The Denver Community Mental Health Questionnaire: A Multivariate Approach with Alcoholic Outpatients

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Barry Mallin

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BARRY MALLIN

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ABSTRACT

For the sake of clarity this research is presented as four seperate studies.

Study One was concerned with the effect of changing the administrative procedure of the Denver Community Mental Health Questicnaire from an interview procedure, as used in Denver, to a self-administration. Two groups of community norms; one an interview group (IG) the other a self-administration group (SAG), were collected and compared.

Study Two compared the Winnipeg norms collected in Study One (SAG) with an estimate of the interview community data collected in Denver.

Study three was based on the logic that an instrument like the Denver Community Mental Health Questionaire should be able to differentiate between a normal and a pathological group. The SAG data from Study One was compared with data collected from a group of self-defined alcoholic out-patients (ALC1). These findings are discussed with reference to what the literature tells us about the psychiatric concomitants of alcoholism and along what dimensions other self-report scales discriminate alcoholics from the norm.

While then first three studies were concerned with the restandardization of the Denver Community Mental Health

Questionaire cn a sample of the Winnipeg community and the effect of changing the mode of administration Study Four was an initial attempt to use the instrument in a pre-post treatment evaluation study. This was not an evaluation study per se. As will be seen, the conditions of the study were less than ideal for drawing conclusions about the efficacy cf treatment. Nevertheless, the results were interesting from the point of view of investigating the utility of an instrument like the Denver Community Mental Health Questicnaire in such a setting.

The findings were essentially that the Denver Community Mental Health Questionaire could be reasonably used as a self-administered questionaire; that local norms are required for valid comparisons; that the scale was able to discriminate alcoholics from normals along dimensions consistant with those suggested in the literature; and that the changes in the alcoholic profiles observed during treatment suggest that the scale could provide useful outcome data when used in an appropriate design. Suggestions fcr further research and design modifications to provide less equivocal conclusions are presented.

ACKNOWLEGEMENTS

I am extremely pleased to be writing this section of the thesis. In part my pleasure comes from knowing that the ordeal is nearly complete, but also partly because it gives me an opportunity to write my thanks to those who "helped me through the night."

Jim Burdick and the A.F.M. commissioned and funded much of this work, and although our outlooks differ and neither of us knew just what we were getting into, I am indebted to them for the part they played.

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GENERAL INTRODUCTION

The age of "relevance" has come and gone and the age of "consumerism" is upon us. Hosts of manufacturers and retailers are reeling under the impact of new consumer awareness, sophistication, and legislation. Schools are required to publish data on the employment records of their graduates and even universities are being sued for breach of contract when disenchanted students feel that the "product" they received was misrepresented or of poor quality (Weider, 1976). Nader's Raiders continue to harass big business while expanding their scrutiny to include less profit motivated endeavours such as the Community Mental Health Program. Previously "untouchable" professions such as psychiatry and psychology are being asked to account for the outcome of their various endeavours. In particular they are being required to show a positive cost-benefit ratio.

Insistance on outcome data is not new in psychotherapy research, however, previously it has been a sort of in-house war between adherents of various approaches. With the advent of public accountability comes the sophistication of methodology and analysis in the area of evaluation.

Initially evaluations were primarily modelled on the laboratory procedure so familiar to investigators.

Essentially this amounted to taking pre and post measures on the treatment groups and creating or designating another group as the control group. Many workers in the field now feel that this approach is inappropriate to the field of program evaluation. (Guttentag, 1973; Weiss, 1975; Scriven, 1974).

Guttentag (1973) points out that the classical design assumes "that programs are designed to achieve ends and that the success of programs can be measured by the extent to which the ends are reached." She suggests that in many programs this is not the case since there are different goals for different individuals, and programs frequently have broad aims and unstandardized forms.

Campbell and Stanley (1966) give the criteria for validity in a classical experimental design as: "... the history - the specific events occurring between the first and second measurement, in addition to the experimental variable, are controlled: that the effect of taking a test upon the scores of the second testing are also controlled, and that there is a control for biases resulting in differential selection of respondents for the comparison groups." (p. 5). Guttentag (1973) and others (Scriven, 1974; and Kiresuk, 1973) point out that an evaluation study cannot hope to meet these criteria, and Weiss (1973) has described at length the causes and

effects of "organizational constraints on evaluation research." (p. 49)

As a result of the criticism of the use of the classical experimental design many new evaluative systems have been forthcoming. These include widely used systems such as Goal Attainment Scaling (Kiresuk, 1973), generally accepted but only occasionally used systems such as Edwards' Multi Attribute Utilities Method, (Guttentag, 1973), and esoteric, largely theoretical systems such as Goal Free Evaluation, (Scriven, 1974).

Nevertheless, the majority of "summative" evaluation studies tend to be of the random assignment, pre-post design. This impression is strengthened by Boruch (1974) who replied to Campbell's (1973) comment on the lack of randomized experimental program evaluations by publishing an exemplary bibliography of just this type of study in a variety of areas. It is this author's impression that classical design is the choice not only of the evaluators, because of their extensive education in the experimental tradition, but also of the program administrator, be. Program administrators however, seem to have a tendancy to view the tradition in its simplest form and to eschew often complex but always necessary control procedures in search of ease of implementation and clarity of interpretation.

When presented with a choice between the formative,

comprehensive, Goal Attainment Scaling (Kiresuk and Sherman, 1968) and the more summative Denver Community Mental Health Questionnaire (Ciarlo and Reihman, 1974) the administrators of the Winnipeg alcoholism treatment program, for whom this research was first commissioned, initially chose Goal Attainment Scaling. Later, faced with staff concerns about implementation, workload, and personal accountability the administrators chose to implement a pre-post administration of the Denver Community Mental Health Questionaire (D.C.M.H.Q.) along with other measures of agency functioning.

DESCRIPTION OF THE PRESENT STUDY

For the sake of clarity this research is presented as four seperate studies.

Study One was concerned with the effect of changing the administrative procedure of the D.C.M.H.Q. from an interview procedure, as used in Denver, to a self-administration. Two groups of community norms; one an interview group (IG) the other a self-administration group (SAG), were collected and compared.

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While then first three studies were concerned with the restandardization of the D.C.M.H.Q. on a sample of the Winnipeg community and the effect of changing the mode of administration Study Four was an initial attempt to use the instrument in a pre-post treatment evaluation study. This is not an evaluation study per se. As will be seen, the conditions of the study were less than ideal for drawing conclusions about the efficacy of treatment. Nevertheless, the results are interesting from the point of view of investigating the utility of an instrument like the D.C.M.H.Q. in such a setting.

Methodological considerations of all aspects of the research are presented in the General Discussion section following Study Four.

ALCOHOLISM- PSYCHOLOGICAL CONSIDERATIONS

Aside from physiological sequellae to alcohol abuse much work has been done on the psychological factors in alcoholism. This work is concerned with both the psychological causes and consequenses of prolonged heavy drinking.

As in other areas of psychology the field of alcoholism is replete with definitions. Barry(1970) finds that none of these is entirely satisfactory and points out that some of the confusion may be eliminated by noting that alcoholism necessarily involves both heavy drinking and psychopathy. Walgren and Barry (1970), in a review article, are somewhat more specific.They specify three necessary and sufficient criteria:

> 1) a large quantity of alcohol consumed over a period of years;
>
> 2) abnormal, chronic loss of control over drinking shown by inability to refrain, or inability to stop; and
>
> 3) the drinking causes damage to either physical health or social standing.(pp 716-718)

Clearly, this definition calls for many discretionary judgements concerning what constitutes " large quantities, abnormal loss of control, and damage to social standing." These criteria are likely to be influenced by cultural and socio-economic standards.

Alcoholism has also been described as a disease (Jellinek, 1960), and in disease terms as an "agent" attacking a "host" in a favourable "enviornment" (Mello, 1972). while the disease concept, as applied to alcoholism, has been useful in removing it from the world of moral weakness and wickedness and has helped to dramatize the seriousness of the disorder and the need for

treatment the concept also has certain drawbacks. Robinson (1972) feels that the labelling process coincident with the disease concept may have adverse effects on the individual's self-concept and relationship with others. Calahan (1972) has suggested using the term "problem drinking" which implies a mutiplicity of problems as opposed to a specific pathogenic agent.

This concept of problem drinking is especially compatible with the use of multiple criteria for the diagnosis of alcoholism as specified by the National Council on Alcoholism (1972). Calahan et al (1969) found that while the authors categorized 12% of their sample of users as heavy drinkers only about 2% of the sample classified themselves as such. In a later study Calahan (1970) produced a guideline for classifying subjects as problem drinkers. This required further criteria. Calahan designated several measures of loss of control over drinking (frequent intoxication, binge drinking) and several categories of problems due to drinking (with spouse or relatives; with friends or neighbors; with job; with law, police, or accidents; with health; with money; and with beligerence) (pp 28-23). Many currently used scales are modeled on this on and incorporate these dimensions.

Usually the subjects report on their own drinking behaviour in an interview or on a questionaire. Guze et

al (1963), with 18 questions grouped into 5 different criteria, reported that in a study of 90 criminals, 39% of whom were independantly diagnosed as being alcoholic, all but one gave information which enabled classification as alcoholic. Of particular note is that information gleaned from interviews with close relatives would not have detected the alcoholism in 16 cases. This study, in modified form, has been replicated (Guze and Goodwin, 1972) and is cited as indicating the trustworthiness of self reports (Barry, 1970).

Other criteria for problem drinking based on similar sets of questions to that of Guze (1963) have been reported by Auerback (1966); Selzer (1971) was further validated by Moore (1972); Steinhiller et al. (1967); and Shelton et al. (1967). Other scales have been developed for more specific purposes. Edwards et al. (1972) asks only two questions, Selzer (1967) asks five. Jackson (1967) formulated two scales each with five levels Jellinek (1946) reported on a very lengthy questionaire measuring age at onset of a large number of symptoms. An abbreviated form of this questionaire was published by Jellinek in 1952. McCusker et al. (1971) reported on the Zinberg scale of alcohol abuse, which makes use of detailed information on the person's history of physical, social, and occupational impairments due to drinking. Mumford and Miller (1960) asked about emotional responses

to drinking and motivations for using alcohol.

This multiplicity of scales reflects, in part, the lack of an ideal, generally accepted set of criteria defining alcoholism. It also reflects the varying emphasis on either brevity or comprehensivness as well as the various methods and groups used in validating the different scales.

As previously mentioned one validational system used is to have friends and relatives of the subject rate the subject as alcoholic or not. Another is to use classification by a trained observer (often the person administering the questionaire). By far the most commonly used and supposedly objective basis for specifying a person as alcoholic is inpatient or outpatient treatment for alcoholism. This procedure also has its problems. Studies by Blaine et al. (1964) and Wolf et al. (1965) indicate the cultural relativity of a physician's diagnosis of alcoholism. They maintain that this leads to an overrepresentation of the type of alcoholic characterized as the skid-row social deviate in hospital populations of alcoholics.

While we know a good deal about the psychological functioning of the alcoholic from the content of the items that comprise the criterion scales for diagnosing alcoholism we must also consider studies approaching the question from other viewpoints. One other approach is to

consider the psychological, or psychiatric, concomitants of alcoholism. Another is to administer the so-called broad-band psychological tests to groups identified as alcoholic by means of other criteria.

Among psychiatric illnesses the one most closely associated with alcoholism is depressive, or manic-depressive psychosis, also called affective disorder (Barry). Shuckit et al. (1969) found historic evidence for affective disorder among 27% of his alcoholic subjects. From the opposite tack Coleman (1968) found 20% alcoholics and 22% heavy drinkers, both high proportions, among a sample of 59 male manic-depressives. Looking at collaterals Winnokur et al. (1970; 1971) reported an elevated incidence of affective disorder among female relatives of alcoholics and of alcoholism among male relatives. In this light it is often suggested that both the mania and the alcoholism are a means of masking the symptoms of depressive illness.

Further evidence for a link between alcoholism and depressive illness is the association of alcoholism and suicide as reviewed by Walgren and Barry (1970) and Goodwin (1973). A link between suicide and each of affective disorder, alcoholism, and schizophrenia has been postulated by both Robins et al. (1968), in St. Louis, and Barraclough et al. (1970), in Sussex, England. Although certain methodolgical problems are common to