This transcript of a conference presentation describes a motivational model of alcohol use that shows the interrelationship between the various factors that affect drinking. First, a flow diagram is presented and described that shows how complex biological, psychological, and environmental variables contribute to a person's motivation for drinking, that is, to his or her expectations of affective change from drinking. The variables discussed include past experiences as they shape current expectations, current life situation, and cognitive mediating events such as beliefs, thoughts, and perceptions about the effects of drinking. The rest of the presentation describes theMotivational Structure Questionnaire for Alcoholics (MSQ-A) and discusses how it provides a clinical profile of a patient that can then be used for systematic motivational counseling. Sample clinical profiles are presented in order to illustrate and discuss 10 of the 16 clinical indices revealed by the questionnaire: number of concerns, aversive motivation, lack of commitment, inappropriate commitment, ambivalence, composite emotional intensity, hopelessness, ineffectiveness, goal distance, and alcohol irrelevancy. Paper copies of the slides used in the presentation are included. (TE)
Motivational Determinants of Alcohol Use:
A Theory and Its Applications

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New Fellow's Invited Address
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Thank you Dr. Grabowski.

First, I would like to acknowledge the contributions of two of my collaborators to the research on motivational determinants of alcohol use that I will discuss today. They are Eric Klinger of the University of Minnesota and Joseph Blount of Widener University.

Our research, and that of other investigators, identifies compelling reasons for viewing alcohol use and misuse as a motivational phenomenon. Hence, we have formulated a motivational model of alcohol use that takes into account the various factors that affect drinking and shows how these factors are interrelated. Due to time constraints today, I am not able to discuss the full model, which is available in several recently published papers (Cox & Klinger, 1988, 1990). Instead, I have depicted an abbreviated version of the complete model in the first slide.

SLIDE 1: Flow Diagram

The flow diagram shown here is intended to illustrate that alcohol use is fueled by complex biological, psychological, and environmental influences. Nonetheless, the final, common pathway to alcohol use is motivational. That is, each variable that affects drinking does so insofar as it contributes to a person’s expectations of affective change from drinking. In turn, as the final end point at the extreme right of the flow diagram indicates, a person decides to consume or not to consume any particular drink of alcohol according to whether or not he or she expects that the positive affective consequences of drinking will outweigh those of not drinking.

For people who doubt that drinkers make such decisions about drinking, we ask them (a) to consider the experimental results showing that alcoholics choose to withstand withdrawal symptoms for the opportunity to earn points that will allow them later to go on a binge (Langenbucher & Nathan, 1990), and (b) to imagine how often any drinker would take that next drink if he or she suddenly discovered that it had been poisoned. Nevertheless, this is not to say that people are necessarily aware of either having made a decision to drink or not to drink or the factors that affected the decision. Neither are decisions about drinking entirely rational, but are made on the basis of both rational and emotional processes.
drinking has on a person's nonchemical positive and negative incentives. To the extent that a person expects that the effects of drinking on affect will be positive, weight will be added to the person's decision to drink. To the extent that the person expects that the effects of drinking will be negative, weight will be added to the person's decision not to drink. The final decision, therefore, is made on the basis of whether or not the positive expected consequences of drinking outweigh those of not drinking.

Alcoholic drinking occurs when factors that contribute to the decision to drink (e.g., an individual's positive biochemical reactivity to alcohol) strongly outweigh factors that contribute to the decision not to drink (e.g., the interference that drinking will have on positive, nonchemical incentives). Alcoholics' failure to find emotional satisfaction through their striving for nonchemical incentives is one factor that contributes to their motivation to drink. The alcoholic may, for instance, have an inadequate number of sufficiently positive incentives to pursue; the available incentives may have lost positive value through habituation or the buildup of opponent processes (Solomon, 1980); or the alcoholic's pursuit of positive incentives may be unrealistic or inappropriate, making goal attainment unlikely. Alternatively, the alcoholic's positive goals—even if appropriate, realistic, and sufficient in number—may conflict with one another, making goal attainment unlikely or impossible. In addition, the person's life may be burdened by a preponderance of aversive influences, and the person may be unable to make progress toward removing these noxious elements. In part because of the alcoholic's ineffective motivational patterns, drinking alcohol may be his or her most attractive source of emotional satisfaction.

In summary, the motivational model depicts all of the major categories of variables that are known to affect drinking and suggests (a) ways in which they are channeled through an emotional and motivational system, and (b) their decision theory applications. It should be noted that the contributions of each of the variables to drinking decisions vary among individuals and within the same individual at different times. Therefore, a change in the weight contributed by any one variable will affect the balance between a person's expectations of positive and negative affective
consequences of drinking. Our intervention for alcoholics, which I will discuss shortly, seeks to increase their nonchemical sources of emotional satisfaction that are incompatible with drinking, thereby shifting the balance in favor of decisions not to drink.

In order to study the interrelationships between people's pursuit of nonchemical incentives and their motivation to use alcohol, we first constructed a questionnaire to assess motivational structure. This instrument is the Motivational Structure Questionnaire for Alcoholics, or MSQ-A.

**SLIDE 2: Motivational Structure Questionnaire for Alcoholics (MSQ-A)**

The questionnaire asks alcoholics to name and describe their current concerns and make judgments about them along various dimensions that will reveal the structure of each patient's motivation. From patients' completed questionnaire, we derive quantitative indices that indicate among other things the value, perceived accessibility, and imminence of the alcoholic's goals, as well as patterns of commitment to these goals and the nature of the patient's desires and roles in regard to them. From these indices, we construct a profile to depict each patient's motivational structure.

Our initial studies using the MSQ-A with alcoholics demonstrated that it is a reliable and valid instrument (Cox et al., 1989; Klinger, 1987). This research also indicated not only that people's motivation to use alcohol is closely tied to their incentives in other life areas but also that their motivation to change their drinking behavior is tied to these incentives (Klinger & Cox, 1986). Therefore, we went on to develop a counseling technique for alcoholics that is based on the MSQ-A.

The technique, which we call Systematic Motivational Counseling,

**SLIDE 3: Systematic Motivational Counseling**

seeks to modify directly the motivational basis for problem drinking. It focuses on the alcoholic's nonchemical incentives, aiming to maximize the emotional satisfaction that he or she derives from these incentives, thereby reducing the motivation to seek emotional satisfaction by drinking alcohol.

There are two major phases of Systematic Motivational Counseling.
SLIDE 4: SYSTEMATIC MOTIVATIONAL COUNSELING

1. Assessing Motivational Structure
2. Modifying Motivational Structure

First, we assess motivational structure with the MSQ-A and construct a profile for each patient. Second, we undertake a multicomponent counseling procedure to modify patients' motivational structure and thus help them to develop a meaningful life without alcohol. In order to illustrate Systematic Motivational Counseling, I will show several MSQ-A clinical profiles and discuss the counseling components that we might use with patients exhibiting each profile. Altogether, we have 16 clinical indices, but for illustrative purposes I have selected 10 of them to show on the slides that follow.

One noteworthy feature of a patient's clinical profile is the total number of concerns that the patient names for the 15 major life areas and how this number compares with the number that other patients name. The Number of Concerns index is plotted as Index 1 on the slides. In the first slide shown here,

SLIDE 5: Profile 1 (MERK)

we see the profile of a patient who named a small number of concerns relative to other patients and received a T-score of 30 on the Number of Concerns index. A low score on this index might indicate several different things about a particular patient. However, one therapeutic tactic that might be indicated for such patients is to help them to identify new incentives (i.e., healthy, nonchemical sources of emotional satisfaction) to pursue and enjoy. One way in which we help patients do so is to explore with them the pleasurable activities that they have enjoyed in the past and the activities that they imagine would bring satisfaction in the future. We also attempt to identify the categories of activities that seem to bring them satisfaction and find other activities in each category in which the patient might enjoy engaging.

One patient, for example, now that he had given up drinking alcoholic beverages, thought that he would enjoy trying new, interesting nonalcoholic beverages. Thus, he decided that each week
he would go to a "fancy" grocery store and choose either some gourmet coffee beans to sample or an exotic fruit (e.g., a mango or papaya) with which to make a nonalcoholic drink. I am not suggesting, of course, that merely substituting nonalcoholic beverages for alcoholic ones is a cure for alcoholism. I am suggesting, however, that if patients are able to learn to enjoy such healthy sources of gratification, this will be one factor that will help to tip the balance in favor of decisions not to drink.

Another important MSQ-A index to consider in working with patients clinically is Aversive Motivation, which is shown as Index 2 on the slides.

SLIDE 6: Profile 2 (WORS)
The most striking characteristic of the patient's profile shown in Slide 6 is his strong elevation on Index 2. This index indicates the proportion of concerns that patients express in terms of avoidant verbs (e.g., "get rid of," "prevent," "avoid"). Since it is psychologically more satisfying to be positively motivated (i.e., to have attractive goals that one wants to achieve) (Roberson, 1990) than negatively motivated (i.e., to have aversive goals that one wants to get rid of), patients who are high on the Aversive Motivation index may need help in shifting their motivational style from negative to positive. To help them do so requires cognitive restructuring. For example, typical negative goals that the counselor might help the patient reconceptualize as positive goals are as follows: A goal of "getting rid of my weight problem" might become "accomplish having an attractive, healthy body through good nutrition and exercise." "Avoid making a fool of myself around other people" could be reformulated as "learn to enjoy having other people appreciate me for the person I really am." "Escape from my present boring job situation" could be recast as "accomplish finding a job where I really enjoy going to work."

The last MSQ-A index that I will discuss today is Inappropriate Commitment, shown as Index 4 on the next slide.

SLIDE 7 (TRUS)
Like the patients shown in the first two slides, the patient in Slide 7 is also depressed on Index 1 and elevated on Index 2. In addition, however, the third patient also has a high score on Index 4,
Inappropriate Commitment. Such a high score indicates that the patient is committed to achieving goals (a) for which he expects little chance of success and/or (b) from which he expects to derive little emotional satisfaction. Such patients sometimes feel committed to "inappropriate" goals because they feel that they should pursue these goals rather than because they want to do so. They might need help either (a) to reassess their expected chances of success in reaching their goals and their anticipated emotional satisfaction upon doing so, or (b) to relinquish goals to which they are inappropriately committed. For example, one patient who needed to become disengaged from an inappropriate goal was recently divorced from his wife but was still very much emotionally attached to her. Despite the fact that there was no chance for the couple to be reconciled (the wife, in fact, was to be remarried), the patient was obsessed with thoughts of reuniting with his former wife, and the resulting emotional turmoil was accompanied by thoughts of drinking. Requiring considerable emotional support, this patient was strongly encouraged to put his past behind him and to find new sources of happiness to replace his loss.

The Systematic Motivational Counseling technique, as we currently practice it, is an adjunct to an inpatient and aftercare alcohol rehabilitation program. We have used the technique with many patients during brief counseling, usually five or six sessions. We have seen a small number of additional patients for extended counseling, ranging from several months to two years. All indications are that our efforts have succeeded. Patients have responded favorably to the technique, and have often spontaneously told us that merely completing the MSQ-A has helped them to articulate their important concerns in life and served as an impetus for them to prioritize their goals. We have information about long-range treatment outcomes only on those patients whom we have seen for long-term counseling. Among these patients, only one experienced a "slip" (which turned out to be only a temporary set-back), and no other patients resumed drinking for the duration of our contacts with them. Moreover, during the course of the counseling sessions, these patients seemed to make significant progress in rebuilding their lives through nonchemical goals and incentives. Nevertheless, Systematic Motivational Counseling now awaits formal evaluation.
References


Motivational Structure Questionnaire
for Alcoholics (MSQ-A)
Systematic Motivational Counseling
Systematic Motivational Counseling

1. Assessing Motivational Structure

2. Modifying Motivational Structure
Number of Concerns
Aversive Motivation
Lack of Commitment
Inappropriate Commitment
Ambivalence
Composite Emotional Intensity
Hopelessness
Ineffectiveness
Goal Distance
Alcohol Irrelevancy

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