code the statement as an instance of CT.

- Statements about the past in a present context: Only code past CT as CT if the client connects the past with a statement about the present. For example, if the client mentions past ability to cut down on drinking as a reason that (s)he can quit this time, code it as CT.
- Statements about other behaviors in the current context: A connection between the target behavior and other events/values must be established *explicitly* by the client in order to be coded later in the session. For example, if the client ties drinking into receiving lower grades, code subsequent statements about the importance of doing well in school as CT.
- Statements about others: Do not code client statements about *other* people when they are mentioned together (i.e., “we” or “us”); the client must be referring to him or herself specifically. However, if the client uses a statement about another person as a reason to change or not change, then code it as CT or CCT. For example, if the client cites a relative going to prison for DWI as a reason not to drink, then code it as CT, but do *not* code a statement about “none of us” having drinking-related problems as CCT.

References

- Cicchetti, D. V. (1994). Guidelines, criteria, and rules of thumb for evaluating normed and standardized assessment instruments in psychology. *Psychological Assessment*, 6(4), 284-290.
- Miller, W. R. (2000). *Motivational Interviewing Skill Code (MISC) Coder's Manual*. Retrieved March 15, 2009, from University of New Mexico Center on Alcoholism, Substance Use, and Addictions Web site: <http://casaa.unm.edu/download/misc1.pdf>.
- Miller, W. R., Moyers, T. B., Ernst, D., & Amrhein, P. (2008). *Manual for the Motivational Interviewing Skill Code (MISC), Version 2.1*. Retrieved April 15, 2009, from University of New Mexico Center on Alcoholism, Substance Use, and Addictions Web site: <http://casaa.unm.edu/download/misc.pdf>.

Appendix
MISC 1.1 Coding Sheet

Recording # _____

Coder _____

<i>Categories</i>	<i>Tallies</i>	<i>Totals</i>
<p>-</p> <p>Counter-Change Talk</p> <ul style="list-style-type: none"> • Desire <i>not</i> to change • Ability <i>not</i> to change • Reason <i>not</i> to change • Need to <i>not</i> change • Commitment <i>not</i> to change • Taking steps <i>away</i> from change 		<p>CCT</p>
<p>+</p> <p>Change Talk</p> <ul style="list-style-type: none"> • Desire to change • Ability to change • Reason to change • Need to change • Commitment to change • Taking steps toward change 		<p>CT</p>