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Alcohol Relapse and Change Needs a Broader View than Counting Drinks

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The investigation of alcohol use disorder relapse by Maisto and colleagues (2016, this volume) hopefully will end efforts to define and understand relapse as a single event consisting of some number of drinks. The authors' finding that heavier drinking during treatment predicted heavier drinking at the end of treatment and 1 year later seems to reflect the often-used phrase that "the best predictor of future behavior is past behavior". However, as noted in the article, the various quantity-based definitions of relapse were highly intercorrelated, had only a small to moderate (though statistically significant) relationship with future drinking, and had no important differences between them. The most general measure of relapse, "some drinking" during treatment, was not as good predictor of future drinking, suggesting that it may be more a measure of lapse than relapse or may simply reflect the non-linear process of becoming abstinent. As the authors conclude, these definitions of relapse are not powerful predictors and do not help us to understand what essentially is a dynamic process or series of events.

In this commentary we offer some reasons for the failure of quantity-based definitions and then discuss the need to define successful action prior to being able to identify relapse. Next we consider the importance of including the perspective of the person making the change when defining both treatment goals and relapse. Finally we suggest that relapse has to be understood using a broader view of the change process that considers vulnerability; recycling; and how to learn from client, provider, and researcher failures.

Why Quantity-based Definitions Fail

The inadequacy of counting drinks or consequences as a measure of relapse lies in a misplaced focus. Marlatt and Gordon (1985) in their groundbreaking work emphasized *maintenance* of behavior change, with relapse viewed as important insofar as it needed to be prevented in order to sustain change. Key concerns were how abstinence was undermined and what processes contributed to movement from lapse or slip to collapse or relapse. As addiction treatment professionals began to apply these concepts, however, the focus shifted

from maintenance to relapse (Brandon et al., 2007). Relapse became the main target, and relapse prevention came to be an important treatment component both separate from and in conjunction with a comprehensive cognitive behavioral treatment program – so much so that programs began doing relapse prevention activities even before clients had achieved a measure of successful behavior change.

Maisto and colleagues' article reflects the field's shift towards a decontextualized focus on relapse. The authors' outcome of interest, relapse, was defined as drinking during treatment with no requirement that the individuals have a period of successful abstinence (or achieve some other measure of drinking behavior change) before trying to assess relapse. This makes the study one of examining levels of drinking during treatment and how they affect end-of-treatment and posttreatment drinking, rather than relapse *per se*. This is more than a semantic difference or examining two sides of the same coin. Relapse has such negative connotations that trying to define it by any amount of drinking is not only arbitrary but also potentially harmful. Defining relapse solely in terms of quantity risks unnecessarily engaging a violation effect, similar to the Abstinence Violation Effect, such that once I drink X amount, I view myself as having failed, give up on trying to change, and thus may create a self-fulfilling prophecy. Moreover, focusing more on maintenance – that is, measuring periods of and behaviors associated with successful change – ought to be at least as useful in predicting future behavior as measuring drinking quantity during treatment.

Important in and of themselves, successful periods of action are also fundamental to our understanding of relapse. In his dissertation, Daniel Rounsaville (2010) examined proximal and distal predictors of relapse using Project MATCH data. He used semi-Markov modeling and regression analyses to understand predictors of transitions between periods of abstinence, lapse, and relapse. In order to successfully understand transitions from one to another category over time, he had to punctuate the data, defining what constituted an abstinence period as well as lapse and relapse periods. It was a complicated and tedious process but seemed to describe the path of change for individuals during the posttreatment period in a rich and dynamic manner. Although a number of individuals remained in an abstinent state for the entire 1-year period, the majority moved between lapse, relapse, and abstinence. The transition analysis demonstrated that lapse and relapse constituted distinct patterns of drinking and that predictors differed for different transitions. For example, depression related more to lapse episodes than relapse drinking. A history of more intense drinking predicted relapse but not lapse. Self-efficacy increased the probability of abstinence and decreased the probability of both lapse and relapse. Temptation to drink and struggling to maintain change predicted relapse more than a lapse. Because relapse is a dynamic process, attempting to measure it without also measuring successful action marked by periods of abstinence and/or lapses seems doomed to failure (Kirchner et al., 2012; Witkiewitz, 2008).

Using the Changer's Perspective

In addition to identifying successful action, it is also important for clinicians, researchers, and changers themselves to identify when they've *given up* on taking action to make the desired change. Relapse is perhaps best conceptualized as this giving up or dropping out of

the action or maintenance stages of change. Thus, to fully understand the phenomenon of relapse, we need to distinguish between momentary struggling (in the presence of continued efforts to change) and essentially discontinuing efforts to reach the behavior change goal at this time. Only then can we track where the individual is currently in the process of change and begin to understand the recycling process. Certainly we can try to use normative data to define relapse, but it is essentially an ipsative process and ultimately has to be defined by the individual signaling when they stopped making efforts to sustain change.

An illustration may be helpful. As the first author was consulting to a dual diagnosis treatment program, he met a young man with severe alcohol and drug use disorders. He had been abstinent from alcohol and drugs for a period of time but in the couple of days prior to our meeting had gone on a binge and consumed a significant number of drinks. He called the program staff and they brought him back into the residence to an emergency “respite bed”. Clearly he had relapsed by any of the definitions used in this study, and the staff was considering employing a relapse treatment protocol. However, in our conversation the client, who knew about the stages of change, said that even though he recognized the prior days’ drinking was a significant problematic event for his recovery, he did not identify it as a relapse because he was still committed to working on recovery.

Taking into account the individual’s perspective leads to important questions. What is the individual’s goal for this behavior change attempt? As the authors mention in the article, the goal espoused by both the COMBINE and Project MATCH treatments was abstinence from all alcohol. However, we do not know if that was the goal of each individual in the trials. What if, during a behavior change attempt, an individual shifts goals from abstinence to moderate drinking? Does that represent a relapse? Many individuals in action for cutting down their drinking are in precontemplation for abstinence (DiClemente, 2003). How long must a period of abstinence be before we can identify a relapse? In the smoking cessation literature a quit attempt has to be intentional and last for 24 or 48 hours for it to be considered bona fide. What is the difference between a lapse and a relapse? Rounsaville (2010) used NIAAA drinking guidelines to define a period of lapsing as non-abstinence but less than 7 and 14 drinks per week for women and men, respectively. But again, this assumes a goal of abstinence. Moreover, questions arise as to whether someone can continue lapsing to some drinking without being considered to have relapsed. When do we know that someone has dropped out of the process of change? These are critical questions that cannot be answered by simple definitions that count drinks or consequences.

Even when we do attempt to use relatively simple measures, like numbers of drinks and consequences, the complexity of relapse remains. The reality is that relapse is not a stable state. Individuals shift between abstinence and drinking, as well as between drinking with and without symptoms of alcohol use disorders (Dawson et al., 2007; Zweben & Cisler, 1996). Treatment goal is related to treatment outcomes so that those with an abstinence goal are more likely to be abstinent than those without (Hall et al., 1990). However, if we are truly to respect the drinking goals of every individual, abstinence simply cannot be the sole definition of success we use for severe use disorders, let alone mild and moderate ones.

To account for this, researchers are beginning to define quantity/frequency outcomes in more dynamic ways that allow for some measure of drinking to still be defined as a success. For instance, some have used more descriptive outcome data like percent days drinking, days heavy drinking, and drinks per drinking day (Project MATCH Research Group, 1997). In one early study of relapse examining smokers who were successfully in action for cessation, I used smoking less than 95% of former habit to define successfully sustained action (DiClemente & Prochaska, 1982). When the change goal is reduction of binge drinking, the metric for success or relapse often focuses on binge quantity and frequency (i.e., percent days heavy drinking). Although these more continuous measures of quantity and frequency may represent an improvement over the abstinent vs. not abstinent dichotomy, they are still arbitrary. As noted previously, we still need the individual to give input on the extent to which he or she is continuing or quitting significant change efforts. We also need more sensitive and comprehensive markers of success and failure to be able to reflect what is really happening as individuals struggle with the process of change.

Thanks to the current analyses in this study and recent work of Maisto, Witkiewitz and other authors, we are beginning to understand relapse as a dynamic, multidimensional, and multi-determined series of events (Prince & Maisto 2013; Witkiewitz & Marlatt, 2007). We are learning that our outcome measures must include psychosocial proximal and distal influences (McKay et al., 2006) that reflect or predict sustaining or failing to sustain change. Otherwise relapse ends up measured by quantity, which we have established is not an adequate measure. Examining the same Project MATCH data used in many previous studies, Carbonari and DiClemente (2000) found a success profile at the end of treatment that had important implications for individual posttreatment drinking quantity and frequency. Successful abstinence was marked by several variables reflecting commitment, personal struggle, use of coping activities, and both temptation to drink and self-efficacy to abstain. The most interesting finding was that future heavy drinkers had posttreatment profiles on these measures exactly opposite the long-term abstainers and that moderate drinkers, who had not engaged in binge drinking throughout the entire year, had profiles that lay somewhere between these two more extreme groups. Two of the predictors, temptation and self-efficacy, were inversely related and particularly interesting. In a subsequent analysis, the difference between these two measures not only predicted overall outcomes but also predicted time to first drink and number of drinks on the first drinking day for MATCH participants who had achieved 7 days of abstinence at the end of treatment (Shaw & DiClemente, 2016).

A Broader View of the Process of Change is Needed

These findings underscore the fact that relapse is not an isolated event and that it has to be viewed in the context of and as a critical part of the broader process of change (DiClemente, 2003). Relapse is not simply a problem of addictive behaviors. It extends beyond the confines of alcohol or drug use disorders and is not merely a product of the neurobiological effects of addictive substances. Relapse is a part of the process of intentional behavior change and represents failure to sustain change across an entire range of sought-after health behavior changes (e.g., diet, exercise, medication adherence, gambling, diabetes management, alcohol, and drug use). Relapse during a current attempt to change a target

behavior is defined as a return to a prior behavior pattern or the inability to sustain a behavior change (Brownell et al., 1986; Witkiewicz & Marlatt, 2007). Yet, we know that the process of achieving long-term maintained change more often than not includes prior failed or partially successful attempts to change. Sustained change represents a cumulative sequence of successive approximation learning, and as such relapse can actually *contribute* to successful change (Dawson et al., 2007; DiClemente, 2003). Hence, we need not only to define but also to understand what is the “failure” represented by relapse.

There are some very interesting new books that examine mistakes and failure and their role in science and life. Firestein (2016) is his book entitled “Failure” describes failure as the lifeblood of scientific inquiry, contending that failures may be more important or meaningful than successes. A couple of points struck us about his efforts to define failure, and these may be helpful in discussing relapse. The first is that there is a “continuum of failure, not just one kind” (p.8) and that the continuum represents mistakes, life lessons, unexpected learning, and opportunities for future discovery. The second is that there are such things as “good” failures that represent something new and valuable and that need no condemnation or excuses. These seem like important points to add to our discussion of relapse, especially given that relapses often lead to successful outcomes over time (DiClemente, 2006).

The reality is that recycling requires using the information gathered from one unsuccessful change attempt to inform the next one, so that change tasks can be more adequately accomplished and ultimately lead to successful, sustained change. We must respect relapse and be able to understand what aspects or types of relapse help individuals learn how to adjust their approach to change. That is the subject of another book, entitled “Black Box Thinking”, where Matthew Syed urges readers to examine failure and mistakes to figure out how to learn from them. His point is that, just as the airline industry uses recovered black boxes to understand reasons for and prevent future failure, we need to do the same in various areas of organizational and personal functioning. Certainly, this recommendation to examine and learn from failure is relevant for our clients, patients, and research participants who have relapsed. But it is also important for us, who as a field are hopefully ready to examine our own failures in addressing relapse, so that we may change the way we approach and study this crucial topic.

The current findings by Maisto and colleagues (2016) can contribute to this shift in our perspective and approach to defining and understanding relapse. For us that would mean the following: defining relapse only in the context of abstinence or successful action; accounting for the multiple and successive transitions between abstinence, lapse, and relapse over time; understanding the individual’s goal and collaborating with those experiencing the struggle to maintain change to include giving up on change as the phenomenological definition of relapse; broadening our understanding of relapse to include predictors and markers like temptation and self-efficacy; and finally respecting relapse and recycling processes so we and our clients can turn failure into successful learning and significant sustained change.

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