

White, W. (2012). The Psychology of Addiction Recovery: An Interview with William R. Miller, PhD. Posted at www.williamwhitepapers.com; published in abridged form in Counselor (in press).

**The Psychology of Addiction Recovery:
An Interview with William R. Miller, PhD
Emeritus Distinguished Professor of Psychology and Psychiatry
Center on Alcoholism, Substance Abuse, and Addictions (CASAA)
The University of New Mexico
January 2012**

William L. White

Introduction

Dr. William Miller is one of the most influential voices in the modern treatment of alcohol and other drug problems. Following his education at Lycoming College, the University of Wisconsin, and the University of Oregon (PhD in 1976), Dr. Miller served as a professor of psychology and psychiatry at the University of New Mexico for more than 30 years. In addition to his teaching responsibilities, he has specialized throughout his career on some of the most important research in recent decades on the resolution of substance use disorders. His many studies evaluating the effectiveness of addiction treatment served as a major catalyst to national efforts to bridge the gap between scientific research and clinical practice in addiction treatment. His pioneering work on motivational interviewing similarly exerted a profound influence on the practice of addiction counseling in the U.S. and throughout the world. Dr. Miller's research on family responses to alcohol problems, Alcoholics Anonymous, quantum change experiences, and the interface between psychology and religion have also been highly praised.

The many awards Dr. Miller has received and the high personal and professional esteem with which he is regarded within the addictions field are well-deserved. My own deep respect for Dr. Miller's work prompted this invitation to him to reflect on his career and share his thoughts about the future of addiction treatment. Please join us in a most engaging discussion.

Early Career

Bill White: Your undergraduate and graduate work in psychology spanned the mid-1960s to the mid-1970s. How would you characterize the depth of training related to alcohol and other drug problems and attitudes toward such problems in departments of psychology during that era?

Bill Miller: In psychology, such training was non-existent at most universities at that time. There were no courses offered, and I don't remember substance use disorders even being addressed in the mainstream courses. I didn't get a negative impression either – they were just absent. It was as though this was a problem for specialists or other professions.

Bill White: You became involved in the study of alcohol problems at a time few psychologists were specializing in this area. How did you come to develop this central focus of your career?

Bill Miller: For a summer internship in 1973, I worked at the Veterans Administration Hospital in Milwaukee, Wisconsin. Jim Hart, the director of training there, gave me free rein to look around the hospital and decide where I would like to work and learn. The inpatient alcoholism unit there was run by Bob [Robert G.] Hall, at a time when it was unusual for psychologists to be in charge of such programs. Bob asked me what I knew about alcoholism, and I told him “Nothing.” “Well,” he said, “this is the second most common diagnosis you will see throughout your career. Come work with us.” And I did. I read voraciously, learned about the behavioral work of people like Alan Marlatt and Mark and Linda Sobell, but most of all, I talked with the patients. Since I knew nothing about alcoholism, I put on my best Carl Rogers listening hat, and they taught me. We talked about how they had reached the spot they were in, what they were experiencing, and what they hoped and planned for the road ahead. I enjoyed talking with them, and always have liked working with people struggling with alcohol/drug problems. It was like an instant chemistry.

Bill White: How would you characterize the state of addiction treatment when you entered the field?

Bill Miller: It was pretty dismal. The state of the art was lecturing and confronting people, as if they didn't know themselves and were incapable of perceiving reality. I read clinical descriptions of people with alcoholism as

pathological liars, difficult, denying, resistive, and rife with stubborn immature defenses. I thought that alcoholics in Milwaukee must be unusual because those weren't at all the people I had talked with. It was common practice in the field at that time to get in people's faces and yell at them. There was "attack therapy" where a patient would be placed in the middle of a circle while everyone around them screamed invectives at them. Someone who broke a program rule might be required to wear a toilet seat around his neck for a day or two. That wasn't happening at the Milwaukee VA, but it was common. You still run into this kind of thing occasionally, but at the time, it was not only common but regarded as "the only language they can understand." Practices that would clearly constitute malpractice in the treatment of virtually anything else in the DSM were regarded to be good and therapeutic for alcoholics. It was unbelievable.

Evaluating the Effectiveness of Addiction Treatment

Bill White: You spent much of your early career and considerable time since evaluating the effectiveness of addiction treatment. What are the major conclusions you have drawn from this work?

Bill Miller: That substance use is behavior, subject to the same learning, environmental, social, and cultural influences as any other behavior. Drugs also have pharmacological effects, of course, but even severely dependent people change or suspend their use in response to what's happening around them. Drug use is a choice. We certainly treat it as such within the legal system; intoxication usually exacerbates rather than mitigates an offense. With all the window-dressing of a "disease model," people still ultimately decide for themselves to continue or to abstain. "One day at a time" is a decision. My colleague Frank Logan, the distinguished learning theorist who himself suffered from alcoholism, said that one doesn't need anything more than an animal model to understand how human beings become addicted, but there is no animal model for the kind of recovery that one sees in AA. That requires the frontal cortex.

Bill White: You were among the first scientists to do a comparative analysis of outcomes between inpatient and outpatient addiction treatment. How would you characterize the field's response to these findings?

Bill Miller: It varied from, "Of course, we knew that all along" from people who did outpatient treatment, to outrage and denial from people invested in

inpatient treatment. Residential treatment was a huge for-profit business in the 1970s and '80s, and commercials implied that it was the only possible way to recover, but the emperor never did have clothes. There never was evidence that residential treatment is more effective than receiving good outpatient treatment at home in the community where ultimately you will live your recovery. In Albuquerque, we were forced by funding cuts during the Reagan administration to close either our public inpatient program, which served a few hundred people a year, or our public outpatient program that treated thousands per year. From a “greatest good for the greatest number” perspective, the choice was easy, but we were concerned about our more severely dependent patients. In fact, we found that we could safely detoxify almost all of our patients on an ambulatory basis. We only hospitalized them when there was some other reason that would in itself warrant it – medical fragility, suicidality, and so forth.

Bill White: Project MATCH was historic in its scope and methodological rigor. What do you think are the most important lessons learned from this project?

Bill Miller: Humility. We had some of the best and brightest of the nation’s clinician-scientists in the alcoholism field. We made our best guess predictions about what kinds of people would do best in which types of treatment, and most of our guesses were wrong. All three treatments also yielded similar results, even though there were expectations that cognitive-behavior therapy in particular would be superior. A shorter treatment (motivational enhancement therapy) was as effective overall as two longer treatments (4 versus 12 sessions). It put a dent in the professional *hubris* that “We know what is best for you.” People, including those with alcohol/drug problems, have wisdom about themselves.

Bill White: There has been considerable interest in the role medications can play in recovery from alcohol and other drug problems. What conclusions have you drawn about this potential role?

Bill Miller: The clearest area of benefit is with opioid addiction. Methadone was a breakthrough, and it is abundantly clear that heroin-dependent people fare far better when they are on methadone than when they are not. Buprenorphine was another step forward. These maintenance medications, which essentially substitute a more benign opioid for heroin, have been a mainstay so far in managing opioid addiction. With alcohol and

other drug problems, the contribution of medication is more modest. Nicotine substitution is an effective aid in quitting smoking, but best when used in combination with other supports. Naltrexone exerts a small effect size in helping people reduce problematic drinking. The good news in addiction treatment is that we now have a menu of evidence-based alternatives to try. If one thing is not working, try something else, or a combination of approaches.

Bill White: You have tried to communicate to the field the methods of treatment that lack scientific support. What are some of the methods you include in this category?

Bill Miller: *Confrontational approaches.* There is not a single positive clinical trial of confrontational treatment. All of the evidence points to no effect or harmful effect. *Educational films and lectures.* Alcohol/drug problems don't seem to be a knowledge deficit. The overwhelming weight of clinical trial evidence is that lecturing people who have already developed problems is a waste of time. *Insight psychotherapy.* Psychoanalysts long ago decided that alcoholics weren't good candidates for analysis, and that's how the clinical trial evidence looks. It's not helpful to go searching for the psychohistorical causes of alcohol/drug problems. And an incredible array of inane, even cruel, treatments have been used for substance use disorders, things that would be unthinkable for other DSM disorders. Most of these have been justified on the assumption that people with addictions are somehow different from normal people and need unusual treatment.

Bill White: I think one of your research interests that will be of great interest to our readers is the relationship between therapeutic empathy and treatment outcomes. Could you highlight the results of these studies?

Bill Miller: First, let me say what I mean by "empathy." I don't mean a personality trait. I don't mean having had similar experience. It is very clear that a personal history of recovery from addiction doesn't in itself make you a more or a less effective counselor. We don't apply that standard in any other DSM condition. Trying to treat others too early in one's own recovery can be dicey, but beyond that, the counselor's recovery status just doesn't affect treatment outcomes. What I mean by empathy is the therapeutic skill described by Carl Rogers, the ability to listen well to people, understand what they mean, and reflect it back to them in a way that helps them keep exploring. It is the opposite of an expert model, that "I'm

going to fix you.” It is a respectful, hopeful, engaged kind of listening that brings out the best in people. It’s not an easy skill. People who are good at it make it look easy, but it takes time to master. *That* kind of empathy is the strongest known predictor of effectiveness in treating addictions, far more than years of experience or education, personality variables, or recovery status. In the first study [Miller, Taylor, & West, 1980] in which we systematically measured empathy, I was astounded by what we found. We could predict from counselors’ empathic skill level alone how much their clients would be drinking up to two years later. The more empathic the counselor, the better their clients’ outcomes, and this was with clients randomly assigned to counselors. This effect was far larger than the differences between various kinds of treatment. Steve Valle [1981] found the same thing.

Bill White: One of the sacred cows you have challenged is the belief in the need for confrontation in addiction counseling. Could you summarize the studies that led to your opposition to such techniques?

Bill Miller: In simplest form, the more you confront, the more you evoke client defensiveness and resistance, which in turn predicts lack of change. Both correlational and experimental studies have shown clearly that more confrontational counseling yields greater resistance, and that’s not only true in addiction treatment. Jerry (Gerald R.) Patterson showed the same thing in family therapy in the 1980s. In one of our own studies [Miller, Benefield, & Tonigan, 1993], we could predict the amount that clients would be drinking from a single therapist behavior: the more the counselor confronted, the more the client drank. And as I mentioned before, controlled clinical trials of confrontational approaches are overwhelmingly negative.

Evaluating Alcoholics Anonymous

Bill White: Your work has included studies evaluating the influence of Alcoholics Anonymous on recovery outcomes. What have you concluded from these studies?

Bill Miller: It’s hard to do true experiments with AA because it is freely available to anyone, but the correlational evidence is rather consistent. People who not only attend but get involved in AA are more likely to stay sober. In a way, it parallels the research on methadone and heroin use: people in AA generally fare better. It’s a prospective finding: AA

involvement at Time 1 predicts sobriety at Time 2, whereas the reverse is not necessarily true – Sobriety at Time 1 doesn't "cause" AA involvement at Time 2. There is a common belief that people who discontinue attending AA are doomed to relapse, but our research says that isn't necessarily so. Some people seem to internalize the 12-Step program and continue to live it even if they are not attending meetings regularly.

Bill White: In a seminal 1994 article published in the *Journal of Studies on Alcohol*, you and Ernie Kurtz outlined several public and professional misconceptions of AA. To what extent do these misconceptions continue today?

Bill Miller: I think it is still the case that people mix up AA with all kinds of things that were not part of Bill W.'s wisdom: confrontation, the disease model as invented by the treatment industry, denial, and an anti-scientific attitude. Original AA was very open to all kinds of "causes" of alcoholism and did not endorse any particular etiology. It was not about theory, it was about helping alcoholics. As I read Bill W.'s "Working with Others," it sounds to me a great deal like motivational interviewing – a patient, loving, accepting attitude not at all like in-your-face confrontation. Bill W. encouraged AA members to be involved in research and was open to whatever might be helpful to alcoholics. What was allegedly "12-step treatment" turned into something entirely different.

Bill White: There have been numerous secular and explicitly religious mutual aid alternatives to AA that have developed over the past 35 years. Do you see these as positive developments in the history of responses to alcohol and other drug problems?

Bill Miller: Mostly, it's too early to say. We know a lot from research about AA, but very little about other mutual aid groups. When I was directing our public addiction treatment program here, we were open to trying new things, but only if we were also collecting outcome data that would tell us what was happening. It is easy to convince ourselves of our own beliefs. Innovation should be encouraged in addiction treatment, but not in the absence of data as a check and balance on our natural biases that we're doing a good job.

Sustained Meditation on Motivation

Bill White: If there is a central theme in your career, it may well be the subject of how people with AOD problems initiate and sustain resolutions of those problems. What lessons have you learned about the role of motivation in addiction treatment and recovery that would be most important to front line addiction counselors?

Bill Miller: Recovery is all about motivation. So is addiction. When you're trying to help someone let go of a drug, you are competing with a powerful and long-practiced reinforcer. People change when they see an alternative that is better. Just quitting is a small part of recovery, and in a way, the easy part. Many people, as Mark Twain quipped, have done it dozens of times. Depending on the drug and level of dependence, the detox process can be tough, but the really challenging part comes after that. You have to decide that you will do it – not necessarily that you want to, but that you will. That insight was encapsulated in the belief (incorrect, in retrospect) that people with addictions have to “hit bottom” and suffer enough before they can get better. With that belief, we once told patients, “Go away and come back when you're motivated” – again something we'd be unlikely to do in treating depression, schizophrenia, diabetes, or heart disease. It's not that people need to suffer severely; it's that they need to decide. That's what we developed motivational interviewing to help with.

Bill White: Could you share the story of how you came to develop motivational interviewing?

Bill Miller: It was completely unplanned and unanticipated. I was working at an alcoholism clinic in Norway and lecturing on cognitive-behavioral treatment methods. During my stay, I met every second week or so with a group of bright young psychologists who were working there, many of them recently graduated. They would role-play clients they were seeing who posed challenges for them, and I demonstrated how I might respond. As I did so, they stopped me frequently to ask what I was thinking, why I had said what I did, where I was going, and so on. In so doing, they caused me to verbalize some decision rules and principles that I was using without being consciously aware of them. One general principle was that it should be the client and not the counselor who voices the arguments for change. I asked questions and used reflective listening in a way that evoked these arguments – the person's own motivations for change. I wrote a simple

description of what we were learning, which was published in 1983, and to my surprise, it took off like a rocket. I began doing research to see if this approach works and if so, why. Seven years later in Australia, I met Steve Rollnick, who had been using and teaching motivational interviewing in addiction treatment programs in the United Kingdom. We began collaborating, starting with the first edition of our book in 1991.

Bill White: What do you see as the future of MI and related clinical technologies?

Bill Miller: I'm not sure it's a "technology" as much as a way of being with people. We designed it to help people who need to make a change in their lives and are ambivalent about doing so. That's a central issue in addiction, but it also turns out to be a common human dilemma. It spread next into healthcare, where people with chronic diseases often know what they need to do to be healthy but have trouble getting themselves to do it. Then it started being adopted in corrections, then mental health and social work, and more recently in fields like dentistry, physical rehabilitation, and education. The idea that we can help people find their own motivation for change seems to be catching on, and to be applicable across a wide range of fields. A challenge is that although motivational interviewing is simple in a way, it is not easy to learn quickly. You don't master it by reading about it or taking a workshop. For most people, at least, it takes some coaching and feedback from observed practice over time.

Bill White: What about the community reinforcement approach that you've been involved with? What is that about?

Bill Miller: It also has a simple philosophy: that in order to be stable, sobriety needs to be more rewarding than drug use. As a society, we have focused a lot on punishing drug use and making life more unpleasant for, even imprisoning, alcohol/drug users. It's as if we believe, "If you can just make people feel *bad enough*, then they will change." I am convinced that you can't punish addiction away. If suffering cured addiction, there wouldn't be any. Most of the people I see have suffered plenty and feel terrible about themselves. You need something positive to move toward. I had the good fortune of meeting and working with Bob [Robert J.] Meyers, who taught me CRA and later developed CRAFT. CRA seeks to make alcohol/drug use less rewarding – to interfere with its positive outcomes and allow its natural negative consequences to occur – but more importantly to

help the person get positive reinforcement from non-drug activities. This includes employment, since unemployment is a major predictor of return to alcohol/drug use. But it also includes getting involved in the natural rewarding activities of life in a community. Every clinical trial of CRA to date has been positive.

Bill White: And what about CRAFT? What is that?

Bill Miller: It's community reinforcement and family training, a natural extension of CRA. Bob developed it, and we tested it in response to a problem posed by clinical staff at CASAA. "We get these telephone calls from desperate family members who have a loved one using alcohol or drugs, stealing from them, deteriorating, and refusing to get help. What should we tell them?" Sometimes the caller was told that there was nothing to be done until the person was ready to come in. Sometimes they were referred to Al-Anon or for an "intervention" as developed by the Johnson Institute – and illustrated by that dreadful cable TV show "Intervention." We designed a study in which such callers were always invited to come in for help, and they were randomly assigned to one of three conditions: (1) to be introduced to Al-Anon and helped to get involved; (2) to prepare for a Johnson Institute-style intervention; or (3) to be given CRAFT, which teaches the family how to encourage sobriety, discourage use, and act when there is an open window of readiness. All three treatments were offered by staff who were trained and believed in the approach. We got large differences in the rate of engaging the "unmotivated" loved one in treatment: about two thirds of those in the CRAFT condition engaged their loved in treatment within a couple of months, over twice the rate found in the Johnson intervention, and far more than in the Al-Anon condition. That finding of roughly two-thirds engagement has now been replicated by several other groups, including in other countries.

Bill White: I think one of the most fascinating areas of your research has been your work on the phenomenon of quantum or transformational change. Could you highlight some of the findings of this work?

Bill Miller: I started out to find out whether these things really happen, whether people really do change substantially and permanently overnight like Ebenezer Scrooge. The answer to that question was an unambiguous "Yes." It was not difficult to find people who had had such life-transforming experiences, often of a mystical nature, and profoundly

benevolent. Though before the experience they were just as varied as human beings can be, afterward they looked more similar. They had a deep peacefulness about them, clarity about values and priorities, a sense of meaning. None of them thought they had done it themselves. They felt changed by something beyond them, an insight or again a mystical experience. They were fascinated to learn that this kind of thing happened to other people, because for the most part, they had told no one or very few people about it. Most of them also knew at that moment that they had gone through a one-way door. They were not afraid of lapsing back; it was not “white knuckle” change. Like Scrooge, they were new people and knew that they would never be the same again. Most of these, by the way, had nothing to do with substance use. You hear stories like this in AA, but they happen all the time to all kinds of people.

Bill White: Transformational change experiences can be quite disorganizing and sometimes resemble acute psychiatric conditions. How can the addictions counselor distinguish these two states?

Bill Miller: Some of the firsthand accounts do sound crazy, which is one reason that people keep it to themselves. These are unusual, powerful, memorable events clearly out of the normal range of experience. The benevolence of outcome is certainly one difference. These people were grateful for the experience, and felt changed in very positive ways. Some heard a message “as if” someone were speaking to them, but not like an auditory or visual hallucination. For some, the experience was decades before, and we did do a ten-year follow-up after the initial interview. These were for the most part healthy, happy, peaceful, well-functioning people, some of them despite substantial hardships. I would say just to listen and be open to the fact that such experiences do not necessarily mean that the person has a major mental disorder! Mystical experiences have been described throughout history, and these quantum changes are more common than one might imagine.

Spirituality, Religion, and Addiction Recovery

Bill White: You have been very interested in the role of religious and spiritual experience in addiction recovery and have conducted studies to evaluate this potential relationship. What have you concluded from these studies?

Bill Miller: My interest has been more broadly in the interface of psychology and religion. The discipline of psychology became very isolated from, even hostile to, the spiritual/religious side of human nature during the 20th century. That's peculiar because psychology's roots lie in philosophy and theology, and spirituality has always been a significant part of human experience. Perhaps psychology had to go through its adolescent rebellion and say, "I am NOT NOT NOT like my parents!" It was perfectly natural for William James to explore *The Varieties of Religious Experience*, but by the time I was trained, it was almost taboo to be interested in this part of human nature. In the addiction field, though, spirituality continued to be regarded as important, especially through the influence of AA. Scott Tonigan here at CASAA has done more research on this than I – the role of spirituality and meaning in stable recovery. I did do what may have been the first randomized trial of spiritual direction – in any field, but in this case, with people coming out of detox in an inpatient program. We found absolutely no benefit, and in retrospect, I think the study was naïve in assuming that spirituality is something you could instill in a short clinical trial. Prayer and meditation appear at Step 11, and these folks were just out of detox, for heaven's sake! Spiritual direction is probably more appropriate after a year of sobriety. We were trying to work up at the top of Maslow's hierarchy of needs, and these people were worried about basic needs like food and safety.

Moderated Resolution of Drinking Problems

Bill White: Over the course of your career, you explored the highly controversial issue of moderation approaches to the resolution of alcohol problems. What conclusions have you drawn about the viability of such approaches and for whom they are most appropriate?

Bill Miller: What was once heresy has become mainstream. Primary care physicians are now encouraged by NIAAA to do routine screening for heavy drinking and encourage patients to reduce their drinking into low-risk range. It always made sense, but we were hung up on the idea that "alcoholics" (for which the bar was set very low) are incapable of moderation. What we found was interesting. People who had less severe problems and dependence were the ones who tended to be successful in maintaining stable problem-free moderation, and were more likely to do that than to abstain. Over time, those with more severe symptoms tended to choose abstinence. It wasn't, however, because they tried moderation and failed. Rather, the

usual experience was that they maintained moderation for a while and found either that it was very difficult (“I feel like I’m walking on a tightrope and could fall off at any time”), not worth it (“What’s the point in drinking so little?”), or both. The experience of trying moderation persuaded them to abstain, not because they couldn’t do it, but because they tried it and didn’t like it. We found a severity level above which no one succeeded in maintaining moderation, and we published these guidelines early in *Controlling Your Drinking*, the self-help book that came out of our earliest studies. The bottom line: for people with less severe problems, stable moderation is probably more likely than stable abstinence; people with more severe problems are more likely to abstain in the long run, and a supportive trial with moderation may help them realize that, an approach I’ve called, tongue-in-cheek, quitting “warm turkey.”

Bill White: Do you see a day when the addiction treatment field will have models of intervention to address the whole spectrum of AOD problem severity rather than just the most severe, complex, and chronic of such problems?

Bill Miller: We’re already there. We *have* the methods to help people at lower severity. We just haven’t had the right delivery system. Specialist addiction treatment programs haven’t attracted people with lower severity, and that’s why both NIAAA and NIDA are looking to primary care as a place for screening, brief intervention, and referral. You need to go where these people show up – in health care, social services, and corrections – and intervene there. As with most chronic conditions, early intervention is usually easier and less costly than waiting until problems become severe, but you can’t use the same severe-dependence models to intervene.

Bill White: You’ve also had an unconventional perspective on relapse. Talk about that.

Bill Miller: Well, it’s a term borrowed from medicine, but in our field, it takes on very pejorative, shaming overtones. When you’ve “relapsed,” it’s pretty clear you’ve done something bad and it’s your own fault. When a person with hypertension or diabetes winds up in the emergency room, we don’t typically say they have relapsed. Recurrences of symptoms are normal in chronic diseases, and managing those is what long-term care is all about. Even though we have talked about addiction as a chronic illness, we have treated it like an acute illness that could be cured with an episode of

treatment. If symptoms recur, we blame the patient for relapsing. In addition to that moralistic overtone, the very term “relapse” implies that there are only two possible states: “clean” and “dirty,” “sober” and “relapsed.” Ironically, the very concept of “relapse” implies the black-and-white thinking that “relapse prevention” is meant to undo. If you use, you have “relapsed,” are no longer in recovery, and the clock starts over. Outcome data just don’t look like that. In a multisite study where we wanted to predict “relapse,” we had a hard time defining it. How bad does a “lapse” have to be before it becomes a “relapse”? How many days of drinking are required, or does any drink do it? Is there an amount threshold, and should it be indexed to body weight? How many days do people have to be “good” before their next use qualifies as a relapse? Actual outcome data show high variability in the length, spacing, and severity of use and symptoms during the course of recovery. In good recovery with a chronic condition, episodes of symptoms become shorter, less severe, and more widely spaced. Perfection is the exception. I’m pretty good about managing my diabetes, and when I go in for a check-up at the teaching hospital, the doctor often brings in a medical student to see a “compliant” patient because it’s unusual. We’ve made far too much of “relapse” in this field. In writing *Treating Addiction*, it was a discipline to replace the idea of “relapse” – not with euphemisms, but with a different way of thinking about maintenance and recovery.

Working with Families

Bill White: Another of your areas of interest is how to support families impacted by AOD problems. Your work challenged conventional wisdom about the best ways for families to respond to such problems. Could you summarize what you discovered through these studies?

Bill Miller: We’ve done a tremendous disservice to families in this field. In the heyday of psychodynamic conceptions, there were theories of “alcoholic wives” who needed their husbands to keep drinking. This morphed into certain family systems theories that whole families need to keep alcoholics in their place and would actively resist recovery by sabotaging it. Long ago, Joan Jackson (1954) pointed out that what is interpreted as spouse or family pathology is an understandable adaptation to the course of addiction, normal survival responses. Yet we have pathologized it. In *Treating Addiction*, I tell the story of a young woman who responded to a treatment request to come to “family night” to support her father’s recovery from alcoholism,

which he had developed well after she had left the home. She was surrounded by staff who told her that she had the disease of co-dependence by virtue of being a family member, and that she herself needed treatment to keep from dying or going insane. I assured her that *they* were crazy, not she. There is no such mental disorder as codependence. It was proposed for inclusion in the DSM, and the APA rejected it for lack of evidence. All of these concepts of the spouse or family as the source of pathology are based on anecdotes, not science. They are self-fulfilling prophecies.

Bill White: So, how do we help families then?

Bill Miller: Without question, families suffer and deserve help. They become depressed, distressed, develop physical symptoms, and feel hopeless and isolated. What we found in our CRAFT research was that receiving *any* of the three treatments resulted in substantial improvement for the family members themselves. They needed help, hope, and support. The difference was the CRAFT was actually likely to get the loved one into treatment. Unfortunately, many systems will not reimburse for treating significant others; only for having the alcohol/drug user in the room. It is quite possible to treat family members without the identified patient being present, and to do unilateral family therapy through them, as happens in CRAFT.

Reflections on Research to Practice

Bill White: You have been quite involved in bridging the gap between scientific research and clinical practice in the addiction treatment arena. What have we as a field learned through efforts in this area?

Bill Miller: The fact is that we have not been required to use evidence-based treatment methods in the addiction field. That's a relatively new idea. When we go to our doctor, we expect that he or she keeps up with medical research and will provide us with the latest, most effective form of treatment for what ails us, but that has not been the standard in behavioral health care. For a long time, we providers could offer whatever happened to come into our heads and get paid for it. Now there are increasing requirements to offer treatment for which there is reasonable scientific evidence of efficacy. Imagine that! But it's no simple matter. What constitutes sufficient evidence? In initial efforts like NREPP, the bar has been set so incredibly low that only one or two positive studies qualify a treatment as "evidence-based" even if there are a host of negative trials. The result is a perplexing

list of dozens of treatments that are “evidence-based.” Imagine if you had cancer and were given a list of five dozen treatments from which to choose, or if your doctor could just pick any one from the list as good enough! Carl Sagan observed that regarding all ideas as having equal merit is equivalent to regarding no ideas as having any merit. Beyond that, it can be very difficult to audit evidence-based treatment, most of which occurs behind closed doors. Without reasonable audit, the requirement is only to *say* that you are delivering evidence-based treatment. What training has the provider had to deliver it? What standards of practice has the counselor met demonstrating his or her competence to deliver this treatment? And how do we know that the provider, even if trained, is actually doing it?

Bill White: What advice would you offer front line addiction counselors to improve their effectiveness in supporting those they serve through the processes of recovery initiation and long-term recovery maintenance?

Bill Miller: Most all professions have continuing education requirements, precisely because knowledge continues to advance after one’s initial training. Ten years out, you can be a dinosaur. Surveys show that most addiction treatment staff are very open, even eager, to learn new approaches if they really are more effective and will help their patients have better outcomes. Unfortunately, there is often little practical support for training. It takes time and money to learn a new complex skill. We have also found that the dominant model for continuing professional education – going to a workshop – is terribly ineffective and usually has no impact on practice. Think about how much you could learn about playing a sport, flying an airplane, or playing a musical instrument by sitting in a workshop. We learn complex skills by being with someone who is more skilled at it than we are, having them watch us practice and give us feedback and coaching. Skills are learned over time with feedback and coaching. That means opening one’s practice to observation – something common in medicine but rare in addiction treatment so far. One would never hire a piano teacher and say, “don’t listen to me,” or a golf coach and say, “don’t watch me.” Sure, it’s scary at first to be observed and expect feedback. It’s the Rorschach projective test in learning, bringing out our worst fears of inadequacy. Good coaching or supervision can get you through that quickly, and can become the most fun part of a work week. And I just have to add: Build your skill in accurate empathy, in reflective listening. It improves client engagement, retention, working alliance, and outcomes.

Future of Addiction Treatment

Bill White: What do you think are the most important next steps in improving the quality of addiction treatment in the United States?

Bill Miller: We have to work out how to help providers learn and adopt innovations. The systems that we have in place for continuing professional education are woefully inadequate. I think we've had disrespectfully low expectations of addiction treatment – disrespectful both for clients and for counselors. Tom McLellan tells of a newspaper ad: “Addiction counselor wanted; no experience necessary.” For what other life-threatening condition would there be such an ad? Professionals who treat addiction deserve at least the same pay, respect, education, training, and ongoing support afforded to those who treat other behavioral health problems. I think we also need to come out of the closet with our practice – to eagerly form learning communities, listen to each other's practice, welcome feedback and coaching, and work together for quality improvement. Scott Miller's system to ask for clients' feedback is another good example of effective practice improvement. We can do better than we've done. Most of us work in a feedback vacuum, and no one learns without reliable feedback. It's like target practice in the dark. No wonder there is no relationship between years of experience and effectiveness – one of the most replicated findings in behavioral health.

Bill White: There is a growing effort to integrate addiction treatment with mental health and primary health care. Do you see this as a positive step?

Bill Miller: Very positive. Most people with addiction problems never come into contact with specialist programs, in part because of stigmatization. Those who do, tend to be at the upper end of severity. But most people with alcohol/drug problems do go for health care – actually at a higher rate than other people do – and come into contact with social services, welfare, and correctional agencies. That's where the people are. Try to refer them out to a specialist program, and most will never get there. But there is abundant evidence that even relatively brief interventions can have a positive outcome, particularly with lower-severity people – brief enough to be compatible with primary care, social services, employee assistance programs, pastoral care, pharmacy, dentistry, and such. Treat them where they are! Beyond brief interventions by the regular providers of these services, it also makes sense to co-locate behavioral health providers in

primary care and social service agencies. If you only have to walk (or be walked) down the hall, you're more likely to get there. The isolation of addiction specialists, often far from other health care and mental health facilities, has been a substantial obstacle to a continuum of care.

Personal Legacy

Bill White: What aspect of your work in this field over the past four decades has been most fulfilling?

Bill Miller: If I've made a contribution, I hope it has been to humanizing care. A respectful, listening, empathic style of counseling was radical, even demeaned, at the time I entered the addiction field. The situation was similar, in a way, to how we regard and treat offenders now. "Bedside manner" is a familiar concept in health care, but one that is often given very low priority in medical training. My own data have led me back to a client-centered, person-to-person approach not just because it's kind, but because it is actually more effective in facilitating change. We have imagined that we professionals hold the answers to our clients' life problems. The longer I work, the more I realize that it is our clients who hold the answers, and our job is to provide the light and water needed for them to bloom. Perhaps it's like the work of a midwife. We don't provide the baby; we just help to bring it out into the light and air of day. I also think, despite the evidence, that the most important work I have done may be those beginning scratches at the phenomenon of quantum change. It was certainly the most rewarding study I ever did, and it strengthened my hope in the profound ability of human beings to change, sometimes quickly and dramatically.

Bill White: What do you hope will be the most important legacy you leave the field?

Bill Miller: Perhaps I have reminded our field of the wisdom of Carl Rogers, the hopeful and radically accepting spirit of his approach. Motivational interviewing is very much an evolution from client-centered counseling and patient-centered medicine. It is a great regret that I never got to meet Carl Rogers and learn from him directly, but I have stood on his Midwestern shoulders. He pioneered a very different way of working that did not emphasize being the expert who assesses and solves other peoples' problems. He trusted and respected the wisdom of each person to find his or her way and was a supportive (and quite expert) companion on that journey.

This is not to leave people to their own devices – a distressing trend in current politics – and without help. People often do not need as much professional help as we imagine they do, but I am certainly left, after my work, with a sobering awareness of how much difference it makes, what I do and say when I sit down with someone. Counseling and psychotherapy are nothing to take lightly. It matters greatly what we do, and we can make a real difference, particularly when working in a life-and-death field like addiction treatment.

Bill White: Dr. Miller, thank you for this interview and for all you have done for our field and those it serves.

Acknowledgement: Support for this interview series is provided by the Great Lakes Addiction Technology Transfer Center (ATTC) through a cooperative agreement from the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Treatment (CSAT). The opinion expressed herein are the view of the authors and do not reflect the official position of the Department of Health and Human Services (DHHS), SAMHSA or CSAT.

References

- Jackson, J. (1954). The adjustment of the family to the crisis of alcoholism. *Quarterly Journal of Studies on Alcohol, 15*, 562-86.
- 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., Taylor, C. A., & West, J. C. (1980). Focused versus broad spectrum behavior therapy for problem drinkers. *Journal of Consulting and Clinical Psychology, 48*, 590-601.
- Valle, S. K. (1981). Interpersonal functioning of alcoholism counselors and treatment outcome. *Journal of Studies on Alcohol, 42*, 783-790.

Selected Publications of Dr. William Miller Recommended by Bill White for Addiction Professionals and Recovery Advocates

Books

- Meyers, R. J., & Miller, W. R. (Eds.) (2001). *A community reinforcement approach to addiction treatment*. Cambridge, UK: Cambridge University Press.
- Miller, W. R., & C' de Baca, J. (2001). *Quantum change: When epiphanies and sudden insights transform ordinary lives*. New York: Guilford Press.
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York: Guilford Press.
- Miller, W. R., & Weisner, C. (Eds.) (2002). *Changing substance abuse through health and social systems*. New York: Kluwer/Plenum.
- Hester, R. K., & Miller, W. R. (Eds.) (2003). *Handbook of alcoholism treatment approaches: Effective alternatives* (3rd ed.). Boston, MA: Allyn & Bacon.
- Miller, W. R., & Delaney, H. D. (Eds.) (2005). *Judeo-Christian perspectives on psychology: Human nature, motivation, and change*. Washington, DC: American Psychological Association.
- Miller, W. R., & Muñoz, R. F. (2005). *Controlling your drinking*. New York: Guilford Press.
- Miller, W. R., & Carroll, K. M. (Eds.) (2006). *Rethinking substance abuse: What the science shows and what we should do about it*. New York: Guilford Press.
- Miller, W. R., Forcehimes, A. A., & Zweben, A. (2011). *Treating addiction: A guide for professionals*. New York: Guilford Press.

Articles and Chapters

Earlier Published Interviews

- Miller, W. R. (1991). Personal perspectives: An interview with William R. Miller. *Drug and Alcohol Review*, 10, 7-14.
- Adams, J. B., & Madson, M. B. (2006). Reflection and outlook for the future of addictions treatment and training: An interview with William R. Miller. *Journal of Teaching in the Addictions*, 5, 95-109.
- Miller, W. R. (2009). William (Bill) Miller: Addiction oldtimer (Interview). In D-D Stout (Ed.), *Coming to harm reduction kicking and screaming* (pp. 62-68). Bloomington, IN: AuthorHouse.
- Miller, W. R. (2009). Conversation with William R. Miller. *Addiction*, 104, 883-893.

Evaluating the Effectiveness of Addiction Treatment

- Miller, W. R., & Hester, R. K. (1986). Inpatient alcoholism treatment: Who benefits? *American Psychologist*, 41, 794-805.
- Miller, W. R., & Hester, R. K. (1989). Inpatient alcoholism treatment: Rules of evidence and burden of proof. *American Psychologist*, 44, 1245-1246.
- Holder, H., Longabaugh, R., Miller, W. R., & Rubonis, A. V. (1991). The cost effectiveness of treatment for alcoholism: A first approximation. *Journal of Studies on Alcohol*, 52, 517-540.
- Miller, W. R. (1992). The effectiveness of treatment for substance abuse: Reasons for optimism. *Journal of Substance Abuse Treatment*, 9, 93-102.

- Bien, T. H., Miller, W. R., & Tonigan, J. S. (1993). Brief interventions for alcohol problems: A review. *Addiction*, 88, 315-336.
- Miller, W. R., Brown, J. M., Simpson, T. L., Handmaker, N. S., Bien, T. H., Luckie, L. F., Montgomery, H. A., Hester, R. K., & Tonigan, J. S. (1995). What works? A methodological analysis of the alcohol treatment outcome literature. In R. K. Hester & W. R. Miller (Eds.), *Handbook of alcoholism treatment approaches: Effective alternatives* (2nd ed., pp. 12-44). Boston, MA: Allyn and Bacon.
- Miller, W. R., Walters, S. T., & Bennett, M. E. (2001). How effective is alcoholism treatment? *Journal of Studies on Alcohol*, 62, 211-220.
- Miller, W. R., & Wilbourne, P. L. (2002). Mesa Grande: A methodological analysis of clinical trials of treatments for alcohol use disorders. *Addiction*, 97, 265-277.
- Wilbourne, P. L., & Miller, W. R. (2002). Treatment for alcoholism: Older and wiser? *Alcoholism Treatment Quarterly*, 20, 3/4, 41-60.
- Miller, W. R., Wilbourne, P. L., & Hetttema, J. E. (2003). What works? A summary of alcohol treatment outcome research. In R. K. Hester & W. R. Miller (Eds.), *Handbook of Alcoholism Treatment Approaches: Effective Alternatives* (3rd ed., pp. 13-63). Boston, MA: Allyn & Bacon.
- Miller, W. R., Villanueva, M., Tonigan, J. S., & Cuzmar, I. (2007). Are special treatments needed for special populations? *Alcoholism Treatment Quarterly* 25(4), 63-78.
- Villanueva, M., Tonigan, J. S., & Miller, W. R. (2007). Response of Native American clients to three treatment methods for alcohol dependence. *Journal of Ethnicity in Substance Abuse*, 6(2), 41-48.
- Duran, B. G., Wallerstein, N., & Miller, W. R. (2007). New approaches to alcohol interventions among American Indian and Latino communities: The experience of the Southwest Addictions Research Group. *Alcoholism Treatment Quarterly* 25(4), 1-10.

Project MATCH

- Project MATCH Research Group (1997). Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol*, 58, 7-29.
- Project MATCH Research Group (1997). Project MATCH secondary a priori hypotheses. *Addiction*, 92, 1671-1698.
- Project MATCH Research Group (1998). Matching alcoholism treatments to client heterogeneity: Project MATCH three-year drinking outcomes. *Alcoholism: Clinical and Experimental Research*, 22, 1300-1311.
- Project MATCH Research Group (1998). Matching alcoholism treatments to client heterogeneity: Treatment main effects and matching effects on drinking during treatment. *Journal of Studies on Alcohol*, 59, 631-639.
- Project MATCH Research Group, (1998). Matching patients with alcohol disorders to treatments: Clinical implications from Project MATCH. *Journal of Mental Health*, 7, 589-602.

Babor, T. F., Miller, W. R., DiClemente, C. C., & Longabaugh, R. (1999). A study to remember: Response of the Project MATCH Research Group. *Addiction, 94*, 66-69.

Therapist Effects and Empathy

- Miller, W. R., Taylor, C. A., & West, J. C. (1980). Focused versus broad spectrum behavior therapy for problem drinkers. *Journal of Consulting and Clinical Psychology, 48*, 590-601.
- Miller, W. R., & Baca, L. M. (1983). Two-year follow-up of bibliotherapy and therapist-directed controlled drinking training for problem drinkers. *Behavior Therapy, 14*, 441-448.
- Project MATCH Research Group (1998). Therapist effects in three treatments for alcohol problems. *Psychotherapy Research, 8*, 455-474.

Role of Medication in Recovery

- Miller, W. R., & Wilbourne, P. L. (2002). Mesa Grande: A methodological analysis of clinical trials of treatments for alcohol use disorders. *Addiction, 97*, 265-277.
- COMBINE Study Research Group (2003). Testing combined pharmacotherapies and behavioral interventions for alcohol dependence (The COMBINE Study): A pilot feasibility study. *Alcoholism: Clinical and Experimental Research, 27*, 1123-1131.
- Miller, W. R., LoCastro, J. S., Longabaugh, R., O'Malley, S., & Zweben, A. (2005). When worlds collide: Blending the divergent traditions of pharmacotherapy and psychotherapy outcome research. *Journal of Studies on Alcohol*, Supplement No. 15, 17-23
- Donovan, D. M., Anton, R. F., Miller, W. R., Longabaugh, R., Hosking, J. D., & Youngblood, M. for the COMBINE Study Research Group (2008). Combined pharmacotherapies and behavioral interventions for alcohol dependence (the COMBINE study): Examination of post-treatment drinking outcomes. *Journal of Studies on Alcohol and Drugs, 69*, 5-13.
- Anton, R. F., O'Malley, S. S., Ciraulo, D. A., Cisler, R. A., Couper, D., Donovan, D. M., Gastfriend, D. R., Hosking, J. D., Johnson, B. A., LoCastro, J. S., Longabaugh, R., Mason, B. J., Mattson, M. E., Miller, W. R., Pettinati, H. M., Randall, C. L., Swift, R., Weiss, R. D., Williams, L. D., & Zweben, A. for the COMBINE Study Research Group (2006). Combined pharmacotherapies and behavioral interventions for alcohol dependence. The COMBINE study: A randomized controlled trial. *Journal of the American Medical Association, 295*, 2003-2017.

Confrontational Treatment

- 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., & Wilbourne, P. L. (2002). Mesa Grande: A methodological analysis of clinical trials of treatments for alcohol use disorders. *Addiction, 97*, 265-277.
- White, W. L., & Miller, W. R. (2007). The use of confrontation in addiction treatment: History, science, and time for change. *Counselor, 8*(4), 12-30.

Alcoholics Anonymous

- Miller, W. R., & McCrady, B. S. (1993). The importance of A.A. research. In B. S. McCrady & W. R. Miller (Eds.), *Research on Alcoholics Anonymous: Opportunities and Alternatives* (pp. 3-11). New Brunswick, NJ: Rutgers Center of Alcohol Studies.
- Montgomery, H. A., Miller, W. R., & Tonigan, J. S. (1993). Differences among AA groups: Implications for research. *Journal of Studies on Alcohol, 54*, 502-504.
- Miller, W. R., & Kurtz, E. (1994). Models of alcoholism used in treatment: Contrasting A.A. and other perspectives with which it is often confused. *Journal of Studies on Alcohol, 55*, 159-166.
- Montgomery, H. A., Miller, W. R., & Tonigan, J. S. (1995). Does Alcoholics Anonymous involvement predict treatment outcome? *Journal of Substance Abuse Treatment, 12*, 241-246.
- Tonigan, J. S., Ashcroft, F., & Miller, W. R. (1995). A.A. group dynamics and 12-Step activity. *Journal of Studies on Alcohol, 56*, 616-621.
- Tonigan, J. S., Connors, G. J., & Miller, W. R. (1999). Special populations in Alcoholics Anonymous. *Alcohol Health & Research World, 281-285*.
- Tonigan, J. S., Connors, G.J., Miller, W.R. (1999). Alcoholics Anonymous Involvement: A review. In Maltby, J., Lewis, C.A., & Hill, A.P. (Eds.) *Commissioned reviews on 300 psychological tests*, Lampeter Wales, UK, Edwin Mellen Press
- Connors, G. J., Tonigan, J. S., & Miller, W. R. (2001). A longitudinal model of intake symptomatology, AA participation, and outcome: Retrospective study of the Project MATCH outpatient and aftercare samples. *Journal of Studies on Alcohol, 62*, 817-825.
- Tonigan, J. S., Miller, W. R., & Connors, G. J. (2001). Prior Alcoholics Anonymous involvement and treatment outcome. In R. Longabaugh & P. W. Wirtz (Eds.), *Project MATCH hypotheses: Results and causal chain analyses* (pp. 276-284). Project MATCH Monograph Series, Vol. 8. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.
- Tonigan, J. S., Miller, W. R., Juarez, P., & Villanueva, M. (2002). Utilization of AA by Hispanic and non-Hispanic white clients receiving outpatient alcohol treatment. *Journal of Studies on Alcohol, 63*, 215-218.
- Tonigan, J. S., Miller, W. R., & Schermer, C., (2002). Atheists, agnostics, and Alcoholics Anonymous. *Journal of Studies on Alcohol, 63*, 534-541.

- Owen, P. L., Slaymaker, V., Tonigan, J. S., McCrady, B. S., Epstein, E. E., Kaskutas, L. A., Humphreys, K., & Miller, W. R. (2003). Participation in Alcoholics Anonymous: Intended and unintended change mechanisms. *Alcoholism: Clinical and Experimental Research*, *27*, 524-532.
- Tonigan, J. S., Bogenschutz, M. P., & Miller, W. R. (2006). Is alcoholism typology a predictor of both AA affiliation and disaffiliation after treatment? *Journal of Substance Abuse Treatment*, *30*, 323-330.

Motivation

- Miller, W. R. (1987). Motivation and treatment goals. *Drugs and Society*, *1*, 133-151.
- Miller, W. R., & Brown, J. M. (1991). Self-regulation as a conceptual basis for the prevention and treatment of addictive behaviours (pp. 3-79). In N. Heather, W. R. Miller, & J. Greeley (Eds.), *Self-control and the addictive behaviours*. Sydney: Maxwell Macmillan Publishing Australia.
- Miller, W. R. (1993). What I would most like to know: What really drives change? *Addiction*, *88*, 1479-1480.
- Miller, W. R. (1998). Why do people change addictive behavior? The 1996 H. David Archibald Lecture. *Addiction*, *93*, 163-172.
- Miller, W. R., Toscova, R. T., Miller, J. H., & Sanchez, V. (2000). A theory-based motivational approach for reducing alcohol/drug problems in college. *Health Education & Behavior*, *27*, 744-759.
- Miller, W. R. (2003). Enhancing motivation for change. In R. K. Hester & W. R. Miller (Eds.), *Handbook of Alcoholism Treatment Approaches: Effective Alternatives* (3rd ed., pp. 131-151). Boston, MA: Allyn & Bacon.
- Miller, W. R., & Atencio, D. J. (2008). Free will as a proportion of variance. In J. Baer, J. C. Kaufman, & R. F. Baumeister (Eds.), *Are we free? Psychology and free will* (pp. 275-295). New York: Oxford University Press.

Motivational Interviewing

- Miller, W. R. (1983). Motivational interviewing with problem drinkers. *Behavioural Psychotherapy*, *11*, 147-172.
- 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.
- Bien, T. H., Miller, W. R., & Boroughs, J. M. (1993). Motivational interviewing with alcohol outpatients. *Behavioural and Cognitive Psychotherapy*, *21*, 347-356.
- Bien, T. H., Miller, W. R., & Tonigan, J. S. (1993). Brief interventions for alcohol problems: A review. *Addiction*, *88*, 315-336.
- Brown, J. M., & Miller, W. R. (1993). Impact of motivational interviewing on participation and outcome in residential alcoholism treatment. *Psychology of Addictive Behaviors*, *7*, 211-218.

- 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.
- 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.
- 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., & Rollnick, S. (2004). Talking oneself into change: Motivational interviewing, stages of change, and therapeutic process. *Journal of Cognitive Psychotherapy, 18*, 299-308.
- Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology, 1*, 91-111.
- Moyers, T. B., Miller, W. R., & Hendrickson, S. M. L. (2005). How does motivational interviewing work? Therapist interpersonal skill predicts involvement within motivational interviewing sessions. *Journal of Consulting and Clinical Psychology, 73*, 590-598.
- Miller, W. R., & Moyers, T. B. (2006). Eight stages in learning motivational interviewing. *Journal of Teaching in the Addictions, 5*, 3-17.
- Miller, W. R., & Rollnick, S. (2009). Ten things that motivational interviewing is not. *Behavioural and Cognitive Psychotherapy, 37*, 129-140.
- Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. *American Psychologist, 64*, 527-537.

Community Reinforcement Approach

- Miller, W. R., Meyers, R. J., & Hiller-Sturmhöfel, S. (1999). The community-reinforcement approach. *Alcohol Health & Research World, 22*, 116-121.
- Miller, W. R., Meyers, R. J., & Tonigan, J. S. (2001). A comparison of CRA and traditional approaches. In R. J. Meyers & W. R. Miller (Eds.), *A community reinforcement approach to addiction treatment*. (Pp. 62-78). Cambridge, UK: Cambridge University Press.
- Smith, J. E., Meyers, R. J., & Miller, W. R. (2001). The community reinforcement approach to the treatment of substance use disorders. *American Journal on Addictions, 10* (Suppl.), 51-59.

Quantum Change

- Miller, W. R., & C'deBaca, J. (1994). Quantum change: Toward a psychology of transformation. In T. Heatherton & J. Weinberger (Eds.), *Can personality change?* (pp. 253-280). Washington, DC: American Psychological Association.

- C' de Baca, J., & Miller, W. R. (2003). Quantum change: Sudden transformation in the tradition of James's *Varieties*. *Streams of William James*, 5(1), 12-15.
- Miller, W. R. (2004). The phenomenon of quantum change. *Journal of Clinical Psychology: In Session*, 60(5), 453-460.
- Brown, S., & Miller, W. R. (2005). Transformational change. In W. R. Miller & H. Delaney (Eds.), *Judeo-Christian perspectives on psychology: Human nature, motivation and change* (pp. 167-183). Washington, DC: American Psychological Association.

Relapse

- Allen, J., Lowman, C., & Miller, W. R. (1996). Perspectives on precipitants of relapse. *Addiction*, 91 (Supplement), S3-S4.
- Miller, W. R. (1996). What is a relapse? Fifty ways to leave the wagon. *Addiction*, 91 (Supplement), S15-S27.
- Miller, W. R., Westerberg, V. S., Harris, R. J., & Tonigan, J. S. (1996). What predicts relapse? Prospective testing of antecedent models. *Addiction*, 91 (Supplement), S155-S171.
- Westerberg, V. S., Miller, W. R., Harris, R. J., & Tonigan, J. S. (1998). The topography of relapse in clinical samples. *Addictive Behaviors*, 23, 325-337.
- Miller, W. R., & Harris, R. J. (2000). A simple scale of Gorski's warning signs for relapse. *Journal of Studies on Alcohol*, 61, 759-765.

Spirituality, Religion and Addiction Recovery

- Miller, W. R. (1990). Spirituality: The silent dimension in addiction research. The 1990 Leonard Ball oration. *Drug & Alcohol Review*, 9, 259-266.
- Miller, W. R. (1995). Towards a biblical perspective on drug use. *Journal of Ministry in Addiction and Recovery*, 2(2), 77-86.
- Walker, S. R., Tonigan, J. S., Miller, W. R., Comer, S., & Kahlich, L. (1997). Intercessory prayer in the treatment of alcohol dependence: A pilot investigation. *Alternative Therapies*, 3(6), 79-86.
- Miller, W. R. (2000). Rediscovering fire: Small interventions, large effects. *Psychology of Addictive Behaviors*, 14, 6-18.
- Connors, G. J., Tonigan, J. S., & Miller, W. R. (2001). Religiosity and responsiveness to alcoholism treatments. In R. Longabaugh & P. W. Wirtz (Eds.), *Project MATCH hypotheses: Results and causal chain analyses* (pp. 166-175). Project MATCH Monograph Series, Vol. 8. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.
- Miller, W. R. (2002). Spirituality and addiction: What research tells us. *Health and Spirituality Connection*, 6(1), 3, 6-7.
- Miller, W. R. (2003). Spirituality as an antidote for addiction. *Spirituality & Health*, October, 34-38.
- Miller, W. R. (2003). Spirituality, treatment and recovery. In M. Galanter (Ed.), *Recent Developments in Alcoholism (Vol. 16, Research on Alcoholism Treatment*, pp. 391-404). New York: Kluwer Academic / Plenum.

- Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, *58*, 24-35.
- Miller, W. R., & Bogenschutz, M. P. (2007). Spirituality and addiction. *Southern Medical Journal*, *100*, 433-436.
- 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.

Moderated Resolution of Alcohol Problems

- Miller, W. R., & Caddy, G. R. (1977). Abstinence and controlled drinking in the treatment of problem drinkers. *Journal of Studies on Alcohol*, *38*, 986-1003.
- Miller, W. R. (1978). Behavioral treatment of problem drinkers: A comparative outcome study of three controlled drinking therapies. *Journal of Consulting and Clinical Psychology*, *46*, 74-86.
- Miller, W. R., & Joyce, M. A. (1979). Prediction of abstinence, controlled drinking, and heavy drinking outcomes following behavioral self-control training. *Journal of Consulting and Clinical Psychology*, *47*, 773-775.
- Harris, K. B., & Miller, W. R. (1990). Behavioral self-control training for problem drinkers: Components of efficacy. *Psychology of Addictive Behaviors*, *4*, 82-90.
- Miller, W. R., & Taylor, C. A. (1980). Relative effectiveness of bibliotherapy, individual and group self-control training in the treatment of problem drinkers. *Addictive Behaviors*, *5*, 13-24.
- Miller, W. R., Taylor, C. A., & West, J. C. (1980). Focused versus broad spectrum behavior therapy for problem drinkers. *Journal of Consulting and Clinical Psychology*, *48*, 590-601.
- Miller, W. R., Gribskov, C. J., & Mortell, R. L. (1981). Effectiveness of a self-control manual for problem drinkers with and without therapist contact. *International Journal of the Addictions*, *16*, 1247-1254.
- Miller, W. R., Pechacek, T. F., & Hamburg, S. (1981). Group behavior therapy for problem drinkers. *International Journal of the Addictions*, *16*, 827-837.
- Miller, W. R. (1983). Controlled drinking: A history and critical review. *Journal of Studies on Alcohol*, *44*, 68-83.
- Miller, W. R. (1985). How prevalent are controlled drinking outcomes? A commentary on Helzer et al. (1985). *Bulletin of the Society of Psychologists in Addictive Behaviors*, *4*, 207-212.
- Miller, W. R. (1985). Long-term moderate drinking among alcoholics discharged from the hospital. *New England Journal of Medicine*, *313*, 1661-1662.
- Marlatt, G. A., Miller, W. R., Duckert, F., Gøtestam, G., Heather, N., Peele, S., Sanchez-Craig, M., Sobell, L. C., & Sobell, M. B. (1985). Abstinence and controlled drinking: Alternative treatment goals for alcoholism and problem drinking? *Bulletin of the Society of Psychologists in Addictive Behaviors*, *4*, 123-150.
- Miller, W. R. (1987). Motivation and treatment goals. *Drugs and Society*, *1*, 133-151.
- Graber, R. A., & Miller, W. R. (1988). Abstinence or controlled drinking goals for problem drinkers: A randomized clinical trial. *Psychology of Addictive Behaviors*, *2*, 20-33.

- Miller, W. R., & Page, A. (1991). Warm turkey: Other routes to abstinence. *Journal of Substance Abuse Treatment*, 8, 227-232.
- Miller, W. R., Leckman, A. L., Delaney, H. D., & Tinkcom, M. (1992). Long-term follow-up of behavioral self-control training. *Journal of Studies on Alcohol*, 53, 249-261.

Working with Families

- Meyers, R. J., Miller, W. R., Hill, D. E., & Tonigan, J. S. (1999). Community reinforcement and family training (CRAFT): Engaging unmotivated drug users in treatment. *Journal of Substance Abuse*, 10(3), 1-18.
- Miller, W. R., Meyers, R. J., & Tonigan, J. S. (1999). Engaging the unmotivated in treatment for alcohol problems: A comparison of three strategies for intervention through family members. *Journal of Consulting and Clinical Psychology*, 67, 688-697.
- Meyers, R. J., Miller, W. R., & Smith, J. E. (2001). Community reinforcement and family training (CRAFT). In R. J. Meyers & W. R. Miller (Eds.), *A community reinforcement approach to addiction treatment* (pp. 147-160). Cambridge, UK: Cambridge University Press.
- Meyers, R. J., Miller, W. R., Smith, J. E., & Tonigan, J. S. (2002). A randomized trial of two methods for engaging treatment-refusing drug users through concerned significant others. *Journal of Consulting and Clinical Psychology*, 70, 1182-1185.
- Manuel, J. K., Austin, J. L., Miller, W. R., McCrady, B. S., Tonigan, J. S., Meyers, R. J., Smith, J. E., & Bogenschutz, M. P. (in press). Community reinforcement and family training: A comparison of group and self-directed delivery. *Journal of Substance Abuse Treatment*.

Research to Practice

- Miller, W. R. (1987). Behavioral treatment research advances: Barriers to utilization. *Advances in Behaviour Research and Therapy*, 9, 145-164.
- Miller, W. R., Zweben, J. & Johnson, W. R. (2005). Evidence-based treatment: Why, what, where, when and how? *Journal of Substance Abuse Treatment*, 29, 267-276.
- Miller, W. R., Sorensen, J. L., Selzer, J., & Brigham, G. (2006). Disseminating evidence-based practices in substance abuse treatment: A review with suggestions. *Journal of Substance Abuse Treatment*, 31, 25-39.

Future of Addiction Treatment

- Miller, W. R. (1993). Alcoholism: Toward a better disease model. *Psychology of Addictive Behaviors*, 7, 129-136.
- Miller, W. R., & Brown, S. A. (1997). Why psychologists should treat alcohol and drug problems. *American Psychologist*, 52, 1269-1279.

- Adams, J. B., & Madson, M. B. (2006). Reflection and outlook for the future of addictions treatment and training: An interview with William R. Miller. *Journal of Teaching in the Addictions, 5*, 95-109.
- Miller, W. R. (2007). Bring addiction treatment out of the closet. *Addiction, 102*, 863.
- Miller, P. G., & Miller, W. R. (2009). What should we be aiming for in the treatment of addiction? *Addiction, 104*, 685-686.