REPLICATION OF A PROGNOSTIC INDEX
BASED ON FOLLOW-UP DATA GATHERED FROM INEBRIATES
TREATED AT AN OUT-PATIENT CLINIC

by

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B.A., The University of British Columbia, 1962

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

Master of Arts

in the Department of
ANTHROPOLOGY AND SOCIOLOGY

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA
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ABSTRACT

Adopting a social problems framework, the relation between certain sociological factors and rehabilitation was analyzed for a group of alcoholic patients treated at an out-patient clinic. It was hypothesized that favourable socio-economic characteristics, such as being married and living with wife, being employed, living in acceptable housing, were related to treatment success. Six such factors, one of them a motivational index, were incorporated into a prognostic index by a Danish researcher. This index was replicated with data gathered during interviews with 155 male patients for a follow-up study during 1962/63.

Treatment results and factors associated with treatment were analyzed both quantitatively and qualitatively. Step-wise regressions showed that socio-economic data combined into an index did not predict treatment outcome with any degree of accuracy for the Canadian sample. Housing, type of spirit consumed and age emerged as a "best" predictor, accounting for roughly 8 per cent of the variance involved in successful treatment outcome. The hypothesis was not confirmed that socio-economic factors are associated with rehabilitation, but it was found that certain social control factors, which are associated with socio-economic factors, are conducive to rehabilitation if treatment is given at out-patient clinics.
The inferences drawn from the findings suggested both certain theoretical and practical implications for treatment. These were spelled out in some detail following Talcott Parsons' theory of social control and deviance, and definitions of illness and health in the light of North American values and social structure.
ACKNOWLEDGEMENTS

The original research, of which this thesis is an extension, was planned and initiated by Dr. R.A.H. Robson, to whom the writer is particularly indebted. Special thanks are due to Mr. Grant Clarke who also formed part of the original research team, and the Executive Director of the Alcoholism Foundation of British Columbia, Mr. E.D. McRae for their assistance.

The help of Mr. T. Nosanchuk, the thesis advisor, and Dr. M. Meissner and Miss D. Coutts, who read the draft and offered helpful suggestions, is gratefully acknowledged.

I.P.

Vancouver, B. C.

April 1964
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CHAPTER I

INTRODUCTION AND STATEMENT OF THE PROBLEM

Introduction

Alcoholism is a state of ill-health suffered by at least 200,000 Canadians. It is a complex condition, or series of conditions, partly physical, partly psychological, partly social. Its treatment and prevention therefore involves many different kinds of health facilities and personnel.¹

Thus the Canadian Council on Alcoholism introduced its brief submitted to the Royal Commission on Health Services in May 1962. Despite the research that has been conducted for quite a number of years in the three areas in which alcoholism could have its roots, no "causes" of alcoholism that would admit of predictable successful treatment have emerged. Hence a proliferation of treatment methods exist.

When the social side of alcohol addiction was first studied (some 30 to 40 years ago), research centered around social causes. That is, alcoholism was seen as constituting a social problem in as much as it resulted principally from social circumstances. To this approach the case history was added. But soon many difficulties in the "social problem" approach were encountered; chiefly, lack of knowledge of how to classify an "alcoholic" and lack of

¹ From the brief submitted to the Royal Commission on Health Services by the Canadian Council on Alcoholism, Vol. 49 (May 1962), p. 9411.
representative populations. Social profiles of striking contrasts were revealed from studies made of alcoholics in state hospitals, police case drunkards, members of Alcoholics Anonymous, patients attending out-patient clinics or being attended to by private physicians, in-patient clinic patients or skid-road winos.²

All of these inebriates were part of a larger population of alcoholics, but no generalizations could be attempted from these uncorrelated studies, each having analyzed a group of problem drinkers separately, trying to ferret out the social causes of their addiction. Further, it was difficult to detect just where the line between heavy drinkers and problem drinkers (that is, those causing also a social problem) existed, especially since problem drinkers included steady-drinkers, periodic-drinkers, weekend-drinkers, spree-drinkers - all of them addicted to some extent in that they have a compulsion to consume alcoholic beverages until, generally, they "pass out" and "come to" manifesting some addiction symptoms.

As more data were gathered, increasingly divergent results led to the questioning of the sole applicability of the "social circumstances causing social problems" approach.

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QJSA, the notation used throughout the footnotes, stands for Quarterly Journal of Studies on Alcohol.
for the evaluation of the causes of alcoholism. As R.K. Merton so rightly stated:³

Like other investigators, sociologists are of course free to delimit the range of their inquiry. They are free to state the criteria of the phenomena that will be regarded as pertinent to systematic investigations. But in proposing particular criteria, sociologists, like other investigators, are required to show that these criteria are theoretically useful, if the proposal is to be taken seriously by others. Freedom to define does not mean license to exclude. And until now, no satisfactory case has been made for confining the scope of social problems to only those problems that are in their origin social in the sense that the events precipitating them are initiated by men in society. Rather, it is proposed that, whatever the precipitating events, they enter into purview as part of a social problem whenever they give rise to significant discrepancies between social standards and social actuality.

With the maturing of sociological theory and empirical methods, attention in the research on alcoholism was soon focused more on the alcoholic himself, his drinking history, his deviant alcoholic behaviours, the function of alcohol for those involved, as well as looking at the social origin of alcoholism.⁴

However, since the central interest of this paper is the efficacy of one type of treatment, namely the kind of treatment given to problem drinkers in an out-patient clinic, in relation to certain sociological factors, the


⁴ Bacon, op. cit., p. 454.
range of inquiry has to be delimited. Thus problem drinkers are viewed as deviants from certain societal norms to which the majority of society would like them to adhere. Although the criteria used here are limited, they are still thought to be theoretically useful in applying them to replicate a prognostic index. It is reasoned that if social factors are thought important in contributing to disease causation, they should also be important in contributing to disease remission, or in the case of alcoholics, to rehabilitation.

After it was ascertained that the causes of alcoholism might well arise from a combination of physical, psychological and social aspects of human lives, a multidisciplinary approach to treatment was generally adopted in out-patient clinics.

The Alcoholism Foundation of British Columbia is an out-patient clinic where such an approach in the treatment of alcoholism has been effected. This clinic was founded on the concept that alcoholism is an illness and a public health problem; the alcoholic thus is looked upon as a sick person.  


Its major areas of treatment include:

1. Medical:  
   a. physical evaluation  
   b. pharmaco-therapy as necessary, including vitamin therapy, Antabuse therapy  
   c. psychiatric assessment in selected cases  
   d. psychometric testing in selected cases  

2. Group education sessions:  
   a. lectures  
   b. films  
   c. group discussions  

3. Individual counselling  

Between 1962 and 1963 a follow-up research study was undertaken in order to evaluate the effectiveness of these services. The study was directed by Dr. R.A.H. Robson, Associate Professor of Sociology at the University of British Columbia, with the writer as one of the two full-time research assistants.

Subsequently the writer decided to enlarge upon the original study and use the follow-up results in order to investigate the problem of prognosis based on available sociological factors; for closely connected with the problem of evaluating treatment outcome is the question of predicting treatment success, especially since the doors of all public treatment facilities are open to all who seek help with their problem, or who are referred to a treatment center by social welfare agencies and others involved in maintaining "law and order."

A proliferation of various "treatment" centers can generally be found in or around large metropolitan areas.
Starting with treatment at a private physician's office or emergency treatment in a ward of a general hospital - usually consisting of detoxicating services and/or emergency treatment of fractures, bruises, hemorrhages - and ending with alcoholic wards in city and county jails - where no therapy is given - a host of "in-between" treatment measures can be found. Special in-patient clinics which combine emergency measures with long-term treatment; private sanitariums which function purely as detoxicating centers and rebuilding of physical strength; private and public in-patient clinics which are involved in various forms of conditioning reflex treatment, Antabuse treatment, psychiatric treatment; in-patient clinics which, in addition to detoxicating services, administer the kind of treatment given at the Alcoholism Foundation; and, of course, out-patient clinics similar to the one described.

Furthermore, there are some foster-home schemes. Here a problem drinker can live with a non-drinking family in the hope that group influences will aid him in staying sober. There are state hospital "drying-out" wards with a maximum of drug treatment and a minimum of psychiatric therapy; half-way houses or work-houses; and prison farms - all operating on the principle that a certain amount of formal control is necessary to keep certain problem drinkers functioning in a non-drinking environment. 7

7 For a comprehensive overview of alcoholism treatment
Naturally, not all "treatment" centers are accessible to all inebriates. There is, firstly, the question of resources, both financial and intellectual, especially with regard to private treatment facilities and clinics giving a psychiatrically oriented type of treatment. Secondly, only a small number of inebriates get sufficiently involved with the law to warrant a "confinement;" and thirdly, not all types of treatment facilities are found in one area. About the only thing these various "treatment" places have in common is the attempt to build up the alcoholic's physical health and to keep him sober for a period of time.

Considering treatment facilities financed by public monies, certainly a scarcity of resources warrants a question of this nature: Are there certain measurable sociological factors pertaining to problem drinkers that would make one treatment agency more effective than another one, and if so, what are these factors?

Scanning the literature for possible factors related to success in the treatment of problem drinkers, one quickly becomes aware that certain socio-economic and motivational characteristics tend to be thought crucial to the treatment outcome, especially if treatment is on an ambulatory basis; that is, where the patient is more

or less in control of his environment and free to follow clinic instructions or not.

There is by no means agreement as to which factors are more important than others, but there seems to be a general assumption that the closer a patient complies with certain societal expectations, that is, being married, employed, and having permanent and suitable accommodation, the better are his chances for successful rehabilitation.8,9,10,11,12,13


Statement of the Problem

Two known studies, one in North America by Dorothee F. Mindlin\textsuperscript{14} and one in Denmark by Kirsten Rudfeld\textsuperscript{15} have confronted the problem of establishing and validating a prognostic index based on data collected from alcoholism outpatient clinic clients. Both indices employ socio-economic and motivational data, but the Mindlin index in addition incorporates psychiatric and psychological test results.

There are other studies dealing with the problem of prognosis (see footnotes 8-13), but none of these studies shows that an index was constructed which was validated on another group of patients.

Both Mindlin and Rudfeld have used their case material and follow-up studies to ferret out factors thought to be important and significantly related to treatment outcome. Mindlin's factors, marital status, economic resources (whether employed or not), usual occupation, arrests, motivation, intellectual functioning at time of intake interview, psychiatric diagnosis and Rorschach Sign Balance, "showed statistically significant differences between outpatient


successes and outpatient failures."\(^{16}\)

Rudfeld's data showed associations between treatment success and age, marital status, employment status, housing, type of intoxicant consumed, and source of initiative of patient's involvement in treatment (motivation). Rudfeld states: "By 'association' in the present account is understood an association found significant on the 5 percent or lower (level), by statistical tests."\(^{17}\) Rudfeld's criteria for statistically significant associations will also hold throughout this thesis. Criteria of success and failure are presented in Chapter II.

In constructing their indices both Mindlin and Rudfeld gave certain weights to various factors found to be significantly related to treatment success or failure. These were then combined into a prognostic scale, and chances for predicting treatment success calculated.

The two indices were constructed independently of each other; yet in accordance with the general findings in the literature, both have certain socio-economic and motivational variables in common. Unfortunately, extensive psychiatric and psychological data comparable to Mindlin's are not available in out-patient clinics which are not solely

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\(^{16}\) Mindlin, op. cit., p. 609. Level of significance is not expressly stated. Mindlin's elaboration of the criteria on which treatment success and failure were based, are to be found on p. 607.

\(^{17}\) Rudfeld, op. cit., p. 216.
psychiatrically oriented. They are not available for this study, whereas comparable data used in the construction of Rudfeld's index are available.

According to Rudfeld's tables the index seems to possess a fairly good degree of predictive reliability for those patients who have received the kind of treatment described for his patient sample. By replicating this index one should then be able to draw some conclusions about the general problem of prognosis and the particular problem of prognosis for inebriates treated at out-patient clinics. At the same time one could perhaps establish if data from one culture can be transposed to another one without modification and still show the same results.

Rudfeld's index is based exclusively on socio-economic and motivational factors. It was calculated from information received of 334 patients, including 13 women (19 patients were disqualified due to lack of data), treated at the Aalborg Antabuse Center between October 1951 and December 1954, and compared with data from a group of 191 patients treated at the clinic of the Danish Temperance Societies in Copenhagen. Length of follow-up time ranged from 17 to 57 months, including treatment period.

18 Ibid., Table 2, p. 214. Statistical chances for success and failure will be described in Chapter IV, Part 2.

Differences in results between the two sets of data were partly associated with different types of treatment, differences in locale - small town versus big city (100,000 vs. 700,000 population) - and accessibility of patients, and partly to ambiguities in recorded data for Copenhagen.

The treatment at Aalborg consisted of Antabuse for each patient, administered under controlled circumstances, coupled with individual and personal counselling with respect to social problems. The Danish Temperance Societies' treatment consisted solely of counselling by a psychiatrist and/or social worker.

**Hypothesis and Rationale**

The addictive effects of alcohol are seen as being of the same nature for all patients and treatment is therefore designed to remedy these addictive effects regardless of other factors affecting the patient's life. Replicating the Dahish index with Canadian data, the following hypothesis is therefore advanced:

The more closely a patient's socio-economic characteristics and motivation to undergo treatment conform to societal expectations, the higher are his chances to benefit

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21 Arsberetning for Afholdsbevaegelsens behandlings-institutioner for alkoholskadede. 1962/1963, 6 pp. (Yearly report for Temperance Union Treatment Centers for persons suffering from alcoholism.)
from the type of treatment offered at an out-patient clinic, and conversely, the less closely a patient's socio-economic characteristics and motivation to undergo treatment conform to societal expectations, the lower are his chances to benefit from the type of treatment offered at an out-patient clinic.

The rationale for the hypothesis is based on Mindlin’s and Rudfeld’s findings, as well as on the findings of other investigators who stress social and motivational aspects as being conducive to success in out-patient treatment of inebriates. Although these writers, as well as Rudfeld and Mindlin, tend to disagree on certain aspects; that is, which are the more or the less important ones, all stress the fact that if a patient is treated ambulatory, he is expected to draw strength from his environment to undertake and continue treatment. As such the "right" environment is seen as a resource - something to fall back upon and something that gives meaning to current living. The economic environment is seen as a measure of the remaining strength and the productiveness of the individual. Motivation to undergo and remain in treatment is seen as one of the resources within the patient. Where all these resources are working for the patient, rather than hindering him, his chances of successful treatment are seen as better.

22 Mindlin, op. cit., p. 614.
Although one may not like the fact or even try to ignore it, the aim of counselling and psychiatric treatment given at out-patient clinics tends to direct the patient's behaviour so that it can change to conform to "middle-class" expectations. An examination of the list of results that the staff of the Alcoholism Foundation expected from the treatment, which stresses employment stability, harmony in the home, good physical health, well-behaved children, adequate social participation, self-reliance, responsibility - just to mention a few - will show this. It therefore seems reasonable to assume that those who, except for their drinking behaviour, conform to certain "middle-class" values will tend to benefit more from the type of treatment offered at out-patient clinics which stress these values in their counselling approach, than those who do not conform to these values.

Furthermore, it is often stressed that most skid-road alcoholics can not benefit from out-patient treatment mainly because their only social support emanates from their fellow skid-road brothers with whom they spend most of their time, and whose group standards are quite dissimilar to those stressing "middle-class" values. In other words, their sources of support do not come from socially approved ones like family or work setting, but from the socially disapproved ones of the deviant sub-group.

23 For the list of results, see Chapter II, pp. 27-28.
as seen by society at large. However, within the deviant group, socially disapproved standards are the norm and what is disapproved by society at large is valued by the sub-group. For those supported by the deviant sub-group therapeutic involvement will be at a minimum and gains small, unless substitutes for the deviant group supporters can be found.

To expect that older persons are more likely to benefit from out-patient treatment would seem contradictory in light of the above, since it is expected that skid-road alcoholics are older men. However, there are distinctions to be made between the skid-road "wino" who is an older man and more or less living continually on skid-road, and the skid-road alcoholic or "lush" who can be of any age, but lives on and off skid-road due to economic and social necessity. Generally, society at large views older men as more stable than younger ones, and thus more amenable to long-term treatment of a voluntary nature.


* Except for the Pacific West Coast where the term skid-road originated, "skid-road" is generally referred to as "skid-row."
Summary

The introduction to this thesis concerned itself briefly with outlining a theoretical approach to the research problem undertaken. Although it was admitted that the "social problem" approach was undesirable if it limited useful ways of looking at data, it was nevertheless used since the central interest of this study is the evaluation of the efficacy of out-patient treatment in relation to certain sociological factors. The theory had been found useful in this approach. Problem drinkers were viewed as deviants from certain societal norms to which the majority of society would expect them to conform. It was reasoned that if social factors are thought important in contributing to disease causation, they should also be important in contributing to disease remission.

The treatment given at the Alcoholism Foundation of British Columbia was described. This clinic is an out-patient clinic. From earlier studies it became apparent that not all patients with alcohol problems tend to benefit from out-patient treatment. The question was raised if a scarcity of resources warrants the investigation of certain factors that would make for successful out-patient treatment, and if so, what were these factors?

Two known studies incorporated socio-economic and motivational data into a prognostic index. The Danish index
incorporated a more limited range of factors than the North American one, but since these were the only factors available from a study conducted for the Alcoholism Foundation of British Columbia a year prior to the present study, it was decided to replicate the Danish index.

The hypothesis was advanced that the closer a patient's socio-economic status and motivation to involve himself in treatment corresponded to societal norms - that is, apart from his alcohol addiction - the higher would be his chances to benefit from the treatment designed to remedy the addictive effects of alcohol; and vice versa, the lower a patient's adherence to societal norms, the smaller are his chances to benefit from out-patient treatment.

The rationales for the hypothesis were based on the findings from the two prognostic indices and the expectations that were advanced by the staff of the Alcoholism Foundation with regard to treatment outcome. Further rationales were furnished by the findings of studies investigating skid-road alcoholics. These alcoholics, due to "social isolatedness" conform to sub-group standards, and thus do not involve themselves in out-patient treatment to a great extent, unless forced. Generally, they tend to leave treatment as soon as possible and do not benefit by their association with an out-patient treatment center.
CHAPTER II
RESEARCH PROCEDURES

The Study Design

The study design for the research project undertaken for the Alcoholism Foundation of British Columbia called for both a control and an experimental group. Therefore two groups of problem drinkers were selected, of which one had received treatment at the Foundation, while the other one had not. These two groups were then to be compared on the extent to which they showed a behavioural change during a comparable period of time.

The Alcoholism Foundation keeps a record of every person who at one time or another has approached the Foundation for help. Persons who have visited only once or twice are generally recorded under a "miscellaneous" category, while patients who have become involved in treatment are recorded under "case" files. The miscellaneous records became the pool from which the control group was selected. It was felt that this group of problem drinkers would constitute a more appropriate control group than a randomly selected sample of all untreated alcoholics from the general population, since it seemed reasonable in the evaluation of the work of the Foundation clinic to use the type of person who eventually comes to such a clinic for help.
The experimental group members were selected from the actual case files, whereby a matching procedure was adopted, which will be described shortly.

The experimental and control groups were defined as follows:

1. **Experimental Group**
   Persons who visited the Foundation during the period from January 1, 1959 to December 31, 1961, and who have used the services of the Foundation at least five times.

2. **Control Group**
   Persons who visited the Foundation during the period from January 1, 1959 to December 31, 1961, and who have had a medical examination and/or intake interview, but have not used the treatment services of the Foundation more than four times.\(^1\)

Selecting the dates between January 1959 and December 1961 meant that anywhere between 11 and 46 months of time had elapsed between the intake interview \(T_1\) and follow-up interview \(T_2\). This length of time was thought to be sufficient, especially since there is evidence that

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\(^1\) Although the majority of the control group members have visited the Foundation offices only once and have had one intake interview and generally one medical examination (2 treatments), in a few instances this procedure had been repeated, making a total of 4 treatments, as defined.
18 months after treatment the chances of a change for either better or worse are slight. Other published studies indicated that, for instance, 77 per cent of English patients had the same follow-up status one year after discharge from Maudsley Hospital in London as they had two years after discharge, with the balance of the patients only changed to a slight degree. Gibbins and Armstrong (1957) and Gerard and Saenger (1959) reported similar conclusions.

Control Factors Selected

As pointed out, socio-economic and motivational factors are known to be associated with rehabilitation. We therefore matched the experimental and control groups simultaneously on the following factors:

1. Sex - by selecting male patients only
2. Age
3. Marital status
4. Occupation
5. Employment status
6. Time elapsed since intake interview

---


The following control factors

7. Educational attainment
8. Religion
9. Treatment received from other than Foundation
10. Severity of drinking problem
11. Motivation for rehabilitation

could not be matched at the time, since the information available was not complete for the control group, and the information regarding motivation for rehabilitation was not available for either group.

It was not known if any member of either group had undergone other treatment after discontinuation with Foundation contact, but all patients who had received extensive treatment from sources other than the Foundation prior to T1 were eliminated, if known. Many of the patients, however, have had some kind of emergency treatment, and short periods of treatment at other centers.

No Jews approached the Foundation for treatment during 1959-1961. Seventy-five per cent of the members of the other religious groups were classified as non-practicing Protestants or Catholics. Since the population appeared to be relatively homogenous with respect to religion, it was decided not to use this criterion for matching purposes.

---

Moreover, since educational attainment is generally closely related to occupation, it was decided to eliminate this characteristic from the matching as well. (Table 3 on page 25 shows the percentage distribution for the selected but unmatched characteristics.)

No information was available regarding the patients' motivation to involve themselves in treatment, except for a listing of referral sources. However, it was decided to elaborate on the aspect of motivation and data were to be secured from both groups during the interview. Since this could only be done after the groups had been selected, we were taking the risk of finding that the two groups were in fact different. This was to be controlled for during the statistical analysis.

Between the period January 1959 and December 1961, about 1000 persons had contacted the Alcoholism Foundation. About one half of these had actually involved themselves in treatment. The 100 females who had contacted the Foundation during this time were excluded from the study.

Matching procedure

A search of the "miscellaneous" files produced 251 control subjects who had no more than four contacts with the Foundation, and where it could be ascertained that prior contact with other treatment centers for alcohol problems had been at a minimum. For 100 control group
subjects six characteristics were matched simultaneously with 100 experimental group subjects. The results of the matching are shown in Tables 1 and 2.

TABLE 1: Numerical Distribution of Subjects in Experimental and Control Groups According to Time Elapsed Since Intake During a Three-Year Period from 1959 to 1961

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Time Span</th>
<th>Number of Subjects in each Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 1961 - December 1961</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>January 1960 - December 1960</td>
<td>35</td>
</tr>
<tr>
<td>3</td>
<td>January 1959 - December 1959</td>
<td>35</td>
</tr>
</tbody>
</table>

The 1960 Annual Report of the Foundation gives certain information about the characteristics of the persons visiting the Foundation for that year. This information is included with respect to age, occupation and employment status in Table 2. From this it will be seen that, on the basis of these characteristics the experimental and control groups appear to be representative of the total patient population who visited the Foundation in that year.
TABLE 2: Percentage Distribution of Selected Matched Characteristics for Experimental and Control Groups and Compared with 1960 Patient Intake

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Experimental &amp; Control Groups</th>
<th>1960 Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 - 30</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>31 - 40</td>
<td>45</td>
<td>36</td>
</tr>
<tr>
<td>41 - 50</td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>51 - 60</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>60 +</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>19</td>
<td>Not</td>
</tr>
<tr>
<td>Married</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>24</td>
<td>re-</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
<td>ported</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>White Collar</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Skilled</td>
<td>56</td>
<td>54</td>
</tr>
<tr>
<td>Unskilled</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>Unemployed</td>
<td>58</td>
<td>61</td>
</tr>
</tbody>
</table>

We then calculated the distribution in the experimental and control groups for educational attainment and religion which had not been used in the matching process and amount of prior treatment from agencies other than the Foundation, for which we lacked complete information. The distributions for the two groups are presented in Table 3.
TABLE 3: Percentage Distributions of Selected Characteristics for Experimental and Control Groups

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=100</td>
<td></td>
</tr>
<tr>
<td>Religious Affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>73</td>
<td>70</td>
</tr>
<tr>
<td>Catholic</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>None</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Under 8 years</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>8 - 11</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 - 13</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>University</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Technical</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Start of Severity of Drinking Problem*</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Under 20 years</td>
<td>48</td>
<td>29</td>
</tr>
<tr>
<td>20 - 30</td>
<td>31</td>
<td>26</td>
</tr>
<tr>
<td>30 - 40</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Over 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Alcoholics Anonymous</td>
<td>38</td>
<td>32</td>
</tr>
<tr>
<td>Provincial Mental Hospital,Clinics</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>None</td>
<td>31</td>
<td>25</td>
</tr>
</tbody>
</table>

* Does not add up to 100 because information was not available for all subjects on these characteristics.

The table shows that with respect to religion and education, for which we had fairly reliable information, the two groups are very similar.
The Interview Schedule

Three sets of data were to be collected: 1. Information concerning control factors on which both groups were to be similar; 2. information concerning the extent of rehabilitation; and 3. information of particular interest to the Alcoholism Foundation. This information was to be collected by personal interviews with the 200 subjects in the sample. A copy of the interview schedule is included in Appendix A.

1. Control Factors: As pointed out, "miscellaneous" contact files were incomplete on all sets of data to be secured. It was therefore decided to secure information from all respondents with regard to all control factors. For each of the control factors for which insufficient information was available, several indices were used, as follows:

1) Severity of drinking problem prior to patient's visit to Foundation:
   a. The number of times he had appeared in court on drinking charges
   b. The state of his physical and emotional health
   c. His pattern of drinking

2) Motivation to be rehabilitated prior to patient's visit to Foundation:
   a. The extent to which his seeking help from the Foundation was self-instigated rather than the result of pressures by others
b. Whether his expectations concerning the kind of treatment to be received were realistic or not, and whether his approach to the Foundation was the result of a desire to become rehabilitated or to satisfy other purposes.

c. His reason for approaching the Foundation

d. The extent of his insight into his drinking problem

e. His willingness to make sacrifices in order to receive treatment.

3) Treatment received other than from Foundation prior to patient's visit to Foundation:

a. The number of treatments and the period over which they were received from a variety of treatment sources

2. Rehabilitation Criteria

In order to ascertain what constitutes rehabilitation in the minds of those that give treatment to problem drinkers, the staff of the Alcoholism Foundation was asked to furnish a list of behavioural and attitudinal patterns which they sought to change as a result of their treatment. The following list of 18 results expected from treatment was prepared by the staff of the Foundation:

1) Improved stability in employment

2) Reconciliation with spouse (if separated)

3) Active membership in Alcoholics Anonymous

4) Increased harmony in the home

5) Improved physical status

6) Improved behaviour of children

7) Better social participation
8) Improved attitudes toward life
9) Resumption of domestic responsibilities
10) Continuing sobriety or
11) Longer periods of sobriety than before treatment
12) Return to an active religious life
13) More optimistic outlook
14) More realistic approach to problems
15) Continuing use of clinic services
16) Less frequent recourse to drugs or sedatives
17) More self-reliance and less dependency on community resources
18) Improved family inter-relationships

Evaluating the list of suggestions, it appeared that the Foundation expected a behavioural and attitudinal change in the following areas:

1) Drinking behaviour
2) Health - physical and emotional
3) Work
4) Social interaction in the family
5) Social activities
6) Insight into problems associated with drinking

In general, the aim of the Foundation was to reduce the amount of alcohol consumed; to improve the physical and emotional health of the patient; to enable him to secure or maintain work in an appropriate occupation; to
increase the extent to which he assumes appropriate responsibilities in the family; to increase the amount of approved social interaction in the work situation, the family and the community; to increase the patient's general insight into his behaviour. It was therefore aimed to measure the extent to which the members of the experimental group as well as the control group had changed in these respects between the time they first approached the Foundation (T₁) and the time of research interview (T₂).

3. Development of Interview Schedule

The development and validation of the interview schedule proceeded in the usual manner - personal interviews with Foundation staff and experts in the field of alcoholism; reviewing the literature; attendance at Alcoholics Anonymous meetings; trial interviews with alcoholics in a provincial hospital alcoholics ward; and pre-tests with a sample of Foundation contacts. All in all the interview schedule underwent three revisions.

The fourth and final interview schedule included a face sheet on which the socio-economic characteristics from each patient's file at the Foundation were recorded prior to the interview. Since the respondent was not aware that the interviewer was familiar with his file, this provided a convenient check on the "truthfulness" of the interviewee, including factors in his socio-economic background.
The interview schedule contained pre-coded response categories and each interviewer prepared the code-sheets for the persons interviewed by him or her. For each area in which a change was expected, a number of questions that seemed relevant and appropriate were designed to measure change. In each area the patient also was asked if he thought that a change had occurred. Based on all patient's responses for each area, the interviewer also made an evaluation of change, except in the area of health. Here the physician at the Foundation made the assessment.

4. Scoring the Criteria of Rehabilitation

"Rehabilitation" as such is still an ill-defined concept in the field of alcoholism, and the measurement of change criteria are equally ambiguous. Various scales have been devised (Bell Scale; Bacon and Straus Stability Scale), but none has been found completely satisfactory so far. The use of the Bell Scale was discontinued by Dr. Bell himself. Thus we were forced to employ our own ideas regarding rehabilitation and the measurement of change. Criteria were accumulated by studying the literature and consulting professionals dealing with alcohol problems. Just how far different evaluations and measurements of rehabilitation affect the assessment of treatment outcome is a moot point in an area that needs much concentrated research before criteria can be reliably defined.

6 Personal correspondence with Dr. Bell.
The rules for the scoring of the various scales for measuring change in behaviour and attitudes are given in Appendix B. However, for the purpose of this study, and to bring the criteria in line with Rudfeld's, separate negative response categories were eliminated and included in the "no change" or "same" response category. For the assessment of overall change, for this is the category Rudfeld uses, the categories and definitions as used in this study are given here:

1) Overall Behaviour Change - Alcoholism Foundation

A - Much improvement: Drinking much improved or no longer a problem, as well as improvement in major areas of life where changes were possible.

B - Some improvement: Improvement in drinking only, or some improvement in drinking and some improvement in other areas of life.

C - No improvement or deterioration: No changes, or drinking has deteriorated, and some or much deterioration has occurred in other areas of life as well.

Rudfeld's criteria of behavioural change can be seen as comparable:

2) Overall Behaviour Change - Rudfeld

A - Good results: Complete resocialization. No or normal consumption of alcohol.

B - Doubtful results: Definite improvement, or considerable resocialization. There have, however, been occasional relapses to the abuse of alcohol.
Poor results: Generally nothing achieved, possibly after transient improvement. Unstable resocialization. Frequent relapses.7

Data Collection

As far as possible, respondents were interviewed in offices associated with the General Hospital Public Health Complex, and not at the Foundation offices. It was thought that a more "neutral" place of interview would be helpful in securing respondents' cooperation and unbiased answers.

The difficulties of data collection are too numerous to mention here, but a summary can be found in Chapter 3 of the report written for the Alcoholism Foundation of British Columbia.8

Tables 4 and 5 give convenient summaries of the interview results. Except for three cases, incomplete interviews (Table 5) resulted from interviewing wives, friends, social workers, etc.

7 Rudfeld, op. cit., p. 213.

TABLE 4: Summary of Respondents Found and Interviewed

<table>
<thead>
<tr>
<th>Persons chosen in original groups</th>
<th>Experimental</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>200</strong></td>
</tr>
<tr>
<td>Substitutes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To match pair</td>
<td><strong>5</strong></td>
<td><strong>4</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>For deceased</td>
<td><strong>1</strong></td>
<td><strong>4</strong></td>
<td><strong>5</strong>*</td>
</tr>
<tr>
<td><strong>Total Sample Chosen</strong></td>
<td><strong>106</strong></td>
<td><strong>108</strong></td>
<td><strong>214</strong></td>
</tr>
</tbody>
</table>

| Total Interviewed                | **91**       | **64**  | **155** |
| Total unable to trace            | **11**       | **29**  | **40**  |
| Refusals                         | **2**        | **7**   | **9**   |
| Unable to interview by final date for various reasons | **2** | **8** | **10** |
| **106** | **108** | **214** |

Per cent of Groups Interviewed                  | **86%** | **59%** | **72%** |

* 9 persons died altogether, but 3 did so during the time span allocated for interviewing and no substitutes were deemed necessary; 1 deceased could not be matched.
### TABLE 5: Comparison Between Experimental and Control Groups for Characteristics of the Interview Situation

<table>
<thead>
<tr>
<th>Characteristics of Interview Situation</th>
<th>% of Experimental Group</th>
<th>% of Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Person Interviewed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject</td>
<td>94**</td>
<td>81</td>
</tr>
<tr>
<td>Wife</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Place of Interview</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Offices</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>Home</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td>Jail</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Mental Hospital</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td><strong>Interview Completion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information complete</td>
<td>92</td>
<td>83</td>
</tr>
<tr>
<td>Information incomplete</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td><strong>Cooperation by Interviewee</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>70</td>
<td>61</td>
</tr>
<tr>
<td>Good</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Fair</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Poor</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Inaccessible</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td><strong>Frankness of Interviewee</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very frank</td>
<td>76</td>
<td>67</td>
</tr>
<tr>
<td>Moderately frank</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Not frank</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

* Where the totals do not add up to 100 per cent, a lack of information accounts for the difference.

** Figures are underlined to show that 1) the experimental group consistently has more of the desired responses, and 2) that most responses are of the desired kind.
Summary

The study design of the research project undertaken for the Alcoholism Foundation of British Columbia called for an experimental and control group; the former had received treatment, the latter had not. The members of the two groups were compared to the extent to which they had become rehabilitated during comparable periods of time. Eleven control factors thought to influence rehabilitation were selected, six of which were matched simultaneously - sex (by excluding females), age, marital status, occupation, employment status, and time elapsed since intake. Two additional factors, education and religion, were controlled in the sense that the distributions for these factors for each group as a whole were very similar.

Due to the incompleteness of data, attempts were made to collect material to control on the additional variables - treatment received from other than Foundation, severity of drinking problem, and motivation for treatment and rehabilitation. A comparison with the 1960 intake figures showed that the subjects selected were representative of the whole intake population.

A pre-coded interview schedule was constructed containing questions which sought to secure three broad classes of information:

1. Data on control factors
2. Extent of subject's rehabilitation
3. Matters of particular interest to Foundation.
The measures of rehabilitation were arrived at after discussion with Foundation staff and from examination of relevant literature. Information was sought to measure change between the time the respondent had first approached the Foundation for help (T₁) and the time of follow-up interview (T₂) in the following areas:

1. Drinking behaviour
2. Health (physical and emotional)
3. Behaviour in the area of work
4. Social interaction in the family
5. Social activities
6. Insight into problems associated with drinking

Due to a lack of agreement of what constitutes rehabilitation in the case of alcoholism, and a lack of scales measuring rehabilitation, change was measured in accordance with scales constructed by the research team. Data were collected for 91 experimental and 64 control group members, making a total of 155 persons interviewed, or 72 per cent out of a total sample of 214. Summary tables were constructed to give a rough overview regarding the overall interview situation.
CHAPTER III
RESULTS OF TREATMENT

Before the effects of treatment on rehabilitation could be measured, differences on control factors had to be ascertained. Thus in this chapter, two aspects will be examined: A. differences on control factors, and B. differences in rehabilitation; that is, what changes took place in the subjects' behaviour between the time they first visited the Foundation and the time of research interview, and what factors were associated with rehabilitation.

A. CONTROL FACTORS

Comparison Between 44 Matched Pairs

As stated in Chapter II, the research procedure selected for this study was a matching technique on control factors between 100 patients who had received treatment at the Foundation and 100 patients who had not (as defined). Ideally, it was expected that at least 95-90 matched pairs could be compared. Unfortunately, due to difficulties in locating members of the control group and some incorrect information used to match pairs, only 44 pairs could be matched on all points selected. Thus in order to establish if all experimental subjects interviewed could be compared with all control subjects interviewed (91 and 64 respectively)
the extent to which the 44 matched pairs were similar or different from the total persons interviewed had to be first evaluated.

A comparison ascertained that the differences between the matched pairs and the total groups interviewed were so slight, that the analysis of the overall results could be undertaken on all the experimental and control group members interviewed.¹

Comparison Between Total Experimental and Control Group Members Interviewed on Independent Variables

The fact that 91 experimental group and only 64 control group members were available for interview could conceivably have distorted the balance on the various control factors. However, this was not so.

Summarizing details² found in Tables included in Appendix C, it was found that:

1. No significant³ differences appeared between the two groups on the 6 socio-economic characteristics matched simultaneously. Nor was there any significant difference in the distribution of the variables religion and education. The largest percentage difference for all groups was 7.


² For details, again see op. cit., pp. 66-75.

³ Differences found significant at the 5 per cent or lower level.
2. Comparing the groups on treatment received from sources other than the Foundation, no significant differences appeared, except that members of the experimental group had more contact with Alcoholics Anonymous than had the control group members.

3. A higher proportion of experimental group members saw their problems associated with drinking as more serious and of longer duration than did control group members. No statistically significant differences appeared.

4. On all three indices of motivation for rehabilitation the experimental group indicated a greater desire to be rehabilitated than did the control group. In two instances, a. attitudes towards treatment and b. reasons for stopping or not involving oneself in treatment, significant differences between the two groups existed.

B. EFFECT OF TREATMENT ON REHABILITATION

The following matters will be outlined in this part of Chapter III:

1. A discussion of the selection of indices of rehabilitation
2. Comparison of experimental and control groups with respect to rehabilitation
3. Factors associated with rehabilitation.
Indices of Rehabilitation

Measures of rehabilitation were defined in terms of change since initial contact with the Foundation. Consequently a degree or state of behaviour and attitude was ascertained for T₁ and the same repeated for T₂ - the difference between the two being the degree of change (See Appendix B for details.) To measure rehabilitation in any other way seemed preposterous, since alternative approaches assume that all patients exhibited the same kind of behaviour at T₁, which clearly is not a valid assumption. Nor did we possess any adequate knowledge on this point from the case histories.

As will be recalled, six areas of rehabilitation were selected: 1. drinking; 2. health; 3. work; 4. interaction in family; 5. social activities; 6. insight into problems associated with drinking.

In each area various questions were asked to cover several aspects of behaviour and attitude. In addition, the patient was asked for his opinion regarding change in each area. Based on all the answers obtained for each area separately, the interviewers made an overall assessment of change in each area, which was then incorporated into one general summary measure of behavioural and attitudinal change. As will be shown shortly, the latter assessment will be the one on which the Prognostic Index is based.
For each area of rehabilitation, all assessments were cross-tabulated to see if clusters of indices could be identified; that is, a measure of the extent of covariance in each bivariate comparison was developed. For the sake of convenience, this is called "correlation." This "correlation" was arrived at as follows:

<table>
<thead>
<tr>
<th>No. of cases moving in same direction (+, 0, -)</th>
<th>Total No. of cases (excluding &quot;no answer&quot; responses)</th>
</tr>
</thead>
</table>

The "correlations" between the various items were then examined and the item with the highest "correlation" was selected to represent the index for evaluating change in each area. Where the interviewer's assessment "correlated" most highly with all other indices, this index was chosen as the measure of rehabilitation. Indices which did not "correlate" highly with any others in a particular area, were also included in the analysis. Except in the areas of drinking and work where the patient's assessment differed from the interviewer's, the interviewer's assessment was chosen to represent all other indices. In the area of health the interviewers refrained from an assessment, but the patient's rather than the physician's assessment was used as the measure of change.

The patient's assessment was a purely subjective one, and it is not known on what criteria it was based. The interviewer's assessment was based on a weighing of various factors such as, for instance, in the area of drinking,
periods of complete abstinence, amount and type of spirits consumed, patterns of drinking (alone, in company, daily, week-end), degree of intoxication, physical consequences (black-outs, shakes, D.T.'s, etc.).

In the area of drinking, the differences between the patient's and the interviewer's assessment could be attributed to the following:

1. Patients tended to minimize drinking problems and maximize even the smallest gains in abstinence.  

2. Changes in amounts of spirits consumed at one sitting might have been due to a decrease in tolerance over time, but which were seen as a change "for the better" by the patient.

3. The fact that the patient had sought help at one time or another led him to think that he should have somehow improved his drinking behaviour and therefore concluded that he had when this was not the case.

In the area of work, differences could be attributed to such factors as:

1. Patients automatically tended to see an improvement in all areas of behaviour when a slight improvement in drinking behaviour had occurred, even if this was not so.

4 This is a well-known phenomenon in the area of alcoholism. See, for instance, Department of Public Health, State of California, Alcoholism and California, "Selected Aspects of the Prospective Follow-up Study," Publication No. 2, p. 41, for a selection of patients' concepts of "abstinence."
2. Since work is one of man's most important areas for self-realization, detrimental experiences in this area tended to be minimized by patients. For instance, a perusal of those interview schedules in which discrepancies between interviewer's and patient's assessments were noted showed, that generally those patients who said they have had satisfactory work experiences before T₁, still maintained at T₂ that they were satisfied with their work experiences to the same extent as before T₁, although they had been markedly downwardly mobile in the meanwhile, or had lost their jobs altogether at T₂.

3. Patients unemployed in both groups at the time of follow-up study tended to be especially defensive about their work experiences. (55 per cent of both groups were unemployed.)

The following indices, then, were chosen for analysis:

1. **Drinking**
   - Interviewer's assessment of change in drinking problem
   - Patient's assessment of change in drinking problem

2. **Health**
   - Patient's overall assessment of change

3. **Work**
   - Interviewer's overall assessment of change
   - Patient's overall assessment of change
4. Family

Interviewer's assessment of change in the fulfillment of family men's responsibility towards family members

5. Social Activities

Interviewer's assessment of change in the fulfillment of financial responsibility in paying for accommodation

Interviewer's assessment of change in leisure time activities

6. Insight

Interviewer's assessment of change in patient's insight into reasons for drinking

7. Overall Change

Interviewer's assessment of overall change, based on assessments in areas 1 to 6

Comparison on Extent of Rehabilitation Between Experimental and Control Groups

The following table shows the differences in the degree of rehabilitation between the two groups using the major indices selected to represent rehabilitation. Where the table shows a dash (-), the data for this category were not broken down into "much improvement" and "some improvement." Then the figure halfway between the two categories represents the total improvement registered. The interviewer's assessment is represented by the abbreviation "IA", and the patient's assessment by "PA".


<table>
<thead>
<tr>
<th>Rehabilitation Indices (Change)</th>
<th>Much Improvement</th>
<th>Some Improvement</th>
<th>No Improvement or Deterioration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>Drinking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA - Problem</td>
<td>24</td>
<td>20</td>
<td>34</td>
</tr>
<tr>
<td>PA - Problem</td>
<td>32</td>
<td>36</td>
<td>41</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA - Overall</td>
<td>-</td>
<td>57</td>
<td>-</td>
</tr>
<tr>
<td>Work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA - Overall</td>
<td>-</td>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>PA - Overall</td>
<td>-</td>
<td>45</td>
<td>-</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA - Responsibility</td>
<td>-</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>Social Activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA - Financial</td>
<td>-</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>IA - Leisure Time</td>
<td>21</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Insight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA - Reasons for drinking</td>
<td>34</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Summary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IA - Overall</td>
<td>20</td>
<td>15</td>
<td>40</td>
</tr>
</tbody>
</table>

* All "no answer" responses have been excluded; therefore percentages add up to 100.
From Table 6 it can be seen that the control group members show consistently less improvement in all areas than do the experimental group members. Twenty per cent of the experimental group show much improvement, 40 per cent some improvement and 40 per cent no improvement in the summary assessment of change. The control group members show 15 per cent much improvement, 27 per cent some improvement and 58 per cent no improvement. Positive improvement differences between the experimental and control groups in drinking behaviour are 19 per cent and in overall behaviour 18 per cent. Neglecting such factors affecting rehabilitation as motivation at $T_1$ and attendance at Alcoholics Anonymous meetings between $T_1$ and $T_2$, it could be said that roughly 20 per cent of the overall improvement noted for the experimental group could be attributed to the treatment received at the Foundation. This figure is confirmed by the evaluation of the interviewer of the part played by the Foundation in helping to bring about a change in the patient's behaviour. For 21 per cent of the experimental group the part played by the Foundation in bringing about a change was assessed as "great."

Factors Affecting Rehabilitation

However, since statistical differences had been noted between the two groups on the control factors motivation, severity of drinking problem, and attendance at Alcoholics Anonymous meetings between $T_1$ and $T_2$, we tested for the
effects of these variables on rehabilitation. It was obtained that motivation and attendance at Alcoholics Anonymous meetings did affect rehabilitation to some extent, whereas perceived severity of drinking problem did not. The combined effect increased the rate of rehabilitation in the experimental group by some 7 per cent. This meant that the sole effect of Foundation treatment, regardless of other variables, increased the proportion of those improving - once they made the initial step to seek help - by roughly 12 to 15 per cent. It was also found that for those who attended Alcoholics Anonymous meetings regularly for an extended period of time (over 50 meetings), additional treatment received at the Foundation did not increase their chances of rehabilitation. This is an important point, about which more will be said later.

Speaking for the experimental group alone, length and type of Foundation treatment, as well as time elapsed since intake interview, were not to any extent significantly associated with overall improvement, except for consistent tendencies for those with longer and more treatment to improve somewhat more. Whether or not a patient took Antabuse therapy for any length of time did not differentiate between persons in terms of their chances of showing improvement.

5 Calculations by which this figure was arrived are too intricate to explain here.
Socio-economic factors generally showed trends in the desired direction; that is, for both experimental and control groups taken separately, more older than younger patients improved; more married than not married (as defined); more employed than unemployed, but the number of cases where statistically significant differences were obtained for all subjects was smaller than the general literature on follow-up studies would lead one to assume.

Also, it has been once again confirmed - at least partly - what has been found in many other studies that the closer the social class of the patient corresponds to that of the treatment worker, the better are the chances for treatment success through mutually satisfying communication influences. 6

To summarize then, it would appear that once a person shows sufficient desire to do something about his alcohol problems, and to seek treatment from the Alcoholism Foundation his socio-economic characteristics are only to some degree influencing his chances of treatment success, regardless of the type of treatment he receives from the Foundation.

6 This aspect has been well described by A.B. Hollingshead and F.C. Redlich, Social Class and Mental Illness: A Community Study, New York, Wiley & Sons, 1958. Not without irony, these writers say that psychiatrists "are not sure what attributes a good patient must have, but they include sensitivity, intelligence, social and intellectual standards similar to the psychiatrist's, a will to do one's best, a desire to improve one's personality and status in life...." p. 192.
At this point one could ask: Why then, if the data on socio-economic factors showed fewer statistically significant differences than is generally expected, was it proposed to replicate a prognostic index based almost exclusively on socio-economic factors?

Firstly, the three factors, age, marital status, and employment status showed strong tendencies in the desired direction for all indices of rehabilitation selected and significant associations for some indices. (See Table in Appendix C for details.) Secondly, the other three factors, initiative for attendance, type of accommodation, and type of spirit consumed were not incorporated as control factors in the first study. Therefore, at this point, nothing could be said for these factors, and a test of the other three factors together with the new ones seemed to have some merit. Further, the previous investigator did not ask if it was actually necessary to include so many socio-economic variables, nor was it ascertained which would be the best combination of factors to arrive at the best estimate of prediction. This aspect will be included in the replication of the index.

Summary

Since the prognostic index is based on socio-economic factors believed to be significantly associated with rehabilitation, a short outline of the results of treatment was presented, first ascertaining that the 44 matched pairs
did not differ to any extent from all experimental and control group members interviewed. The analysis was subsequently undertaken on 155 persons interviewed, 91 in the experimental and 64 in the control group.

It was found that experimental and control group members differed significantly on the following control factors:

1. More members of the experimental than the control group had contact with Alcoholics Anonymous during $T_1$ and $T_2$.
2. With regard to the motivational indices, the attitudes of the experimental group members firstly toward treatment before $T_1$ and secondly about treatment generally after $T_1$ were more favourable than those of the control group members.

All other factors showed no significant differences between the two groups.

Indices of rehabilitation were defined in terms of change which had occurred since initial contact with the Foundation and time of research interview. Changes were recorded in the areas of drinking, health, work, family, social activities, and insight into problems associated with drinking.

Interviewers' assessments and patients' assessments differed to some degree in the two important areas of drinking and work. However, since the interviewer's assessment was based on objective indices, that is, an evaluation of a combination of the number of questions asked in each area,
but the patient's assessment on subjective, not ascertainable criteria, it was felt that the interviewer's assessment was the more sound one. The interviewer's overall assessment of change was based on all assessments made for each area in which the patient's response was sought.

Differences in the degree of rehabilitation between the two groups were presented in Table 6. The overall improvement ranged from 20 per cent much improvement, 40 per cent some improvement, and 40 per cent no improvement for the experimental group, and 15 per cent, 27 per cent, and 58 per cent respectively for the control group.

The fact that so many control group members, that is, persons who have had no treatment at the Foundation, improved, called for an analysis of the factors associated with improvement. It was found that motivation for involving oneself in treatment and attendance at Alcoholics Anonymous meetings reduced the overall effect of Foundation treatment on rehabilitation to roughly 12 to 15 per cent. Socio-economic factors showed persistent trends but were not significantly related to overall improvement. More older rather than younger, married rather than single, employed rather than unemployed, and white collar and skilled rather than unskilled workers improved in both groups. Those longer in treatment and with less severe drinking problems showed more favourable treatment results than those
with short treatment periods and more severe problems, but type of treatment, time elapsed since intake, and religion did not affect treatment outcome.

Nevertheless, it was proposed to replicate the Danish index since it also included some factors which had not been analyzed as yet for the Alcoholism Foundation study, but seemed to merit analysis.
CHAPTER IV
THE DEVELOPMENT AND APPLICATION OF THE PROGNOSTIC INDEX

A. DEVELOPMENT OF INDEX

Factors Selected

As pointed out in Chapter I, the Danish prognostic criteria were chosen for replication because the indices which Rudfeld found to be significantly associated with rehabilitation were available from the data collected for the follow-up study in British Columbia.

Rudfeld found the following characteristics to be significantly associated with rehabilitation:

1. Age
2. Marital status
3. Employment status
4. Housing
5. Nature of drinking
6. Motivation (initiative for attending treatment)

These characteristics were dichotomized and a favourable treatment outcome was predicted when the patient was:

1. 35 years of age and over
2. Married and living with spouse
3. Employed
4. Living in suitable accommodation
5. Drinking only acceptable alcoholic spirits
6. Seeking treatment on private initiative

Conversely, an unfavourable treatment outcome was predicted when the patient was:
1. Under 35 years of age
2. Single or no longer married and living with wife
3. Unemployed
4. Living in sub-standard housing
5. Drinking both acceptable and unacceptable spirits
6. Seeking treatment on public initiative

Construction of the Prognostic Scale

With regard to the evaluation of the factors selected, the scale points were dichotomized as follows. A comparison between the Danish and the Canadian factors will show similarities and explain differences.

<table>
<thead>
<tr>
<th>Rudfeld</th>
<th>Alcoholism Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age¹ (on date of first clinic attendance)</td>
<td>1. Age - same</td>
</tr>
<tr>
<td>Point Value 1 - 35 &amp; over</td>
<td>Same trends appeared, but not statistically significant</td>
</tr>
<tr>
<td>Point Value 0 - under 35</td>
<td></td>
</tr>
<tr>
<td>Tables showed that the possibility of recovery at all stages increased with increasing age</td>
<td></td>
</tr>
</tbody>
</table>

¹ As pointed out before, there is no agreement whether or not age is importantly related to rehabilitation. However, "there has been an almost universal belief in the over-all deterioration of the life-adjustment of the alcoholic; it was felt that his family, job, neighborhood, religious, recreational and other modes of expression would all reflect a disorganized, maladjusted personality. Both case studies and quantified researches indicate that this is not the case; there may be dramatic disorganization in one aspect of the alcoholic's life, together with a high degree of stability and integration in another aspect. Again, earlier studies indicated that the median age of alcoholics was between 43 and 46 years; taking broadly representative samples into account, it now appears that this may well be from 5 to 7 years less." Selden D. Bacon, "Alcoholism, 1941-1951: IV. Social Science Research," QJSA, Vol. 13, No. 3 (Sept. 1952), pp. 556-57. An age split at 35 seems therefore justified.
2. Marital status
Point Value 1 - legally or common law married and living with wife
Point Value 0 - single, separated, divorced, or widowed

Married persons showed better results of treatment than unmarried or no longer married ones

3. Employment status
Point value 1 - employed at date of attendance, irrespective of nature and permanency of job
Point Value 0 - without job at date of clinic attendance

Employment status and occupation were closely related and did not have independent significance in predicting success; therefore employment status only was used as an indicator

4. Housing
Point Value 1 - living in flat or room
Point Value 0 - living in shelter, dose-house, or other sub-standard accommodation

The material showed such a close association between being married and living in a self-contained flat that one of the criteria would have been satisfactory to predict success.
4. Housing (cont'd.)

However, living in sub-standard accommodation had significance for predicting failure.

5. Nature of drinking

Point Value 1 - drinking regular spirits only
Point Value 0 - drinking methylated spirits too

Drinking methylated spirits of strange things such as paraffin, hair-lotion, anti-freeze or rubbing alcohol was found significant for predicting failure.

6. Motivation

Point Value 1 - seeking treatment on private initiative
Point Value 0 - seeking treatment on public initiative

Treatment results were better when patients came on their own, or on promptings by family members, physicians or employers than in the cases where public welfare and police officers, or courts had urged treatment as an alternative to other intervention. Although this classification might not always be appropriate, it is one criterion of the patient's voluntariness for treatment involvement.

Alcoholism Foundation

4. Housing (cont'd.)

A flat in Canada would be equal to living in a room in Denmark. Living on or near skid-road in hotels and rooming houses was felt to be sub-standard for Canadian accommodation.

Housing was not used as a Foundation control factor.

5. Nature of drinking - same

Information on the nature of drinking was not used as a Foundation control factor.

6. Motivation - same

Although this information was collected, other motivational data were used as Foundation control factors. Trends in the desired direction appeared; but it was not statistically significant whether a man involved himself in treatment voluntarily or under pressures.
Calculation of Predictive Points

The prediction index was calculated for each patient on the basis of the information available. Each of the socio-economic factors received either one or zero points; six points being the highest score and the most favourable predictor for success in treatment outcome. How the dependent variable - rehabilitation - was assessed has been described in Chapter II, pp. 30-32.

B. APPLICATION OF THE INDEX

In this part of Chapter IV the results of the treatment at the Alcoholism Foundation of British Columbia are compared and evaluated in relation to point values on the prognostic index constructed with data found to be significantly related to rehabilitation in Denmark. This also involves a testing of the hypothesis, which stated that the more closely a patient's socio-economic characteristics and motivation to undergo treatment relate to societal expectations, the greater are his chances to benefit from the type of treatment offered at an alcoholism out-patient clinic. Also, the less closely a patient's characteristics conform to societal expectations, the lower are his chances to benefit from the treatment offered.
Comparison of Danish and Canadian Results

The major purpose of this study is to replicate the Danish index with Canadian material to see if using socio-economic data and limited motivational data only, treatment outcome could be predicted. At the same time it could be ascertained what would be a best combination of socio-economic predictors. Further, one can then see if one can assume that socio-economic data from one culture would lead to identical results if applied to another.

Table 7 shows the results in relation to point values established on the index for the three sets of data: Danish Antabuse, Danish Temperance Societies, and British Columbia Alcoholism Foundation.
TABLE 7: Percentage Comparison of Treatment Results in Relation to Point Values for Danish Antabuse, Danish Temperance, and Alcoholism Foundation Data

<table>
<thead>
<tr>
<th>Point Value</th>
<th>Danish Antabuse Center (N=334)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Results of Treatment</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Much Improvement</td>
<td>6</td>
<td>74 (60)*</td>
<td>14 (11)</td>
<td>12 (10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>54 (56)</td>
<td>18 (19)</td>
<td>28 (29)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>46 (32)</td>
<td>19 (13)</td>
<td>35 (24)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>34 (17)</td>
<td>20 (10)</td>
<td>46 (23)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2;1;0</td>
<td>10 (3)</td>
<td>17 (5)</td>
<td>73 (22)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>51 (168)</td>
<td>17 (58)</td>
<td>32 (108)</td>
</tr>
<tr>
<td></td>
<td>Danish Temperance Societies (N=191)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>49 (27)</td>
<td>31 (11)</td>
<td>20 (17)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>39 (18)</td>
<td>33 (15)</td>
<td>28 (13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>14 (8)</td>
<td>41 (23)</td>
<td>45 (25)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>35 (8)</td>
<td>22 (5)</td>
<td>43 (10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2;1;0</td>
<td>18 (2)</td>
<td>18 (2)</td>
<td>64 (7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33 (63)</td>
<td>29 (56)</td>
<td>38 (72)</td>
</tr>
<tr>
<td></td>
<td>Alcoholism Foundation (N=91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>34 (6)</td>
<td>33 (6)</td>
<td>33 (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>19 (5)</td>
<td>48 (13)</td>
<td>33 (9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>22 (2)</td>
<td>67 (6)</td>
<td>11 (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>13 (2)</td>
<td>37 (6)</td>
<td>50 (8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2;1;0</td>
<td>14 (3)</td>
<td>29 (6)</td>
<td>57 (12)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20 (18)</td>
<td>40 (37)</td>
<td>40 (36)</td>
</tr>
</tbody>
</table>

* On this and all following tables, the N will appear in brackets next to the percentage figure.
Looking at the percentage distribution in relation to point values amongst the various groups and improvement categories, only the Danish Antabuse data show uniform distributions in the desired directions. The Danish Temperance figures are not quite as neatly distributed as the Danish Antabuse ones, but the results are still quite good. However, the results for the Alcoholism Foundation are quite uneven and unexpected. With 6 points credit - the most desirable point value available and meaning that a patient conforms most closely to societal expectations - the chances for much success, some success and no success are equally likely (33.3% each). With 5 favourable points one's chances of much success are smaller than one's chances of failure! (19% vs. 33%) As a matter of fact, whether one rates 0, 1, 2, 3, 4, 5, or 6 points does not seem to discriminate much in terms of achieving good success in treatment outcome.

Statistically evaluated \(^2\) Rudfeld's data (Danish Antabuse) allow a prediction of good success with 6 points in the neighbourhood of 74 per cent (between approximately 64 and 84 per cent) and for definite improvement around 88 per cent (between 81 and 95 per cent). The chance of success decreases until with 2; 1; 0 points it allows for

10 per cent good success (between 2 and 26 per cent) and for 27 per cent for definite improvement (between 7 and 47 per cent). Conversely, the predictions for failure range from approximately 12 per cent for 6 points to 73 per cent for 2;1;0 points.

Inspecting the Canadian data and using the same tables, the following "predictive" results emerge: For 6 points chances of much improvement lie around 34 per cent (between 13 and 59 per cent). For improvement, including much and some improvement, the chances for 6 points are 67 per cent (between 41 and 87 per cent.) Going down the scale, the chances for success vary, but for 2;1;0 points they are about 14 per cent (between 3 and 36 per cent) for much improvement and 33 per cent (between 22 and 66 per cent) for improvement. Conversely, the chances of failure for 6 points would be approximately 33 per cent, and for 2;1;0 points 57 per cent.

In other words, employing the same socio-economic criteria as used for the Danish index, the index does not predict success or failure with any degree of accuracy for the Canadian sample!

Faced with results of this nature, the first question one obviously asks is: Are the two populations of alcoholics comparable? Assuming the null hypothesis that there is no difference between the Vancouver and Aalborg population, a two-tailed t-test indicated that the null
hypothesis must be rejected since $t^3$ is significant between the .01 and .001 level. Thus we can assume that differences between the two populations of alcoholics exist and that perhaps cultural differences could help account for the differences found. However, this matter can not be investigated due to a scarcity of data. Although there is an increasing literature\(^4\) dealing with explanations of varying alcoholism rates by analyzing cultural components (these most frequently investigated and compared with North American rates, are the rates of the Irish, the Jews, the Italians) there seems to be no literature that compares treatment results of alcoholics in various cultures. One could assume that cultural variants in addiction rates should also influence cultural variants in treatment result rates.

**Comparison of Treatment Methods**

As will be remembered, the main concern here is with treatment given in outpatient clinics, but we know that there are differences in treatment. The treatment at Aalborg consisted of supervised daily Antabuse therapy

\(^3\) $t=3.02; \text{df}=423; \text{for } 95\% \ t=1.97$, therefore $t$ is significant between the .01 and .001 level.

coupled with counselling treatment. The treatment in Vancouver included disulfiram (Antabuse) treatment for those who wished to take it. About one quarter of the patients in the experimental group took Antabuse. However, the administration of the Antabuse was different from that in Denmark. In Vancouver the patient was given a quantity of Antabuse tablets which he could or could not take at his own choosing at home or anywhere else. In Aalborg a clinic worker supervised the taking of the daily dose of disulfiram and made sure that the prescribed amount was taken.

As indicated, about one quarter of the patients in the experimental group took Antabuse. Table 8 shows the percentage distribution in relation to point values and results of patients who took Antabuse coupled with counselling treatment and those who did not take Antabuse. Due to the small number of patients, it was found advisable to abbreviate the tables somewhat.


6 In this connection it is also interesting to note that in Switzerland Antabuse treatment given on an ambulatory basis lasts for about 6 months and tablets are given daily under the supervision of a physician, social worker, employer, minister of the church, or a trustee so appointed. See Paul W. Bonnot, "Der Teufel im Glas," (The devil in the glas) Schweizer Illustrierte Zeitung, Vol. 52, No. 42 (14. Oct. 1963), p. 39.
### TABLE 8: Percentage Comparison of Results of Treatment in Relation to Point Values for Antabuse Treatment and Overall Treatment at the Alcoholism Foundation

<table>
<thead>
<tr>
<th>Point Value</th>
<th>Antabuse Treatment (N=22)</th>
<th>Overall Treatment (N=91)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>6 &amp; 5</td>
<td>23 (3)</td>
<td>31 (4)</td>
</tr>
<tr>
<td>4 &amp; 3</td>
<td>17 (1)</td>
<td>50 (3)</td>
</tr>
<tr>
<td>2;1;0</td>
<td>---</td>
<td>33 (1)</td>
</tr>
<tr>
<td></td>
<td>18 (4)</td>
<td>36 (8)</td>
</tr>
</tbody>
</table>

The results between the two types of treatment, that is, having Antabuse treatment or not in addition to the usual kind of treatment given at the Alcoholism Foundation, do not seem significantly different. One may therefore be justified in concluding that in all probability the differences in predictive results are not likely due to the differences in treatment per se. However, there are differences in the treatment method that might influence treatment outcome.

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7 Treatment per se includes both kind and type of treatment, regardless of where treatment is given.

8 Treatment method is the manner in which treatment is given.
Rudfeld, who used the Danish Temperance Clinic data in Copenhagen to validate her index, attributed some of the differences found between the two sets of data to the kind of treatment as well as to the method of treatment; that is, "in particular the possibility of supervising that the patients carry through the cure is important."\(^9\)

Compared with the Copenhagen clinic, the clinic in Aalborg - for one thing because of the smaller size of the city - has the best possibilities for supervising that the Antabuse is taken regularly and to trace any patient trying to evade treatment.\(^10\)

Employing a two-tailed t-test the two populations Aalborg and Copenhagen were found to be comparable.\(^11\)

Although differences in treatment might cause differences in results for Aalborg and Copenhagen, as well as Aalborg and Vancouver, obviously it is not so much the type and kind of treatment administered in an out-patient clinic that makes for better results but the manner in which the treatment is given. If we call this manner of treatment in Aalborg a social control factor, which daily supervision obviously is, social control factors are seen as assuming importance for assuring success in treatment outcome.

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\(^9\) Rudfeld, *op. cit.*, p. 216.

\(^10\) Ibid., p. 215.

\(^11\) \(t=.022; df=523\); for 95% \(t=1.96\), therefore \(t\) is not significant.
However, before this area can be investigated more closely, a statistical evaluation of the results for the experimental group is warranted. A chi square test\textsuperscript{12} on the results for the experimental group was not significant. In other words, the observed frequencies did not differ significantly from the expected ones, and there does not seem to be a relationship between point values and success or failure in rehabilitation.

We are now faced with an explanation of why some of those with few points in their favour did nevertheless succeed and some of those with high points did not.

Trying to account for the anomalies in the Danish data, Rudfeld came to the following conclusions: Those who have done well despite expectations (low points) showed a significant change in a favourable direction right after treatment commenced. Those who have not done well despite high points for social factors, showed a marked personality deviation which interfered with successful treatment outcome. An elaboration of the two explanations follows.

Low Points – High Results

The clinic in Aalborg cooperated closely with the employment exchange and thus succeeded in finding work for patients immediately after commencement of treatment.

\textsuperscript{12} Using an abbreviated distribution (see second half of Table 8, p. 64) chi square = 4.255; df=4; .30<p<.50.
Rudfeld's data showed 35 patients improved their social rating. Twenty-three who were not employed but married at the date of attendance found employment at the commencement of treatment; 4 patients who were employed but not living with spouse resumed marital relations and 9 patients resumed both work and marital relations shortly after the start of treatment. Thus their point value on the scale became equal to the point value of the patients who were both married and employed at the date of first clinic attendance. This necessitated a change in treatment prognosis. However, patients who were neither employed nor married at the initial visit to the Aalborg clinic, but managed to resume "normal" activities in one area only, did not improve as much as the others who were both married and employed.

From this one may perhaps draw the conclusion that when several factors are disturbed at the commencement of treatment, it is of little benefit should one of them be put in order; the whole level must be raised in order to improve the prognosis to any considerable extent.  

High Points - Low Results

These results Rudfeld ascribed to personality deviations.

As there was no doctor trained in psychiatry attached to the clinic, the clientele received no real psychiatric diagnosis, but where certificates as to state of mind or any other documents happened

13 Rudfeld, op. cit., p. 215.
to have been available, or observations made by the staff during treatment have indicated that the patient in question was particularly conspicuous from a psychiatric viewpoint, this unscientific, but nevertheless presumably significant diagnosis was used as a basis. Sixty-eight persons in all were found in this sense to show personality devi-ations. The results for these 68 patients are considerably worse than for the clientele as a whole.

The results show that a psychiatric characterization is of considerable significance for predicting the recovery possibilities, by means of ambulant treat-ment of the type described, for those harmed by alcohol, and that the possibilities of successful prediction on the basis of social factors are limited by the significance of the personality devi-ations for the development.\textsuperscript{14}

Rudfeld's latter conclusions would confirm Mindlin's hypothesis that psychological and psychiatric test data in combination with social data are significant for pre-dicting treatment outcome.\textsuperscript{15}

Vancouver Data

Data are not complete enough to trace a patient's change in either employment or marital status after commen-cement of treatment, nor are the psychiatric data of a nature that would help one to reliably sort out persons who are or are not deviant in their personalities. Only 19 out of 91 patients were seen by the psychiatrist.

\textsuperscript{14} Ibid., p. 215

Perhaps all problem drinkers are in a sense "deviant" not only from cultural norms but also in their personalities. The fact that no clear-cut definition of alcoholics and alcoholism exists might underline the above statement. For instance, the World Health Organization defines alcoholism as a chronic illness that manifests itself as a disorder of behavior. It is characterized by the repeated usage of alcoholic beverages to an extent that exceeds customary dietary use or compliance with social customs of the community that interferes with the drinker's health or his economic and social functioning.\(^\text{16}\)

According to the American Medical Association, alcoholics are those excessive drinkers whose dependence on alcohol has attained such a degree that it shows a noticeable disturbance or interference with their bodily or mental health, their interpersonal relations, and their satisfactory social and economic functioning.\(^\text{17}\)

There is no mention in the latter definition of the alcoholic as a sick person. Moreover, these definitions do not distinguish between alcohol addiction as a cause or a symptom. Many investigators would see excessive drinking as "only the outward manifestation of some underlying social or psychological condition which creates the need for alcohol -

\(^{16}\) Expert Committee on Mental Health, Alcoholism Subcommittee, World Health Organization, Geneva, Medical Report Series No. 48, August 1952.

e.g., the need to escape from feelings of inadequacy, insecurity, anxiety, or depression." Other investigators see a combination of psychological need and social customs leading to the development of the form of addictive behavior known as alcoholism.

Since at the present time it is still almost impossible to state what causes alcoholism, it would be prudent to assume that a form of psychological disturbance, coupled with customary drinking habits might account for problem drinkers. The fact that Jews in North America show no fewer psychological disturbances than other North Americans, yet due to their attitudes towards excessive drinking of alcohol, have very low rates of alcoholism, seems to lend support to the above statement. Although Jews in North America are the most cited example of a people showing different customary drinking habits from the society

18 Ibid., p. 129.

19 I have called it attitudes, although it is much more than simply "attitudes." For explorations on this subject, see Robert F. Bales, "Cultural Differences in Rates of Alcoholism," QJSA, Vol. 6, No. 4 (March 1946), pp. 480-499. Bales' hypothesis that the "ritual" aspect of drinking prevents high rates of alcoholism in Jews has been challenged by D.D. Glad in "Attitudes and Experiences of American-Jewish and American-Irish Male Youths as Related to Differences in Adult Rates of Inebriety," JSA, Vol. 8, No. 3 (Sept. 1947), pp. 406-472, who sees Jewish drinking as "instrumental" rather than "ritual". The quest for social ends, rather than the "effects" of alcohol are seen as imposing restraints on the individual in drinking situations. However, both ascribe social control factors as imposing limits to a man's alcohol intake at one time that prevent him from becoming inebriate.
at large, about one half of North American society, its female composition, also shows variations in drinking habits from its male counterpart, yet has no fewer incidences of psychological disorders when comparing the ratio of male to female admissions to mental hospitals. "Alcoholism is estimated to occur 5 or 6 times as often among males as among females in North America." (It will be recalled, however, that of the persons seeking treatment at the Alcoholism Foundation between 1959 and 1961 only 10 per cent were women.)

In light of the above, it can now be said that without adequate psychiatric diagnoses and/or test data, it seems almost impossible to show if, firstly, an alcoholic's personality differs from that of a non-alcoholic, and secondly, if the differences amongst alcoholics' personality deviations are such that they can be identified reliably without proper assessment, as has been attempted by Rudfeld. The Vancouver data do not lend themselves to such an assessment since only 1/5th of the patients were seen by the psychiatrist. Moreover, since Rudfeld's

20 Charles R. Snyder in Alcohol and the Jews, Glencoe, Ill., The Free Press, 1958, gives a more or less complete summary of "explanations" that have been advanced during the past few hundred years in order to reconcile the fact that Jews have much lower rates of alcoholism than Gentiles amongst whom they live.

explanations of "high points - low results" can not be accepted, other methods of explaining differences must be found, without denying that personality traits might lend themselves to better predictions of treatment outcome than do socio-economic variables.

Returning to an assessment of the socio-economic data we now want to ask: How important is each socio-economic variable in predicting treatment outcome without having to inspect often unreliable case histories. (Rudfeld's "low points - high results."

**An Analysis of the Socio-Economic Variables**

One of the ways to separate the effects of the various socio-economic variables on rehabilitation is by a multiple regression analysis. Table 9 shows the correlation coefficients of the independent variables in relation to the dependent variable - rehabilitation - and the regression coefficients for each variable.
Table 9 presents an interesting although somewhat unexpected picture. The associations amongst the various independent variables are not very high, and none of the variables is closely related to rehabilitation. Housing correlates fairly well with marital status, employment status and type of spirit consumed (and vice versa, except to lesser degrees), and shows the highest correlation with rehabilitation, except that this correlation is very low (.320). Age and initiative for attending treatment are not closely related to rehabilitation (.160 and .060 respectively). Neither marital status nor employment status contribute greatly to rehabilitation.

The mean value of the rehabilitation variable was found to be 2.197, with a standard deviation of .748. This indicates that on the whole the scores are very low.
The following multiple regression equation was derived:
Rehabilitation = 0.225 (age) - 0.069 (mar. stat.) - 0.038
(empl. stat.) + 0.030 (init.) + 0.196 (type
of spirit) + 0.318 (hous.) + 2.706 (constant)

The standard error of the prediction of this equation
is 0.742, while r-squared is 0.082. The large standard error
and the small r-squared indicate that this equation is not
a good predictor; i.e., the fraction of the total variation
in rehabilitation that is accounted for by the regression is
very small. Other unknown factors have much more effect on
rehabilitation than the known socio-economic factors used
to develop this equation.

A stepwise regression showed that marital status and
employment status are closely linked with housing. Housing
includes the two variables and this would explain why the
regression coefficients (-0.069 and -0.038) are negative.
Furthermore, the stepwise regression indicated a combina-
tion of the three variables age, type of spirits consumed
and housing as the best predictor. The standard error of
prediction remains high at 0.73. Eliminating age and type
of spirits as well, housing remains as the best single
predictor. Again the standard error is 0.73, but the r-
squared dropped from 0.081 for age, type of spirit and
housing to 0.053 for housing as a sole predictor.
Thus housing alone would predict treatment outcome almost as well as taking all six variables together, but the association between the socio-economic variables and rehabilitation remains very poor indeed and does not account for more than 8 per cent of the factors involved that make for rehabilitation for those who have come to the Alcoholism Foundation for treatment.

Seeing that marital status and employment status are included in the variable "housing" it does not help to explain Vancouver data anomalies, that is, low points and high results, as it was done for the Danish Antabuse data by inspecting case histories to see if patients had improved their employment and/or marital status right at the commencement of treatment. Neither one nor six factors, unless one of them is acceptable housing, makes a difference whether a patient improves or not. A chi square test of the Vancouver experimental group data (See Table 8, p. 64) confirmed these conclusions. Scale points and rehabilitation showed no significant associations.  

As was pointed out on page 60, the Danish Temperance data do not show as strong predictive validities as the Aalborg Antabuse ones. Nevertheless, a chi square test confirmed that for the Danish Temperance results, socio-

22 Chi square 4.255; df=4; .30 < p < .50.
23 Chi square 21.53, df=8; p < .01.
economic factors were associated with rehabilitation. Furthermore, it was ascertained that the two populations, Danish Temperance and Danish Antabuse were not different. (See page 65.)

Obviously, to account for differences in predictive validities we must resort to a different explanation why the Danish socio-economic data lend themselves to prediction of treatment outcome while the Vancouver data do not, and what could possibly account for the anomalies found in the Vancouver results. As mentioned before, some factors which we have named social control factors without specifying them further, seem to play an important part whether or not an inebriate shows improvement subsequent to treatment at an out-patient clinic. This aspect will now receive attention.

Social Control Factors

An abbreviated (due to small numbers) comparison between the experimental and control group Vancouver results might high-light the fact that social controls of some kind seem to influence treatment outcome. As will be recalled a number of subjects had attended Alcoholics Anonymous between T₁ and T₂; therefore the control group has been divided into those that have received A.A. "treatment" and those that have not.
TABLE 10: Percentage Comparison of Results of Treatment in Relation to Point Values for Experimental Group, Control Group with Alcoholics Anonymous Treatment, and Control Group Without Further Treatment

<table>
<thead>
<tr>
<th>Point Values</th>
<th>Experimental Group (N=91)</th>
<th>Control Group with A.A. Treatment (N=16)</th>
<th>Control Group without Treatment (N=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A and B Improvement</td>
<td>C No Improvement</td>
<td>Total</td>
</tr>
<tr>
<td>6 &amp; 5</td>
<td>66 (30)</td>
<td>34 (15)</td>
<td>100 (45)</td>
</tr>
<tr>
<td>4 &amp; 3</td>
<td>64 (16)</td>
<td>36 (9)</td>
<td>100 (25)</td>
</tr>
<tr>
<td>2;1;0</td>
<td>43 (9)</td>
<td>57 (12)</td>
<td>100 (21)</td>
</tr>
<tr>
<td></td>
<td>60 (55)</td>
<td>40 (36)</td>
<td>100 (91)</td>
</tr>
<tr>
<td>6 &amp; 5</td>
<td>83 (5)</td>
<td>17 (1)</td>
<td>100 (6)</td>
</tr>
<tr>
<td>4 &amp; 3</td>
<td>67 (4)</td>
<td>33 (2)</td>
<td>100 (6)</td>
</tr>
<tr>
<td>2;1;0</td>
<td>25 (1)</td>
<td>75 (3)</td>
<td>100 (4)</td>
</tr>
<tr>
<td></td>
<td>62 (10)</td>
<td>38 (6)</td>
<td>100 (16)</td>
</tr>
<tr>
<td>6 &amp; 5</td>
<td>52 (12)</td>
<td>48 (11)</td>
<td>100 (23)</td>
</tr>
<tr>
<td>4 &amp; 3</td>
<td>50 (4)</td>
<td>50 (4)</td>
<td>100 (8)</td>
</tr>
<tr>
<td>2;1;0</td>
<td>6 (1)</td>
<td>94 (16)</td>
<td>100 (17)</td>
</tr>
<tr>
<td></td>
<td>35 (17)</td>
<td>65 (31)</td>
<td>100 (48)</td>
</tr>
</tbody>
</table>

Admittedly, the number of subjects for those in the control group with Alcoholics Anonymous treatment is very small, and no conclusions should be drawn from these figures. Nevertheless, it is interesting to note that for
those who received no treatment at all, the chances for improvement are very slim when they do not conform to societal expectations. Conversely, those who conform most closely to societal expectations succeed better with Alcoholics Anonymous "treatment."

On the one hand, some subjects in the control group with no or very few points in their favour may be those least imbedded in some socially cohesive network - either approved by society at large or by a sub-group - as for instance the "bums" and some older alcoholics on skid-road. If one looks upon some forms of alcoholism as a form of self-destruction that arises out of a lack of social bonds, it seems that the wish not to get well is simply a continuation of the social isolatedness hitherto experienced.

On the other hand, some of the subjects in the control group may be too deeply embedded in their own sub-culture, for instance, "winos" and "lushes" and do not want to change their behaviour for fear of becoming completely isolated if they have no place to which they can go and be accepted.


25 By "social isolatedness" is understood a lack of family bonds, work and good housing as set out in the frame of reference for this research project.
When the alcoholic who has been off Skid Road for a time returns he feels a relaxation of tension and a sense of leaving his worries behind him. If members of his last group are still on Skid Road and he rejoins them, no one asks where he has been or what he has done. He can volunteer the information if he wishes, but there is no necessity to do so. No member of the Skid Road Groups inquires about his family, his job, his marital status, or any other area of his life. On Skid Road his failures, his successes, and other criteria for acceptance in the larger society become irrelevant.26

Nevertheless, non-drinking alcoholics do not fit into their old sub-groups; therefore, in order to be accepted they must conform to group norms, one of which is the sharing of a bottle.

In our case, the types of persons just described did not come to the Foundation on their own initiative, but were "referred" (i.e. "forced") by some welfare agency or court. Small wonder that they did not involve themselves in treatment, which would have meant a complete change of behaviour and facing an unknown and threatening future, when the social support they need can only be received from the deviant sub-group.

However, for those who have not accepted the definition of "skid-road alcoholic" for themselves, a change is still possible. Nor do all alcoholics with few points in their favour live on skid-road. The fact that 43 per cent of those with low points registered some improvement after treatment at the Foundation shows that a change in

26 Jackson, op. cit., p. 473.
behaviour is possible. Perhaps in this instance, the Alcoholism Foundation with its even limited day-time program helped to keep the alcoholic from seeking companionship in a drinking environment, especially when he was not working. Once the vicious circle was broken and the alcoholic had re-defined the situation for himself, and decided not to return to his drinking environment, he could then be helped by the treatment agency. (An elaboration of this aspect will be attempted in the next chapter.)

Control group subjects who associated extensively with Alcoholics Anonymous are more than any other group of patients enmeshed in social relations (they have the highest points) and seem to be able to adjust to the forms of social control that is inherent in the Alcoholics Anonymous philosophy more so than would socially isolated persons.

Perhaps at this point a slight digression into A.A. philosophy might be helpful. According to the "bible" of the alcoholic affiliating with A.A., "The Twelve Step Program of Recovery," as set forth in such books as Alcoholics Anonymous: The story of how many thousands of men and women have recovered from alcoholism, every alcoholic is selfish, dishonest, and inconsiderate due to the overriding desire for "the bottle." A first step to realizing his own shortcomings, rather than accuse others of them, includes the following:
First of all, we had to quit playing God. It didn't work. Next we decided that hereafter in this drama of life, God (as we understand Him) was going to be our Director. He is the Principal; we are His agents. He is the Father and we are his children. Most good ideas are simple, and this concept was the keystone of the new and triumphant arch through which we passed to Freedom.27

Once this realization was firmly incorporated into the alcoholic's thinking, he had started to accept controls both from outside and from within. This spiritual love-dependency relationship between "father and child" is the ideal setting for the transmitting of these controls. But other, more "worldly" persons are also important in the alcoholic's life on the way to sobriety. The fellowship of Alcoholics Anonymous, often in the form of the "sponsor" provides this worldly person with whom the new member can honestly discuss his life situation and difficulties as they arise during each day. (However, this is not to be confused with a "working through" of problems as would be attempted in a psychiatric setting; it is more as if a network of interpersonal relations substitutes for private introspection.) A favourable setting for the transmission of controls is created.

And to conclude with another excerpt of A.A. philosophy:

Practical experience shows that nothing will so much insure immunity from drinking as intensive work with other alcoholics.... Life will take

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on a new meaning. To watch people recover, to see them help others, to watch loneliness vanish, to see a fellowship grow about you, to have a host of friends — this is an experience you must not miss.... Frequent contact with newcomers and with each other is the bright spot of our lives.28

The person joining Alcoholics Anonymous is brought back from a place of personal but not yet social isolation through constant drinking into an extremely tight social setting, where his personality becomes merged with that of the social group. What tighter forms of social control are there?

As was stated on page 47, it was found that for those patients in the experimental group who attended Alcoholics Anonymous meetings regularly, treatment received at the Foundation did not increase their chances of rehabilitation. Clearly, here is one instance where approved tight social control factors seem to be more effective in helping an alcoholic to maintain sobriety than the individually oriented, psychological type of counselling treatment with its laissez-faire bias given at an out-patient clinic. However, those who before the start of treatment were not fettered by any form of approved social control, e.g. family, work, housing, did not benefit from the attendance at Alcoholics Anonymous meetings, whereas some did, surprisingly, from the treatment administered at the Alcoholism Foundation.

28 Ibid., p. 89.
Thus one could postulate that if one received treatment at the Foundation, whether one shows a change in behaviour or not is not so much dependent on socio-economic characteristics as it is on the particular treatment received. But favourable background factors seem to influence chances for success in Alcoholics Anonymous affiliation, and no or few favourable background factors seem to influence chances for failure if one had no treatment at all.

However, the fact that more than one-third of the patients (17 out of 46) improved without having had treatment as defined, is quite astonishing. Although they generally showed only "some improvement," nevertheless the fact persists that a change in their behaviour occurred without any "outside" help. When the patients were asked to what or whom they attributed a change in drinking behaviour, they gave the following answers:

1. Wife, family and children (9)
2. Self (5)
3. Work, religion and accident – one each (3)

Furthermore, of the 9 who mentioned wife, family and children as the main agent of change, 4 gave self as second most important agent. Ties to family and self-respect seem two powerful factors that are conducive to a change in behaviour at the point when one has decided to "do" something.

29 This "treatment" might be no more than giving the man a place to go where he meets a different type of person than he usually does.
about one's drinking. How the alcoholic finally decides to "do" something about his problem needs exploration.

These findings are very tentative; however, they do suggest certain possibilities by which treatment success in outpatient clinics could be improved, although it seems impossible at the present time to predict treatment success by solely concentrating on socio-economic factors and one type of motivational index that does not seem to discriminate.

Under the circumstances, the hypothesis, that those patients whose socio-economic characteristics and motivation conformed more closely to societal expectations tended to benefit more from the type of treatment offered at an alcoholism outpatient clinic than those whose characteristics and motivation did not, must be rejected.

It has further been shown that the Vancouver and the Danish populations of alcoholics are not comparable. This could imply that data from one culture do not lend themselves for straight replication on another one, because too many unknown cultural variants can enter. However, using the Danish scale it was found that a combination of age, type of spirit consumed and housing inhabited makes for the "best" combination of predictors using the Canadian data, although this "best" predictor is so poor that it accounts for only 8 per cent of the factors contributing to rehabilitation.
Summary

Socio-economic data on age, marital status, employment status, housing, drinking and motivation collected for the Alcoholism Foundation of British Columbia study were dichotomized in terms of predicting favourable or unfavourable treatment outcome. These indicators were found to be significantly associated with rehabilitation by a Danish researcher and were incorporated into a prognostic index. Alcoholism Foundation data, although not tested for three indices, were nevertheless found to show the same trends as the Danish data although they were not always significantly associated with improvement.

Favourable characteristics received one point, unfavourable ones, zero point; thus a score of 6 points made for the highest and most favourable predictor for success in treatment outcome.

A comparison of the Canadian and Danish data obtained that, although with Danish Antabuse data the chances for some success in treatment outcome are about 88 per cent for 6 points and about 27 per cent for 2;1;0 points, the Vancouver data did not lend themselves to predict treatment outcome with any degree of accuracy.

Trying to account for the differences between the Danish Antabuse and Vancouver data, it was established that, firstly, the two populations were different and, secondly, that not treatment per se, but the method of
treatment influenced the rate of recovery. This method of treatment, as practiced at the Danish Antabuse clinic, was subsumed under a rubric of "unspecified social control factors."

Danish Temperance Societies' predictions were not as good as Danish Antabuse ones (but better than Alcoholism Foundation ones) and Rudfeld attributed some of the differences found between the two Danish clinic results to the method of treatment, as well as to other factors. It will be recalled that the method of treatment at the Danish Temperance Societies is similar to that of the Alcoholism Foundation, although much less extensive, in that the major aspect of treatment consists in individual counselling. Danish Antabuse clinic treatment consists, besides individual counselling, of supervised daily intake of Antabuse, including the tracing of patients trying to evade treatment. In comparison the treatment practices at the Alcoholism Foundation and the Danish Temperance Societies are extremely laissez-faire.

Anomalies in the Danish data were explained by Rudfeld in that those who had improved despite low points showed a significant change in a favourable direction in employment and marital status right after the commencement of treatment. This explanation could not be accepted for the Vancouver anomalies of low points and high improvement,
since employment and marital status were not found important in predicting treatment outcome because the two indices were included in the index of housing. Housing, together with age and type of spirit consumed was found to be the "best" predictor. No explanation could be found for the Vancouver irregularities. However, it was hypothesized that the Alcoholism Foundation must have acted - in some cases at least - as a "socializing" agent, keeping those alcoholics with no social ties and no work off skid-road or from a drinking environment during the day-time by involving them in group activities at the Foundation. This must have given them an opportunity to re-define their situations.

Rudfeld found that those patients who had not improved despite high points for social factors showed marked personality deviations which interfered with successful treatment. Again, this explanation could not be accepted for the Vancouver findings due to the equivocal nature of "personality disturbances" in alcoholics. There was no way of assessing these disturbances according to approved psychiatric methods in our clinic population since only 19 out of 91 patients had been seen by the psychiatrist. However, there were no statistically significant differences between those with and without psychiatric assessment as far as rehabilitation was concerned.
The importance of personality variations and their association with rehabilitation is by no means denied - on the contrary - but the data force us to leave the investigation of this aspect of an alcoholic's characteristics to other researchers.\(^{30}\)

However, concentration on unspecified informal social control factors showed some interesting variations in the data amongst the patients in the experimental group, in the control group without further treatment, and patients in the control group who affiliated with Alcoholics Anonymous:

1. For the experimental group members, predictive factors are not significantly associated with rehabilitation and treatment received at the Foundation is the important variable. For those with high points, the Foundation, like Alcoholics Anonymous, seems to act as a "reinforcer" of internal controls, for those with low points as a socializing agent instilling both internal and external controls.

2. Control group members without further treatment and with few favourable points showed few changes in behaviour, whereas one half of those with favourable points improved without treatment from outside. Change in behaviour was credited to wife and family and self - i.e.,

\(^{30}\) In this we comply with R.K. Merton's ideas set forth in his Part I of Social Theory and Social Structure, Rev. Ed., Glencoe, Ill., The Free Press, 1957, pp. 81-117.
external cohesiveness and internal controls. Those with few or no social ties to bind them did not improve.

3. Control group members with Alcoholics Anonymous affiliation and most favourable points benefitted more from their association than those with few or no points. It seems that already existing social bonds are strengthened by A.A. philosophy, but when there are no or few existing bonds, the social control inherent in A.A. philosophy does not seem to take root.

Care should be taken to look upon the above findings as tentative; nevertheless, they seem to suggest certain treatment implications which will be elaborated in the next chapter.

Conclusions

1. The hypothesis that favourable and unfavourable socio-economic characteristics lend themselves to prediction of treatment outcome in out-patient clinics was not confirmed.

2. As a best predictor of treatment success a combination of housing, type of spirits consumed and age emerged, accounting for roughly 8 per cent of the variables involved in successful treatment outcome.

3. Without investigating cultural variants, it seems unwise to transpose socio-economic data from one culture to another one and expect to achieve the same results.
4. Leaving aside personality variables, established unspecified social control factors, rather than straight socio-economic characteristics, seem important to rehabilitation.
Inferences Drawn from Findings

Although the hypothesis was not confirmed, the findings suggest certain implications for treatment and further research. To recapitulate briefly, it was thought that socio-economic characteristics enhancing social cohesion tended to be positively associated with rehabilitation when treatment was received at an out-patient clinic; and that alternatively, social characteristics emphasizing social isolatedness (as defined) would make for poor treatment success. Nevertheless, it was obtained that some unspecified social control factors, together with favourable socio-economic characteristics do influence changes in an alcoholic's behaviour, once he has taken the initial step "to do something" about his drinking problem. The clearest positive illustration of this was given by those (admittedly few) persons who involved themselves extensively in A.A. philosophy. A clear negative illustration was given by the 94 per cent of those who did not conform to societal expectations, did not involve themselves in treatment and failed to show any positive change in behaviour. However, since 43 per cent of those with unfavourable characteristics but Foundation treatment improved, it is indicated that concentrated efforts could be made to
encourage treatment involvement for all those with even adverse backgrounds. For those lacking approved forms of social control, the Foundation's main purpose seems to be to act as a re-socializing agent or even primary socializing agent, first instilling internal social controls which will, in turn, bring about a patient's abiding to informal external social controls or norms. In-patient treatment for those lacking a background in which strengthening social ties operate could be seen as one solution. However, where no in-patient facilities are available - and a pattern of "in and out of jail" seems to be the only alternative - a counsellor who is attached to an out-patient clinic, but goes out to the patient and tries to involve him in treatment rather than wait for the patient to come to him, might help to reach those who would not ordinarily seek help at an out-patient clinic.  

1 Cf. a recent article in MacLean's Magazine (Jan. 25, 1964) by Jane Becker. This article reports of the University Settlement Recreation Centre, serving as a community center for a "slum district" in Toronto, and its activities. It was, however, noticed that, although there was enough space and enough facilities and the membership had doubled, many neighbourhood teenagers never came to the Centre. The social worker assigned to work with the young men found that the only way of reaching some of "these kids (who) didn't belong to anything and didn't want to" was to go to their hangouts - sleazy restaurants, pool halls, broken homes - and offering them the first real understanding these kids ever had. (p. 21) Although it is still too early to assess the program, Mr. Felstiner, the social worker, seems to achieve a certain measure of success with his methods.
This aspect clearly involves the concept of motivation. Experimental work in this area, that is, how to motivate the alcoholic to come for treatment, is presently being undertaken. One way of tackling this problem has been described by M. Brunner-Orne.\(^2\) Informal group sessions are held with emergency-ward hospitalized patients, whose hospitalization averages about ten days. The goal of the informal group sessions held right on the ward is mainly to enable the patient to recognize his need for counselling and to help to establish a positive attitude towards further treatment.

Another way of motivating the alcoholic for treatment is described by M.E. Chafetz.\(^3\) Here the clinic worker goes to the emergency ward of a general hospital, and involves the patients in discussions and points out further treatment facilities where therapeutic relationships can be established. Many of the patients seen at emergency wards are from lower socio-economic backgrounds and are quite often physically collapsed homeless men. Here it is essential to establish a degree of motivation for the patient's willingness to involve himself in out-patient treatment.

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It is often pointed out that the best time for motivating an inebriate to involve himself in treatment is when he is "down and out," has "reached bottom," or is full of remorse and guilt due to losing a job or his family. This is precisely at the point where he has to leave his usual group affiliations and is exposed to standards of the majority group, as in hospitals and clinics.

This would also suggest that rehabilitation work in prisons has little effect since the alcoholic has simply replaced one deviant sub-culture with another from which to draw support.

A second and seemingly important implication the findings suggest, again involves social control factors - namely those of systematized, supervised daily Antabuse treatment. This type of treatment could be combined with research in this area. Two groups of patients could be selected for treatment, matching them on socio-economic characteristics. One group could be given the customary laissez-faire counselling treatment; the other daily, supervised Antabuse treatment combined with counselling. Effects of both types and methods of treatment could be measured about 18 months after initial intake. Directed experiments of this nature would seem to take out much of the haphazardness of present laissez-faire treatment methods.
Thirdly, the findings seem to suggest that certain clients with favourable socio-economic characteristics could be directed to Alcoholics Anonymous for extensive involvement in A.A. group work, after the initial intake at the Foundation. Experimental work in this area has been carried out by Dr. Harrison M. Trice, who is Assistant Professor of Industrial and Labour Relations at Cornell University and an A.A. Trustee. He suggests certain differences in affiliating and non-affiliating alcoholics, such as the ability to share basic emotional reactions with others, prior associational experiences (some knew persons who had enough "will-power" to quit on their own! and why shouldn't they have this will-power too, or some knew persons whom A.A. helped to stay sober), exposure to A.A. philosophy prior to joining, the alcoholics perception of what to expect, his welcome at the first meeting, whether he has a sponsor or not, the attitudes of his family (or friends) towards A.A.\textsuperscript{4} Definitely, an exploration of these factors seems warranted.

Further, and here I quote because this aspect is central to my ideas:

A second experience that differentiated between affiliates and non-affiliates is the fact that the former had, before going to any meetings at all, already lost their drinking friends, while the latter had not. This suggests that the

affiliates came from a background in which "symptoms" of alcoholism are readily stigmatized while the non-affiliates came from social situations in which these manifestations are more readily accepted as normal.\(^5\)

In the introduction to this study it was stated that a scarcity of resources warrants questions of when, where, how and with what and whom to treat inebriates, especially since there are a variety of established treatment outlets. Although caution is necessary in interpreting results from small samples, nevertheless the findings broadly confirm those of others: Alcoholics who live in acceptable housing are on the whole more amenable to a laissez-faire "treatment" approach than those who live in derelict or skid-road accommodation. However, the results do not allow us to make suggestions as to who could benefit most from out-patient treatment.\(^6\)

\(^5\) Ibid., p. 27

\(^6\) In this respect it might be of interest to the reader to know that a certain self-selection as to who involves himself in out-patient treatment seems recently to take place. It was noted, both in Copenhagen and in Vancouver that during 1963 the clientele consisted of patients who came from higher socio-economic backgrounds. For instance, the Danish Temperance Societies report that during 1962-1963, 73 out of 155 patients came from white collar professions, while in 1957-1958 there were only 20 out of a total of about 150 or so from white collar backgrounds. (Arsberetning for Afholdsbevægelsens behandlingsinstitutioner for alkoholskadede, p. 2.) As in Vancouver, the proportion of men to women alcoholics seeking treatment was 9:1 in Copenhagen.
So far we have neglected to mention psychological factors. There is no doubt that such factors play an important part in an alcoholic's ability to recover. If we are able to discover how the interaction of the alcoholic's socio-economic position with his personal pathology affects treatment outcome, we should have advanced considerably. Mindlin's work regarding these factors might be a beginning.

Limitations of the Findings

It was found that roughly 8 per cent of the factors which make for rehabilitation could be accounted for by socio-economic data. This leaves 92 per cent unaccounted variance. Surely, these 92 per cent must include some personality factors, although we are, at the moment, not sure what they are. The findings are therefore severely limited in their application to treatment.

As for the findings themselves, non-agreement with the hypothesis and generally small numbers impose limitations for generalizations. Furthermore, the above implications all suggest that certain forms of social controls are operating that are conducive to rehabilitation. Limitations are imposed on our findings in that we are not sure what kinds and forms of social controls are important, but it is understood that they are those "approved" institutionalized informal social control factors (as opposed to formal ones of law, religion, morality, etc.) that are engendered
by socialization practices in the family; in the school; in professional schools; that are operative in client-professional relationships - just to mention a few.

Limitation of Rudfeld's Prognostic Index

Part of the limitation of our findings is actually taken over from the limitation in Rudfeld's findings. When it was contemplated to replicate Rudfeld's index, the question of treatment loomed large. After all, one must ask: Are the two types of treatment similar enough that similar treatment results can be expected, or is the fact that Antabuse was a must in Aalborg but not in Vancouver a strong enough deterrent? It should and would have been, had the index not been "validated" on a sample of patients who seemed to receive a type of treatment that was much closer in nature to that given in Vancouver than that given in Aalborg. Also, Copenhagen as a large maritime city seems closer in certain characteristics to Vancouver than does Aalborg, a small provincial town. Thus in Aalborg the conditions for supervising the daily Antabuse intake were given and patients could be traced who were evading treatment.

The clinic in Copenhagen is characterized by a very large number of 'semi-transients' of whom it is difficult to judge whether they can be said to be 'treated.' In the case of some individual patients at the Clinic in Copenhagen, however, a long-term and apparently very thorough social-psychiatric treatment has in fact been carried through.\\

The description of the Copenhagen sample sounded as if it fitted the Vancouver population. Although the results for Copenhagen were poorer than they were for Aalborg, they were nevertheless quite good. On the strength of the results for the validation sample, the replication was undertaken. However, the reliability of Rudfeld's validation method now seems doubtful. The article describing Rudfeld's work as it appeared in English in the Danish Medical Bulletin did not give much information about the Danish Temperance Societies. From material received from the Danish Temperance Societies in Copenhagen, including the original Rudfeld article in Danish, the following was learned:

1. The Danish Temperance Societies are actually connected with the Protestant Church in Denmark, and apparently very few referrals of alcoholics by welfare, court, prison and police authorities are made. It seems that most referrals are on a voluntary basis which, obviously, introduces some self-selection bias. This does not hold for the Danish Antabuse clinic nor for the Alcoholism Foundation of Vancouver.

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2. The Danish Temperance Societies' clinic has expanded considerably during 1962/63, but before that time it was open only 4 hours for 2 days a week and treatment given was of a psycho-therapeutic nature only. No medical doctor was attached to the clinic, and no pharmaco-therapy of any kind was administered.

3. There was no actual follow-up contact of Copenhagen patients. Information was taken from the patient's file recorded by the counsellor at the last interview and Rudfeld's investigation occurred when the time elapsed since intake interview was in many instances shorter than one year. In other words, it seemed as if the patients in at least some instances were still receiving treatment. This method of assessing change seems highly unreliable.

4. A fourth factor imposing limitations on the findings is the criteria of rehabilitation. It seemed that as far as the Copenhagen material was concerned, this was assessed rather arbitrarily due to the method of recording in the files. In all fairness, it should be pointed out that Rudfeld recorded her doubts as to the comparability of the two Danish groups, as well as to the inadequacy of the social data recorded at Copenhagen.

5. There is also some doubt if the Vancouver and the Rudfeld criteria of rehabilitation can be seen as strictly comparable, for in each case, interviewers' biases
might distort perception and recording. However, until reliable assessment guides have been established, there is no way of ensuring comparability of rehabilitation criteria.

Having the Vancouver data as a third measure, there now seems no doubt that the Copenhagen group was a poor choice for a validation sample. Rudfeld's index, it appears, can not be used to generalize beyond the Aalborg clinic population, unless, of course, the exact treatment equivalent is adhered to in other clinics. We are therefore doubly justified in concluding that not treatment per se in an out-patient clinic is important for achieving differing results in differing populations, but that the method of treatment, that is, how the treatment is administered, is the important variable that might help to discriminate in terms of who will benefit best from certain kinds of treatment given at differing treatment centers.
Theoretical Implications for Treatment

Throughout this study the fact was stressed that alcoholism is looked upon as an illness and therefore treatment given is in accordance with clinical principles. However, the empirical research undertaken suggests that certain informal social control factors are conducive to rehabilitation. When these factors are absent, treatment involvement and/or treatment success are minimal.

The question might be raised of how far the concept of alcoholism as an illness and the relation of social control factors to the concept of treatment might be categorized into a paradigm that would suggest certain forms of treatment for certain patterns of alcoholics' illnesses.

According to Talcott Parsons\(^9\) in the United States and Canada when an individual experiences difficulties in fulfilling his social role obligations, as in the case of illness, we tend to see it as a disturbance in capacity. Thus the person is granted exemption from role-obligations; he is not held responsible for his sick state which is conditionally legitimized. However, in granting the sick state, a heavy emphasis is placed on the "acceptance of the need for help and of the obligation to cooperate with the source of the help."\(^10\) (Italics mine)


\(^10\) Ibid., p. 182.
With respect to legitimation there is a particularly strong emphasis on its conditional aspect, that illness is only legitimized so long as it is clearly recognized that it is intrinsically an undesirable state, to be recovered from as expeditiously as possible.\textsuperscript{11}

Obviously, some problem drinkers, especially those with few socially acceptable bonds and who do not want to get well, would, under the above definition in the light of North American values and social structure, lose their "sick" status and take on the status of "deviants."

If illness implies that the sick person also has a claim on others to help him to get well, it provides a "point of leverage"\textsuperscript{12} for social control which is not so readily available for those who do not see illness "as a way out," but form partnerships in drinking, especially on skid-road, which reinforce alienative tendencies.

This greatly weakens the attitudinal sanctions of the normal institutionalized structure in that each has an alter to whom he can turn for approval of his action to offset the disapproval of the rest of society.\textsuperscript{13}

According to Parsons, the "problem of the secondary gain of deviance is a primary focus of the mechanisms of social control."\textsuperscript{14} This "secondary gain" is the alcoholic's

\textsuperscript{11} Ibid., p. 183.


\textsuperscript{13} Ibid., p. 286.

\textsuperscript{14} Ibid., p. 277.
emotional investment in his form of deviance. Without external help, i.e., some form of social control, both the "sick" and the "deviant" alcoholics can not give up this emotional investment. In the case of the sick alcoholic, giving up secondary gains would involve disturbing his internal "economy," and also disturbing the expectations that significant others have of him. In the case of the alcoholic these expectations are generally highly unrealistic.\(^5\) If the significant others succeed in changing this expectation to a more realistic one, secondary gains become undesirable. For the deviant alcoholic giving up secondary gains involves giving up group support; "ego would be clearly a traitor who was guilty of letting them (the group) down if he abandoned them or questioned the legitimacy of their position."\(^6\) Strong measures would be needed to succeed in tearing the deviant away from his group support.

However, both "sick" and "deviant" alcoholics can in turn be sub-classified into "sick" and "too-sick" and "deviant-nonsupported" and "deviant-supported" alcoholics. The accompanying paradigm sketches the path of involvement for each alcoholic sub-group from the definition of its status to the treatment agency applicable.

\(^{15}\) Ibid., p. 276.

\(^{16}\) Ibid., p. 294.
TABLE 11: Definition of Alcoholics’ Behaviours and Path of Involvement from Definition of Status to Treatment Agency and Treatment Suggested

<table>
<thead>
<tr>
<th></th>
<th>Alcoholism as Illness</th>
<th>Alcoholism as Deviance</th>
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<tbody>
<tr>
<td></td>
<td>Too-Sick</td>
<td>Deviant-</td>
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<tr>
<td></td>
<td></td>
<td>Non-supported</td>
</tr>
<tr>
<td>Sick</td>
<td>Defined according</td>
<td>Secondary gains</td>
</tr>
<tr>
<td></td>
<td>to societal norms</td>
<td>Secondary gains</td>
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<tr>
<td></td>
<td>Onus on healer &amp;/or</td>
<td>desirable - up to a</td>
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<td></td>
<td>society. Too sick to</td>
<td>point</td>
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<tr>
<td></td>
<td>be helped.</td>
<td></td>
</tr>
<tr>
<td>Secondary gains</td>
<td>become undesirable</td>
<td>Secondary gains</td>
</tr>
<tr>
<td></td>
<td>Secondary gains</td>
<td>remain desirable</td>
</tr>
<tr>
<td></td>
<td>desirable</td>
<td></td>
</tr>
<tr>
<td>Obligation</td>
<td>To society</td>
<td>To no one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To sub-culture</td>
</tr>
<tr>
<td>Societal Involvement</td>
<td>High</td>
<td>Low</td>
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<tr>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Motivation</td>
<td>Established</td>
<td>Not established</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not established (except in some instances)</td>
</tr>
<tr>
<td>Treatment Involvement</td>
<td>Possible</td>
<td>Not possible</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minimally possible</td>
</tr>
<tr>
<td>Redefinition of Status</td>
<td>Not necessary (Desirable)</td>
<td>Necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Necessary</td>
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<tr>
<td>Modes of Redefinition</td>
<td>Therapeutic Setting</td>
<td>Education</td>
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<td></td>
<td></td>
<td>Offer and accept-</td>
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<tr>
<td></td>
<td></td>
<td>able support</td>
</tr>
<tr>
<td>Treatment Agency</td>
<td>Laissez-faire</td>
<td>Laissez-faire</td>
</tr>
<tr>
<td></td>
<td>Out-patient</td>
<td>Compulsory Supervision</td>
</tr>
<tr>
<td></td>
<td>A.A.</td>
<td>In-patient</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Out-patient</td>
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<tr>
<td></td>
<td></td>
<td>Group Therapy</td>
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<tr>
<td></td>
<td></td>
<td>Sick-Bay - Stress</td>
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<tr>
<td></td>
<td></td>
<td>on sick role</td>
</tr>
</tbody>
</table>
The paradigm suggests that one of the most important factors in trying to change an alcoholic's behaviour would be to "motivate" him to accept a definition of being "sick" which, at the same time, would imply an obligation to get well. (Redefinition of Status.) However, this can not be achieved too quickly; therefore treatment agencies that offer the kind and method of treatment that support the alcoholic not only during his re-definition period but also during the entire treatment span might achieve the best possible results.

The following implications are contained in the paradigm:

1. The "sick" alcoholic defines his status in accordance with societal norms. At the point of this definition, secondary gains become undesirable, while before the secondary gains received from his drinking behaviour might have stopped him from seeing himself as a sick man. At this point, according to Parsons, he feels an obligation to society because his involvement in society is still high; he generally has a family, work, and perhaps some friends, although he may drink mainly alone rather than in company. As soon as his desire to "do" something about his drinking has been established by the definition of himself as a sick person, his involvement in treatment becomes possible. Therefore a re-definition of status at this time is no longer necessary, although a strengthening of his obligation
to get well is certainly desirable. This he can achieve through laissez-faire treatment support given at out-patient clinics or Alcoholics Anonymous, because there are sufficient societal bonds that keep him involved in the therapeutic process until at least the major difficulties are resolved.

2. The "too-sick" alcoholic has most likely been to various treatment agencies, but has never involved himself in treatment sufficiently to benefit from it. He therefore defines his status as "too sick;" no one can help him; he has tried everything; doctors are no good; they don't know what they are talking about; etc. Indulgence in his "too-sick" role brings about secondary gains which he would lose if he accepted the "sick" status. He sees himself as an object of pity and suffering. His obligations are to himself to keep the suffering plausible enough for others to believe him. This prevents him from having to change. Treatment involvement is not possible, although he might have some motivation left to do something about his drinking. Through education, especially by pointing out that there are various treatment facilities and that there are "cures," it might be possible that he can re-define his status from "too sick to be helped" to "sick needing help badly." This would oblige him to try the remedy suggested, which could be supervised treatment involvement. It has to be supervised and strict to prevent him from falling
back into the "too-sick" role should the "cure" take a longer time than he had hoped. Perhaps various kinds of reflex conditioning might be effective, since this kind of therapy would stress a scientific rather than a person-to-person approach, especially since the latter allowed the patient to reject the healer as ineffective before.

3. The "deviant-non-supported" problem drinker is the lone wolf, the floater. He feels neither an obligation to himself nor to society; therefore his involvement with anyone is minimal. At times he has nagging feelings that he should do something about his drinking and thus regain entrance into society. At this point treatment involvement may become possible, but unless the necessary socially approved support is forthcoming in massive doses, he will slip back into his lone-drinking pattern. Generally this type of problem drinker requires emergency treatment at general hospitals because he has no one to turn to in case of emergency. He may also be found in drunk courts, since he has no cronies like the "deviant-supported" alcoholic to keep him from being caught in a drunken stupor by the police. At this point he may be ready to re-define his status if enough support is offered, especially if it is pointed out to him that he is really a "sick" rather than a "bad" person. Yet the support offered has to be well balanced between "supervised" and "too supervised" since too strong supervision will put him right back from where
he came. Group therapy, especially with a group of alcoholics who have re-defined their status already might help this patient best. After he has accepted socially approved group supports he might be able to benefit from out-patient treatment if his mental capacity is high enough to gain from person-to-person therapy. If his mental capacity is too low, supervised work settings might be a solution.

4. The "deviant-supported" alcoholic poses the most difficult rehabilitation problem. His allegiance to sub-group standards prevents him from re-defining his situation. Secondary gains inherent in his drinking pattern are only desirable and forthcoming as long as he remains a loyal member of the sub-group. His obligation is to his sub-culture, but not to society at large. Since the standards of the larger society do not apply to him, his motivation to involve himself in treatment is non-existent and treatment an impossibility. He needs to be torn away from his source of support. In-patient treatment with massive doses of support and great stress on the "sick" aspect of alcoholism might help this type of drinker to re-define his status from "deviant" to "sick." At this point treatment involvement might become possible, but therapy needs to be supervised at all times to prevent the patient from slipping out of the sick role into the deviant role by returning to his old group. It should be stressed that for deviant alcoholics neither jail nor the present mental
hospital set-ups are workable. Jail settings, of course, are the most detrimental to rehabilitation; for they allow no re-definition of status - simply a change from one deviant group pattern to another one. In-patient therapy with strong emphasis on rehabilitation programs in the area of work and social behaviour might be effective to some degree.

The above suggestions tend to neglect many of the underlying "causes" of alcoholism; yet the empirical investigation has shown that those not willing to involve themselves in treatment, although no less needy of treatment than the others, could be "treated" in a manner that takes care of their problems which initially made them reject the role of a "sick" person and accept that of a "deviant." Out-patient treatment based on laissez-faire methods does not seem to help the "deviant" alcoholic, especially not the one who is group-supported.

**Summary and Conclusions**

In Chapter V the implications of the findings were recorded. It was found that informal social control factors played a decisive role in both treatment involvement and treatment success. Suggestions based on present research were advanced whereby problem drinkers could be motivated to involve themselves in treatment, especially those who would not normally seek help at out-patient clinics.
Secondly, it was advanced that Antabuse treatment given along the lines of the Aalborg method might prevent the haphazardness of present out-patient treatment. Control treatment parallel with the Antabuse therapy might after assessment lead to an established workable treatment procedure.

Thirdly, the findings indicated that some persons, especially with favourable socio-economic characteristics, could be directed to Alcoholics Anonymous for affiliation without being treated at the Alcoholism Foundation.

Although it was established that those who live in acceptable rather than in derelict housing tend to benefit more from out-patient treatment, the empirical results did now allow for making suggestions as to who could benefit most from this type of treatment agency.

The limitations of the findings were outlined. These were principally of two kinds: Alcoholism Foundation data and Danish data. Only 8 per cent of the factors that make for rehabilitation could be accounted for by the Alcoholism Foundation socio-economic data. The findings are therefore severely limited in their application to treatment outcome prediction. The hypothesis was not confirmed.

The limitations of the Danish findings were incorporated into ours. The main limitation resulted from the doubtful reliability of the Danish validation method. Treatment methods seemed to be more important than was at first
realized. There also exists some doubt as to the comparability of the treatment success evaluation criteria. Comparing the Danish results with the Vancouver results, it seems doubtful that the Rudfeld index can be used to generalize beyond the Aalborg clinic population, unless the exact treatment equivalent is adhered to in other clinics. We therefore concluded that not treatment per se but the method of treatment is the important variable that might help to discriminate in terms of who will gain most from certain kinds of treatment given at differing treatment centers.

This fact led to the working out of some theoretical implications for treatment, being mainly based on Parsons' theory about deviance and social control and definitions of sickness and health in the light of North American values and social structure. A paradigm was constructed showing definitions of four sub-groups of alcoholics and the paths and means that lead from definition of status to treatment agency, in order that the treatment might achieve its ends. It was concluded that differing types and methods of treatment are necessary for differing self-definitions of alcoholics, and that motivation was an important variable in re-defining treatment-hopeless situations into treatment-hopeful ones.
Summary

The central interest of this study was the evaluation of the efficacy of out-patient treatment for inebriates in relation to sociological factors. A social problem framework was adopted for the investigation. It was reasoned that if social factors are thought important in disease causation - and alcoholism is looked upon as an illness - these same factors should also be important in disease remission. For the purpose of evaluating the latter, a prognostic index based on socio-economic data collected from inebriates during a follow-up study for the Alcoholism Foundation of British Columbia was constructed. This prognostic index was a replication of a Danish scale devised by Kirsten Rudfeld.

Age, marital status, employment status, nature of housing, nature of drinking, and one motivational factor - initiative for attending out-patient treatment - were used as predictive indices, and treatment success as the criterion. An index devised in Denmark was used for replication since no North American index existed which was constructed incorporating solely the above predictive factors. This posed problems, and led to the questioning if data from one culture could be transposed to another one without
modification and still show the same results. We know that cultural variants influence rates of alcoholism, but we do not know yet if and how they influence treatment results.

The Danish index was calculated from information received from 334 inebriates (mostly male) treated at the Aalborg Antabuse Center between October 1951 and December 1954. It was validated on data collected from 191 patients treated at the clinic of the Danish Temperance Societies in Copenhagen. Length of follow-up time ranged from 17 to 57 months, including treatment period.

The replication data were collected during a follow-up study conducted for the Alcoholism Foundation of British Columbia during 1962/1963. The writer was part of the research team. One hundred and fifty-five male inebriates were interviewed, of whom 91 were in the experimental and 64 in the control group. The experimental group was defined as consisting of patients who had at least five treatments at the Foundation; the control group was defined as consisting of patients who had no more than four treatments. Treatment included intake interview and intake medical examination. The average number of treatments in the control group was 2, and in the experimental group 9-10. Length of follow-up time ranged from 11 to 46 months, including treatment period.

Treatment at Aalborg consisted of daily supervised pharmaco-therapy (Antabuse), and individual counselling in
addition to the general medical services available to all patients. Treatment for the Vancouver sample was similar, except that pharmaco-therapy was not compulsory and supervised. Consequently only roughly one quarter of the experimental group patients took disulfiram for varying lengths of time. The Danish Temperance Societies' treatment was confined to personal counselling by a psychiatrist or social worker.

Based on various findings by other investigators, the hypothesis was advanced that the more closely a patient's socio-economic characteristics and motivation to undertake treatment conformed to societal expectations, the higher were his chances to benefit from the type of treatment offered at out-patient clinics. Conversely, the less closely these characteristics corresponded to societal expectations, the lower were his chances to benefit from treatment. Socially favourable characteristics were defined as:

1. 35 years of age and over
2. Married and living with wife
3. Employed
4. Living in suitable accommodation
5. Drinking only acceptable alcoholic spirits
6. Seeking treatment on private initiative

Socially unfavourable characteristics were defined as:

1. Under 35 years of age
2. Single or no longer married and living with wife
3. Unemployed
4. Living in sub-standard housing
5. Drinking both acceptable and unacceptable spirits
6. Seeking treatment on public initiative
The information for constructing the index was collected with the help of a precoded interview schedule by interviewing 155 patients out of a total sample of 214. Of these 214, 107 who have had no treatment had been assigned to the control group and matched with the experimental group on socio-economic factors. The majority of the non-interviewed patients could not be located; some had deceased; some refused to be interviewed.

The prognostic index was calculated for each patient on the basis of the information received. Each of the favourable factors received one point; each of the unfavourable ones zero points. A score of six points made for the most favourable predictor for success in treatment outcome.

Treatment results were measured in terms of overall behavioural and attitudinal change between T1 (intake interview) and T2 (follow-up interview). Since the original follow-up study included also negative measures for treatment results, to equal the Danish and Vancouver treatment criteria, the following definitions of treatment results were adopted:

**Overall Behavioural Change**

A - **Much improved**: Drinking much improved or no problem, as well as improvement in major areas of life where changes were possible.
B - Some improvement: Improvement in drinking only, or some improvement in drinking habits and in other areas of life.

C - No improvement or deterioration: No changes, or drinking has deteriorated, as well as behaviour in other areas of life.

The criteria were based on the patient's responses and interviewer's assessment of all patient's responses in each area in which change was measured. The areas included: drinking, health, work, family, social activities, and insight into problems associated with drinking.

Differences in the degree of rehabilitation between the two Danish groups ranged from 51 per cent much improvement, 17 per cent some improvement, and 32 per cent no improvement for the Danish Antabuse treatment, and 33 per cent, 29 per cent, and 38 per cent, respectively for the Danish Temperance Societies' treatment.

Differences in the degree of rehabilitation between the Vancouver experimental and control groups ranged from 20 per cent much improvement, 40 per cent some improvement, and 40 per cent no improvement for the experimental group treatment, and 15 per cent, 27 per cent, and 58 per cent, respectively for the control group.

Thus there was a steady decrease in overall improvement from Danish Antabuse with the highest figure of 68 per cent, Danish Temperance with 62 per cent, Vancouver
experimental group with 60 per cent to the Vancouver control group with the lowest improvement figure of 42 per cent.

Excepting the control group, the improvement figures among the three treated groups were very similar, yet the prediction figures for success based on socio-economic data were most dissimilar. For instance, with Danish Antabuse data chances for success in treatment outcome were about 88 per cent for 6 points and about 27 per cent for 2;1;0 points; with Vancouver data the chances for success in treatment outcome were about 67 per cent for 6 points and about 33 per cent for 2;1;0 points. While the Danish Antabuse showed a neat downward progression from high points and success to low points and no success predictions, the Vancouver data were "mixed." For instance, with 6 points credit the chances for much improvement, some improvement and no improvement were equally distributed; while with 5 points credit one's chances for much improvement were smaller than one's chances for failure! (19 vs. 33 per cent.) The Vancouver ratings did not discriminate much in terms of predicting treatment results and therefore do not lend themselves to prediction with any degree of accuracy.

The hypothesis that those patients who conformed more closely to societal expectations than those who did not tended to gain more from the type of treatment offered at alcoholism out-patient clinics had to be rejected. Furthermore, a statistical test indicated that the Vancouver and
the Danish populations of alcoholics were not comparable. This meant that data from one culture are not suitable for straight replication on another one, because too many unknown cultural variants can enter. Employing a regression equation it was found that a combination of age, type of spirits consumed and housing made for the "best" combination of predictors using the Canadian data, although the "best" predictor was so poor that it accounted for only 8 percent of the factors contributing to rehabilitation.

Trying to account for the differences between the Danish Antabuse and Vancouver data, it was established that, firstly, the two populations were different and, secondly, that not treatment per se, but the method of treatment influenced the rate of recovery. This method of treatment as practiced at the Danish Antabuse clinic was subsumed under a rubric of unspecified social control factors.

Since the Danish Temperance Societies' predictions were not as good as the Danish Antabuse' ones, the Danish investigator also attributed some of the differences found between the two clinic results to the method of treatment employed. In contrast to the supervised Danish Antabuse therapy, the treatment practices at the Alcoholism Foundation and the Danish Temperance Societies are extremely laissez-faire. The fact that Aalborg is a small provincial town where treatment evaders could be traced, and that both Vancouver and Copenhagen are large maritime cities where
little control over patients can be exercised, surely contributed to the differences found.

The Danish and the Vancouver data showed certain inconsistencies; that is, patients improved who according to predictions should not have, and vice versa. Anomalies in the Danish data were explained by Rudfeld by showing that those who had improved despite low points showed a significant change in a favourable direction in employment and marital status right after commencement of treatment. This explanation could not be accepted for the Vancouver anomalies of low points and high results, since employment and marital status were not found important in predicting treatment outcome, because the two indices were included in the index of housing. No explanation could be found for the Vancouver irregularities. However, it was hypothesized that the Alcoholism Foundation must have acted - in at least some instances - as a "socializing" agent, preventing those alcoholics with no social ties and no work from associating with their usual drinking companions during the day by involving them in counselling and some group activities at the Foundation. This gave these patients an opportunity to redefine their situations and accept the controls which were imposed upon them during the therapeutic process.

Rudfeld further found that those patients who had not improved despite high points for social factors showed marked personality deviations which interfered with
successful treatment outcome. Again this explanation could not be accepted for the Vancouver data due to the equivocal nature of "personality disturbances" in alcoholics. In the Vancouver clinic there was no way of assessing these disturbances in accordance with approved psychiatric methods since only 19 out of 91 clinic patients consulted the psychiatrist. However, a chi square test revealed that there were no statistically significant differences in rehabilitation between those with and without psychiatric assessment. Patients at the Alcoholism Foundation were generally only referred to the psychiatrist when a personality disturbance was noted. Without denying that personality variations are associated with rehabilitation, again it was not possible to find an acceptable explanation for the inconsistencies of high points and low treatment success for the Vancouver data.

However, concentration on unspecified social control factors showed some interesting variations in the results among the patients in the experimental group, the patients in the control group who had no further treatment, and the patients in the control group who affiliated with Alcoholics Anonymous rather than involving themselves in treatment at the Alcoholism Foundation:

For the experimental group members, predictive factors were not significantly associated with rehabilitation and treatment received at the Foundation was the important
variable conducive to change. For those with high points, the Foundation, like Alcoholics Anonymous, seemed to have acted as a "reinforcer" of internal controls; for those with low points as a "socializing" agent instilling both internal and external controls.

Control group members without further treatment and with few favourable points showed few changes in behaviour, whereas one half of those with favourable points improved without treatment from an agency. Change in behaviour was credited to wife and family and self, i.e., external socially approved cohesiveness and internal controls. Those with few or no ties to bind them to socially approved persons did not improve.

Control group members with A.A. affiliation and most favourable points gained more from this association than those with few points. It seemed that already existing social bonds were strengthened by A.A. philosophy and involvement, but when there were no or few existing bonds, the social control inherent in A.A. philosophy did not seem to be effective.

Although the above findings should be treated with caution due to small samples and certain limitations in the data, nevertheless they suggested certain treatment implications, both theoretical and practical.

The theoretical implications for treatment motivation and therapy are mainly based on Talcott Parsons' theory on
deviance and social control and definitions of sickness and health in the light of North American values and social structure. The investigation showed that there were distinct groups of alcoholics who could not benefit from outpatient treatment. One main group was found to be the alcoholic supported by fellow drinkers and composing a distinct sub-group whose norms and social controls were in opposition to societal norms and social controls.

Since alcoholism generally is looked upon as an illness, it would imply that society conditionally legitimizes the sick status of the problem drinker. However, alcoholism is only legitimized so long as it is recognized that it is an undesirable state, which poses an obligation to accept help from others, to cooperate with the source of the help, and to recover as fast as possible. Thus alcoholics who do not want to involve themselves in treatment change their status from "sick" to "deviant." Clearly, out-patient clinics who use clinical principles in combatting alcoholism can not effectively deal with "deviant" alcoholics, unless these can be induced to revert their status from "deviant" to "sick." Mechanisms of social control to bring about this change could be instigated at the point when the deviant alcoholic is "down and out;" generally when he needs to receive emergency treatment in a general hospital. Practical work along these lines presently being undertaken was described.
Based on Parsons' definitions a paradigm was constructed which tried to classify the alcoholics into four groups:

1. The "sick" alcoholic who defines his status in accordance with societal norms and for whom treatment involvement in out-patient clinics is possible and desirable.

2. The "too-sick" alcoholic who defines his status according to personal norms, and puts the onus on the healer and/or society for being unable to help him. Since he feels no obligation to society but only to himself (leading to further indulgences), he feels no obligation to change his drinking habits. His motivation needs to be established, possibly through education, thus allowing him to re-define his situation before he can gain from treatment. In-patient treatment allowing little indulgence, perhaps reflex conditioning, may be suitable.

3. The "deviant-nonsupported" alcoholic feels no obligation to anyone. He is generally a floater with neither societal nor sub-group support. By offering acceptable support, possibly during emergency treatment in general hospitals, his latent desire to change his situation could become manifest. Treatment involvement in out-patient clinics might be possible for some, for others group therapy might be more suitable.

4. The "deviant-supported" alcoholic poses the most difficult rehabilitation problem. His allegiance to sub-
culture standards prevents him from re-defining his status. Forcible removal from the deviant group with a change of support coming from differently oriented persons might allow him to re-define his situation. Compulsory supervision (but not in a jail or jail-like setting!) is mandatory until a re-definition of situation has occurred. A heavy emphasis on the sick status and overindulgence - to a point - seem warranted. In-patient treatment might be conducive to rehabilitation.

The inferences made from the findings were as follows:

1. Informal social control factors played a decisive role in both treatment involvement and treatment success. Where these factors are not present in the form of family, work and acceptable housing, in-patient treatment might be more successful than out-patient treatment.

2. Out-patient treatment, although most effective when patients conformed to societal expectations, also had a beneficial effect on unattached alcoholics once their desire for a change had been established. By contacting this patient, perhaps during emergency treatment, rather than waiting for him to come for treatment on his own, more unattached alcoholics might be treated ambulatory.

3. Supervised daily pharmaco-therapy can work in out-patient clinics when the conditions are such that time and place allow for certain control factors to operate, e.g., tracing patients trying to evade treatment.
4. Under certain circumstances, clients with favourable socio-economic characteristics could be directed to Alcoholics Anonymous for treatment rather than treating them at an out-patient clinic.

5. Patients living in acceptable housing seem, on the whole, more amenable to out-patient treatment than those who live in derelict or skid-road accommodation.

6. The results do not allow us to advance concrete suggestions as to who would benefit most from out-patient therapy.

Conclusions

1. The hypothesis that favourable and unfavourable socio-economic characteristics lend themselves to prediction of treatment outcome in out-patient clinics, such as the Alcoholism Foundation of British Columbia, was not confirmed.

2. As a "best" predictor of treatment success, a combination of housing, type of spirits consumed and age emerged, accounting for roughly 8 per cent of the variance involved in successful treatment outcome. Some of the unknown variables could possibly be accounted for by personality deviations.

3. Without investigating cultural variants, it seems unwise to transpose socio-economic data from one culture to another and expect to achieve the same results.
4. Leaving aside personality variables, established informal social control factors rather than straight socio-economic characteristics seem important to rehabilitation of problem drinkers.

5. One of the social control factors found conducive to rehabilitation was the method of treatment rather than the kind of treatment received at an out-patient clinic.

6. Differing types and differing methods of treatment are necessary for differing self-definitions of alcoholics. It was concluded that a desire to "do" something about one's drinking problem was an important variable in re-defining treatment-hopeless situations into treatment-hopeful ones.
Suggestions for Further Research

Some suggestions for further research have been advanced in the body of the thesis. The following suggestions arise from the findings of this study:

1. A theoretical evaluation of social control factors conducive to a change in human behaviour and a design to test these on patients with alcohol problems. Group counselling, as one method of treatment imposing various social control factors, could perhaps help to establish guides in this research.

2. An assessment of psychological factors that distinguish one alcoholic with a "normal" personality from another with a "deviant" one. This would imply that standard testing procedures, perhaps as already used in other clinics, could be employed and evaluated by a psychiatrist. Similarly, a psychiatric evaluation of each patient seen in person might achieve the same aims. If groups of patients with differing personality assessments could be isolated, then the same type and method of treatment could be given to the groups and results evaluated.

3. Exploration of rehabilitation criteria to arrive at a usable, uniform scale.

4. An intensive exploration of motivational factors with regard to an alcoholic's involvement in treatment, possibly along the lines suggested by Brunner-Orne and Chafetz.
5. An examination of self-definitions of alcoholics presenting themselves at various "treatment" centers, including drunk courts.

6. Concentrated research regarding the problem of prognosis, including extensive validation on representative samples.

7. An examination of cultural factors contributing to alcoholism in various cultures to ascertain if these same factors also contribute to rehabilitation.


Canadian Council on Alcoholism, Brief Submitted to the Royal Commission on Health Services, Vol. 49, (May 1962), Toronto.


Department of Public Health, State of California, Alcoholism and California, Selected Aspects of the Prospective Follow-Up Study, Publication No. 2.


APPENDIX A

The Interview Schedule
Key to Questions

I Control Factors
1. Socio-economic: face sheet, 37, 40, 44
2. Motivation: 4, 5, 6, 7, 8, 10
4. Treatment other than at the Foundation: 19, 20, 34

II Extent of Rehabilitation
1. Drinking behaviour: 18, 25, 26, 27, 30, 31, 35, 36, 86
2. Health: 13, 14, 15, 16, 17, 32, 33, 84
3. Work: 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 85
4. Family: 48, 49, 52, 53, 63, 64, 65, 66, 67, 68, 69, 70, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 89, 90
5. Social activities: 50, 51, 54, 55, 56, 57, 58, 59, 61, 62, 87, 88
6. Insight: 71, 72, 91
7. Summary: 92

III Treatment at the Foundation 9

IV Descriptive Information for the Foundation 1, 2, 11, 12, 28, 29, 93
PART I

INTERVIEW SCHEDULE FACE SHEET

001 Code: Group 0. No answer 1. Experimental 2. Control

002-004 Code: Identification Number __ __ ( )

005 Code: Card Number 1

006 Code: Time Period

0. No answer
1. 1961
2. 1960
3. 1959

007 Code: Age

0. No answer
1. Under 20
2. 21 - 30
3. 31 - 40
4. 41 - 50
5. 51 - 60
6. 60 & over

008 Code: Marital Status

0. No answer
1. Single
2. Married
3. Common Law
4. Separated
5. Divorced
6. Widowed
7. Married more than once

009 Code: Religion

0. No answer
1. Protestant
2. Catholic
3. Other or no religion
010 **Code**: Occupational Category

0. No answer  
1. Professional  
2. White Collar  
3. Skilled  
4. Unskilled  
5. Unemployable

011 **Code**: Occupational Status

0. No answer  
1. Employed  
2. Unemployed  
3. Unemployable, pensioned, etc.

012 **Code**: Education

0. No answer  
1. Less than 8 years  
2. 8 - 11  
3. 12 - 13  
4. University

013 **Code**: Family History of Alcoholism

0. No answer  
1. Yes  
2. No

014 **Code**: Court Record

0. No answer  
1. Yes  
2. No

015 **Code**: Source of Referral

0. No answer  
1. Physician  
2. Wife, relatives or friends  
3. A. A.  
4. Ex-patient  
5. Self  
6. Oakalla or P.M.H.  
7. Social Assistance  
8. Employer  
9. Other
<table>
<thead>
<tr>
<th>Treatment at Foundation (for check)</th>
<th>No</th>
<th>From-To</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Medical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Counselling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Group Therapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Psychiatric Eval.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Antabuse or Temp.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART II

I. CONTACT WITH FOUNDATION AND OTHER RESOURCES

(1) First I would like to ask you a few questions about your contact with the Foundation. Could you look back to the very first time you heard about the Foundation, and tell me how you heard about it; in other words, how did you find out that there was such a place as the Foundation?

016 Code: How patient heard about Foundation? (1)

0. No answer
1. Physician
2. Wife or parents
3. Other relatives or friends
4. A. A.
5. Ex-patient
6. Advertisement
7. Other

(2) You heard about the Foundation for the first time from .........., could you now tell me a little more how you actually came to the Foundation; that is, did someone introduce you to them, did someone recommend you go there, or what happened?

017 Code: How patient came to Foundation? (2)

0. No answer
1. Physician
2. Wife, relatives or friends
3. A. A.
4. Ex-patient
5. Self-referral
6. Oakalla & F.M.H.
7. Social Assistance
8. Employer
9. Other

(3) When was this? ____________________________
(4) Could you tell me some of your reasons for coming to the Foundation?

Areas of personal concern:

<table>
<thead>
<tr>
<th>Areas</th>
<th>Seriousness of Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mild Threat</td>
</tr>
<tr>
<td>a. Work</td>
<td></td>
</tr>
<tr>
<td>b. Family</td>
<td></td>
</tr>
<tr>
<td>c. Phys. Health</td>
<td></td>
</tr>
<tr>
<td>d. Emot. Health</td>
<td></td>
</tr>
<tr>
<td>e. Other</td>
<td></td>
</tr>
</tbody>
</table>

5) In addition to these reasons, what pressures were put upon you to come to the Foundation?

a. None  
b. Specify

<table>
<thead>
<tr>
<th>Source</th>
<th>Degree of Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slight</td>
</tr>
<tr>
<td>a. Wife</td>
<td></td>
</tr>
<tr>
<td>b. Employer</td>
<td></td>
</tr>
<tr>
<td>c. Social Asst.</td>
<td></td>
</tr>
<tr>
<td>d. Other Welfare Agencies</td>
<td></td>
</tr>
<tr>
<td>e. Probation Officer</td>
<td></td>
</tr>
<tr>
<td>f. Other</td>
<td></td>
</tr>
</tbody>
</table>
018 Code: Interviewer's assessment of degree of self-instigation (4 & 5)

0. No answer
1. None, apart from external pressures
2. Slight (some awareness, but pressures mainly external)
3. Moderate (relatively equal self- and other-pressures
4. Great (only slight external pressures)
5. Complete (no external pressures)

(6) You have given me some of your reasons for going to the Foundation; could you now tell me what you expected to happen at the Foundation?

(probe)

019 Code: Interviewer's assessment of attitudes (6)

0. No answer
1. Manipulative (was looking for handout, etc.)
2. Unrealistic (was looking for "magical" solution)
3. Neutral (did not know — no explicit expectations)
4. Realistic (willing to "do his part")

(7) How much did you really think the Foundation would be able to help you with your alcohol problem?

020 Code: Extent of help expected (7)

0. No answer
1. To a great extent
2. To some extent
3. To no extent
At the time you first contacted the Foundation, suppose the doctor or counsellor had suggested you be admitted to a Provincial Hospital for a specific drying out period, of, let's say, 30 days; would you have been willing to accept this as part of your treatment?

a. Yes  
b. No

If no, for what reasons:

a. Involved in other treatment (h)  
b. Could not leave work (h)  
c. Could not leave family (h or l - probe)  
d. Important persons did not want me to go to such a place (l)  
e. Would not have been admitted (h or l - probe)  
f. Have tried before and treatment failed (neutral)  
g. Thought they could not help me (l)  
h. Would not like to go to such a place because of "stigma" (l)  
i. Had heard too many adverse reports about such a place (l)  
j. Did not want to be associated with persons at such a place (l)  
k. Did not think my problem was big enough to warrant treatment (l)

021 Code: Interviewer's assessment of motivation (8)

0. No answer  
1. High (yes, or no because of physical impossibility)  
2. Low (no for other reasons)
5. Could you now tell me what kind of treatments you received at the Foundation.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Year</th>
<th>Period</th>
<th>Number of Treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Medical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Counselling</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c. Psychiatric</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>d. Residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Group Sessions</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>f. Antabuse or Temposil</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

022 Code: Length of Treatment (9)
0. No answer
1. Less than 2 weeks
2. 2-4 weeks
3. 1-3 months
4. 4-6 months
5. 6-12 months
6. over 12 months

Code: Type and Number of Treatments (9)

<table>
<thead>
<tr>
<th>Code</th>
<th>Type</th>
<th>0.</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
</tr>
</thead>
<tbody>
<tr>
<td>023</td>
<td>Medical</td>
<td>N.A.</td>
<td>None</td>
<td>1-4</td>
<td>5-9</td>
<td>10-14</td>
<td>15-19</td>
<td>20 &amp; over</td>
</tr>
<tr>
<td>024</td>
<td>Counsel.</td>
<td>N.A.</td>
<td>None</td>
<td>1-4</td>
<td>5-9</td>
<td>10-14</td>
<td>15-19</td>
<td>20 &amp; over</td>
</tr>
<tr>
<td>025</td>
<td>Psychi.</td>
<td>N.A.</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>026</td>
<td>Resid.</td>
<td>N.A.</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>027</td>
<td>Gp. Sess.</td>
<td>N.A.</td>
<td>None</td>
<td>1-4</td>
<td>5-9</td>
<td>10-14</td>
<td>15-19</td>
<td>20 &amp; over</td>
</tr>
<tr>
<td>028</td>
<td>Antabuse</td>
<td>N.A.</td>
<td>None</td>
<td></td>
<td>under 2-4</td>
<td>1-3</td>
<td>4-6</td>
<td>6 mos. &amp; over</td>
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<tr>
<td></td>
<td>or Temp.</td>
<td></td>
<td></td>
<td></td>
<td>2 wks</td>
<td>wks</td>
<td>mos</td>
<td>mos</td>
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</table>
(Most people after they have been in treatment for some time) (Some people after they have come to the Foundation once or twice) stop coming for a variety of reasons. For instance, some move away, some return to their old place of work, while some others feel they (have benefited enough) (could not benefit) from the programme offered. I wonder, could you tell me what prevented you from (continuing treatment) (undergoing treatment)?

a. Still in treatment (1)
b. Counsellor felt intensive treatment no longer needed (L)
c. Leaving town - work reasons (L)
d. Leaving town - family reasons (L or F - probe)
e. Could not get time off work (L or F - probe)
f. Important persons did not like my coming (L or F - probe)
g. Was inconvenient to travel to clinic (F)
h. Thought I had benefited enough (Could not benefit) (F)
i. Did not like services offered (If pt. went to other place L, if not F)
j. Did not like clinic personnel (F)
k. Did not think my problem was big enough to need treatment (F)
l. Did not like to come without paying bill (F)
m. Other

029 Code: Reasons for Stopping Treatment (10)

0. No answer
1. Still in treatment
2. Legitimate reasons for stopping treatment
3. Fabricated excuses for stopping treatment
Most people who come to the Foundation at one time or another have certain feelings about the helpfulness of the kind of treatment they received. Could you tell me a little about how you felt, first about the treatment and then about the people you met?

First, the treatment itself, apart from the people who gave it:

**Code: Patient's Feelings re Treatment (11)**

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<tbody>
<tr>
<td>Medical</td>
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<tr>
<td>031 Counsel.</td>
<td></td>
<td></td>
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<tr>
<td>032 Psychiat. Interview</td>
<td></td>
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<tr>
<td>033 Residence Group</td>
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<tr>
<td>034 Sessions</td>
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</tr>
<tr>
<td>035 Antabuse or Temp.</td>
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</tbody>
</table>

Could you give me some of your reasons for saying this?

When you came to the Foundation you probably met a variety of people. What were your feelings about them?

**Code: Feelings re People (12)**

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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>037 Counsellor</td>
<td></td>
<td></td>
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<tr>
<td>038 Psychiatrist</td>
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</tr>
<tr>
<td>039 Housekeeper</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>040 Clerical S:</td>
<td></td>
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</tbody>
</table>

Could you explain why you say this?
Could you look back to the time before you came to the Foundation, and tell me something about your general physical health?

Did you suffer from:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Details</th>
<th>Frequency</th>
<th>Duration</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

- a. Headaches
- b. Gen. Fatigue
- c. Sleeplessness
- d. Stomach Upsets
- e. Sudden Weight Changes
- f. Liver Disease
- g. Acute Illnesses
- h. Chronic Illn.
- i. Symptoms assoc. w. heavy drinkg. Blackouts Shakes Halluzinations D. T's. Convulsions Head Injuries

041 Code: Patient's Assessment (13) (see page 13)
042 Code: Doctor's Assessment of physical health T1 (13)

- 0. No answer
- 1. Very good
- 2. Good
- 3. Poor
- 4. Very poor
(14) Now I wonder if you could also tell me a few things about your emotional health at the time you came to the Foundation. Were you bothered by:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Details</th>
<th>Frequency</th>
<th>Duration</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Nervousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Tensions</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>c. Worries, Anxieties &amp; Fears</td>
<td></td>
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<tr>
<td>d. Unmanageable Moods (Depressions, etc.)</td>
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<tr>
<td>e. Restlessness</td>
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<tr>
<td>f. Loss of orientation (Explain)</td>
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<tr>
<td>g. Other</td>
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</tbody>
</table>

043 Code: Patient's Assessment (14) (See page 13)

044 Code: Doctor's Assessment of emotional health T1 (14)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor
At the present time do you suffer from:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Yes</th>
<th>No</th>
<th>Details</th>
<th>Frequency</th>
<th>Duration</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Headaches</td>
<td></td>
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<tr>
<td>b. Gen. Fatigue</td>
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<td>c. Sleeplessness</td>
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<td>d. Stomach Upsets</td>
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<td>e. Sudden Weight Changes</td>
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<td>f. Liver Disease</td>
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<td>g. Acute Illnesses</td>
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<tr>
<td>h. Chronic Ill.</td>
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<tr>
<td>i. Symptoms assoc. w. heavy drinkg. Blkouts</td>
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<tr>
<td>Shakes</td>
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<tr>
<td>Hallucinations</td>
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<td>D.T's.</td>
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<tr>
<td>Convulsions</td>
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<tr>
<td>Head Injuries</td>
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</tbody>
</table>

045 Code: Patient's Assessment (15) (See page 13)

046 Code: Doctor's Assessment of physical health T2 (15)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor
At the present time, are you bothered by:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Details</th>
<th>Frequency</th>
<th>Duration</th>
<th>Severity</th>
</tr>
</thead>
</table>

- a. Nervousness
- b. Tensions
- c. Worries, Anxieties & Fears
- d. Unmanageable Moods (Depressions, etc.)
- e. Restlessness
- f. Loss of orientation (Explain)
- g. Other

047 Code: Patient's Assessment (16) (See page 13)

048 Code: Doctor's Assessment of emotional health T2 (16)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

049 Code: Patient's Assessment of Change in Health (13 & 15) (14 & 16) (See page 13)
**Doctor's Assessment**

**051 Code:** Assessment of change in Physical Health (13 & 15)

0. No answer  
1. Much better  
2. Somewhat better  
3. Same  
4. Somewhat worse  
5. Much worse

**052 Code:** Assessment of change in Emotional Health (14 & 16)

0. No answer  
1. Much better  
2. Somewhat better  
3. Same  
4. Somewhat worse  
5. Much worse

**053 Code:** Assessment of relationship between present drinking behaviour and change in physical and emotional health. (13, 14, 15, 16)

0. No answer  
1. To a great extent  
2. To some extent  
3. To no extent
**Patient's Assessment**

**041 Code:** Assessment of Physical Health at T1 (13)

0. No answer  
1. Very good  
2. Good  
3. Poor  
4. Very poor

**043 Code:** Assessment of Emotional Health at T1 (14)

0. No answer  
1. Very good  
2. Good  
3. Poor  
4. Very poor

**045 Code:** Assessment of Physical Health at T2 (15)

0. No answer  
1. Very good  
2. Good  
3. Poor  
4. Very poor

**047 Code:** Assessment of Emotional Health at T2 (16)

0. No answer  
1. Very good  
2. Good  
3. Poor  
4. Very poor

**049 Code:** Assessment of Change in Physical Health (13 & 15)

0. No answer  
1. Much better  
2. Somewhat better  
3. Same  
4. Somewhat worse  
5. Much worse

**050 Code:** Assessment of Change in Emotional Health (14 & 16)

0. No answer  
1. Much better  
2. Somewhat better  
3. Same  
4. Somewhat worse  
5. Much worse
054 Code: Change in Physical Health (T1-T2), Patient's Assessment (13 & 15)

0. 1. 2. 3. 4. 5. 6. 7.

No ans. +3 +2 +1 0 -1 -2 -3

055 Code: Change in Emotional Health (T1-T2), Patient's Assessment (14 & 16)

0. 1. 2. 3. 4. 5. 6. 7.

No ans. +3 +2 +1 0 -1 -2 -3

056 Code: Change in Physical Health (T1-T2), Doctor's Assessment (13 & 15)

0. 1. 2. 3. 4. 5. 6. 7.

No ans. +3 +2 +1 0 -1 -2 -3

057 Code: Change in Emotional Health (T1-T2), Doctor's Assessment (14 & 16)

0. 1. 2. 3. 4. 5. 6. 7.

No ans. +3 +2 +1 0 -1 -2 -3

(17) To what extent do you think that your feeling ... now has something to do with your present drinking behaviour?

058 Code: Patient's Assessment of relationship between drinking and health (17)

0. No answer
1. To a great extent
2. To some extent
3. To no extent

(18) To what extent is drinking presently a problem to you as compared to the time you first came to the Foundation?

059 Code: Patient's Assessment of Change in Drinking Problem (18)

0. No answer
1. Much more severe problem
2. More severe problem
3. Same problem
4. Less severe problem
5. Much less severe problem
6. No problem
**Other than the Foundation, have you ever gone to a doctor or any other agency or place regarding problems with alcohol:**

### Treatment Before T₁

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don't remember/No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Private Physician</td>
<td>e. Clergyman</td>
<td>f. Therapist (Ind. or Grp)</td>
</tr>
<tr>
<td>g. A. A.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Code:** Treatment before T₁ (19)

<table>
<thead>
<tr>
<th>Year</th>
<th>Period</th>
<th>No. of Treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.</td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In-patient (a-c)</th>
<th>Out-patient (d-f)</th>
<th>A. A. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No answer</td>
<td>None</td>
<td>Very little</td>
</tr>
<tr>
<td>Moderate</td>
<td>Extensive</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In-patient (a-c)</th>
<th>Out-patient (d-f)</th>
<th>A. A. (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No answer</td>
<td>None</td>
<td>Very little</td>
</tr>
<tr>
<td>Moderate</td>
<td>Extensive</td>
<td></td>
</tr>
</tbody>
</table>

### Treatment between T₁ and T₂

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Don't remember/No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Private Physician</td>
<td>e. Clergyman</td>
<td>f. Therapist (Ind. or Grp)</td>
</tr>
<tr>
<td>g. A. A.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Code:** Treatment between T₁ & T₂ (20)

<table>
<thead>
<tr>
<th>Year</th>
<th>Period</th>
<th>No. of Treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.</td>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In-patient (a-c)</th>
<th>Out-patient (d-f)</th>
<th>A. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No answer</td>
<td>None</td>
<td>Very little</td>
</tr>
<tr>
<td>Moderate</td>
<td>Extensive</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In-patient (a-c)</th>
<th>Out-patient (d-f)</th>
<th>A. A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No answer</td>
<td>None</td>
<td>Very little</td>
</tr>
<tr>
<td>Moderate</td>
<td>Extensive</td>
<td></td>
</tr>
</tbody>
</table>
II DRINKING HISTORY

A. Drinking

(21)  You came to the Foundation because .............. thought the Foundation might be helpful to you. Did you at that time consider your drinking a problem?

a. Yes  b. No

How serious did you think it was?

Perhaps you could tell me a little more about this?

066  Code:  Insight into extent of problem at $T_1$ (21)

  0. No answer
  1. Serious problem
  2. Moderate problem
  3. No problem

(22)  If problem:

Since when did you consider your drinking a problem?

067  Code:  Length of drinking problem (22)

  0. No answer
  1. Under 1 year
  2. 1 - 2 years
  3. 3 - 5 years
  4. 6 - 10 years
  5. Over 10 years
Now I would like to ask you two things:
1. What did you think were some of the reasons for your drinking at the time you first came to the Foundation? and
2. What do you now think some of your reasons were.

What did you think your reasons were at the time you came to the Foundation?

Elaborate:

What do you now think some of your reasons were?

068 Code: Interviewer's assessment of patient's insight, T₁ (23)
0. No answer
1. Great insight
2. Slight insight
3. No insight

069 Code: Interviewer's assessment of patient's insight, T₂ (24)
0. No answer
1. Great insight
2. Slight insight
3. No insight

070 Code: Change
0. 1. 2. 3. 4. 5.
No answer +2 +1 0 -1 -2
I'd now like to ask you a few things about your drinking pattern, both at the time you came to the Foundation and at the present. In order to help you describe it, I have a few specific questions.

First, around the time you came to the Foundation:

<table>
<thead>
<tr>
<th>A. With whom:</th>
<th>a. Solitary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. Group</td>
</tr>
<tr>
<td></td>
<td>c. Both</td>
</tr>
<tr>
<td>B. Where:</td>
<td>a. At home</td>
</tr>
<tr>
<td></td>
<td>b. Outside home</td>
</tr>
<tr>
<td></td>
<td>c. Both</td>
</tr>
<tr>
<td>C. When:</td>
<td>a. Daily</td>
</tr>
<tr>
<td></td>
<td>b. Weekends</td>
</tr>
<tr>
<td></td>
<td>c. Periodic</td>
</tr>
<tr>
<td>D. Mornings:</td>
<td>a. Never</td>
</tr>
<tr>
<td></td>
<td>b. Seldom</td>
</tr>
<tr>
<td></td>
<td>c. Frequently</td>
</tr>
<tr>
<td>E. What:</td>
<td>a. Hard liquor</td>
</tr>
<tr>
<td></td>
<td>b. Beer</td>
</tr>
<tr>
<td></td>
<td>c. Wine</td>
</tr>
<tr>
<td></td>
<td>d. Commercial products</td>
</tr>
<tr>
<td>F. Quantity:</td>
<td></td>
</tr>
<tr>
<td>G. To what extent:</td>
<td>a. Slightly intoxicated</td>
</tr>
<tr>
<td></td>
<td>b. Drunk</td>
</tr>
<tr>
<td></td>
<td>c. Unconscious</td>
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<tr>
<td></td>
<td>b. Shakes</td>
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<tr>
<td></td>
<td>c. Hallucinations</td>
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<td>d. D. T.'s</td>
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<td></td>
<td>e. Convulsions</td>
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</tbody>
</table>

Other Details:
### What is your drinking pattern now?

<table>
<thead>
<tr>
<th>A. With whom:</th>
<th>a. Solitary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. Group</td>
</tr>
<tr>
<td></td>
<td>c. Both</td>
</tr>
<tr>
<td>B. Where:</td>
<td>a. At home</td>
</tr>
<tr>
<td></td>
<td>b. Outside home</td>
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<tr>
<td></td>
<td>c. Both</td>
</tr>
<tr>
<td>C. When:</td>
<td>a. Daily</td>
</tr>
<tr>
<td></td>
<td>b. Weekends</td>
</tr>
<tr>
<td></td>
<td>c. Periodic</td>
</tr>
<tr>
<td>D. Mornings:</td>
<td>a. Never</td>
</tr>
<tr>
<td></td>
<td>b. Seldom</td>
</tr>
<tr>
<td></td>
<td>c. Frequently</td>
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<tr>
<td>E. What:</td>
<td>a. Hard liquor</td>
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<td></td>
<td>b. Beer</td>
</tr>
<tr>
<td></td>
<td>c. Wine</td>
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<tr>
<td></td>
<td>d. Commercial products</td>
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</tbody>
</table>

### Other Details:

**Code:** Interviewer's assessment of change in drinking problem (25 & 26)

- 0. No answer
- 1. Much more severe problem
- 2. More severe problem
- 3. Same problem
- 4. Less severe problem
- 5. Much less severe problem
- 6. No problem (completely sober)
How would you compare your drinking problem now with that you had at the time you came to the Foundation?

072 Code: Patient's assessment of own drinking problem (27)

0. No answer
1. Much more severe problem
2. More severe problem
3. Same problem
4. Less severe problem
5. Much less severe problem
6. No problem

If changes, what would you say has mainly brought about these changes?

073 Code: Patient's assessment of most important agent of change (28)

0. No answer
1. In-patient treatment other than Foundation
2. Out-patient treatment other than Foundation
3. A. A.
4. Foundation
5. Self
6. Wife, family
7. Other
8. Not applicable

If changes, what would you say was next most important?

074 Code: Patient's assessment of second most important agent of change (29)

0. No answer
1. In-patient treatment other than Foundation
2. Out-patient treatment other than Foundation
3. A. A.
4. Foundation
5. Self
6. Wife, family
7. Other
8. Not applicable

If others how did these help?
If self, how have these changes come about?
B. Abstinence

(30) I wonder if you could go back in your mind about 8 years and tell me how many periods of complete abstinence you have had since then?

(31) (That is starting in January 1955)

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Length (wks)</th>
<th>Reasons (look for enforcement)</th>
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</table>

(N.B:) Complete abstinence means periods of at least one week without drinking. Mark division between $T_1$ & $T_2$.

075 Code: No. of weeks abstinent during a 6-month period before $T_1$ (30)

- 0. No answer
- 1. None
- 2. 1-4
- 3. 5-9
- 4. 10-14
- 5. 15-19
- 6. 20 & over

076 Code: No. of weeks abstinent during a 6-month period before $T_2$ (31)

- 0. No answer
- 1. None
- 2. 1-4
- 3. 5-9
- 4. 10-14
- 5. 15-19
- 6. 20 & over

154 Code: Change

- 0. No answer
- 1. +4
- 2. +3
- 3. +2
- 4. +1
- 5. 0
- 6. -1
- 7. -2
- 8. -3
- 9. -4
C. Drugs

(32) Have you ever taken any drugs, tranquilizers, etc., to help you stop drinking?

a. Yes  b. No

If Yes,

a. Of what kind and type was the medication?

b. How often did you take it?

c. Who prescribed it?

d. When was this?

(33) Do you now take drugs of any kind?

a. Yes  b. No

If yes,

a. Of what kind and type are they?

b. How often do you take them?

c. Who prescribes these drugs for you?

d. Why do you take these drugs?

e. Are they necessary for you to stay sober?

a. Yes  b. No

077 Code: Interviewer's assessment of patient's use of drugs at T2 (32 & 33)

0. No answer
1. Takes no drugs
2. Takes tranquilizers occasionally
3. Takes tranquilizers routinely, but is not dependent
4. Dependent on tranquilizers
5. Dependent on other drugs

(34) Have you ever taken Antabuse or Temposil including the A. or T. you took at the A. F. (if applicable)

078 Code: Patient's use of Antabuse or Temposil (34)

0. No answer
1. Yes
2. No
D. Court Record

Have you ever been arrested?

a. Yes  b. No

If yes, (If over 10 arrests, list only major offences and No. of liquor offences in 6-month periods preceding T₁ and T₂)

<table>
<thead>
<tr>
<th>Date</th>
<th>Charge</th>
<th>Drinking Involved</th>
<th>Penalties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

(N.B: Mark division between T₁ & T₂)

079 Code: No. of offences involving liquor in 6-month period preceding T₁ (35)

0. No answer
1. None
2. 1-2
3. 3-5
4. 6 and over

080 Code: No. of offences involving liquor in 6-month period preceding T₂ (36)

0. No answer
1. None
2. 1-2
3. 3-5
4. 6 and over

155 Code: Change

0. 1. 2. 3. 4. 5. 6. 7.

No answer +3 +2 +1 0 -1 -2 -3

081 Code: Identification and Card No.

085
III WORK HISTORY

What is your usual occupation

As what are you employed at the moment?

Since when?

Specific Occup.

Specific Occup.

a. Prof. ________________
   Prof. ________________

b. W.C. ________________
   W.C. ________________

c. Skilled ________________
   Skilled ________________

d. Unsk. ________________
   Unsk. ________________

e. Unemployable (why) ________________
   Unemployable (why) ________________

Unemployed

086 Code: Employment status T₂ (38 & 39)

0. No answer
1. Employed
2. Unemployed
3. Unemployable, pensioned, etc.

At the time you first came to the Foundation, as what were you employed then?

How long have you held this job?

a. Professional ________________
   __________________________

b. White Collar ________________
   __________________________

c. Skilled ________________
   __________________________

d. Unskilled ________________
   __________________________

e. Unemployable (why) ________________
   __________________________

f. Unemployed ________________
   __________________________

087 Code: Employment Status T₁ (40 & 41)

0. No answer
1. Employed
2. Unemployed
3. Unemployable, pensioned, etc.

159 Code: Change

0. 1. 2. 3.
NA +1 0 -1
I have already asked you about your occupation at the present and at the time you came to the Foundation. Could I now ask you for a brief rundown of your employment history.

Before Foundation Contact

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Type of Job</th>
<th>Reasons for Changing</th>
<th>Getting along with fellow workers &amp; boss</th>
<th>Satisfaction was job in accordance with abilities</th>
</tr>
</thead>
</table>

(N.B.) If eight or more jobs held, list only major ones and number held of others)
(43) After Foundation Contact

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Type of Job</th>
<th>Reason for Changing</th>
<th>Getting along with fellow workers &amp; boss</th>
<th>Satisfaction - was job in accordance with abilities</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

(44) How many years of schooling did you have: ________________________

(45) Have you had any special vocational training?

Elaborate:
How would you evaluate your own satisfaction regarding your work experience before you contacted the Foundation?

**Code:** Patient's evaluation of work experience before $T_1$ (46)

0. No answer
1. Very satisfactory
2. Satisfactory
3. Unsatisfactory
4. Very unsatisfactory

State Reasons

How would you rate your work satisfaction since you came to the Foundation?

**Code:** Patient's evaluation of work experience after $T_1$ (47)

0. No answer
1. Very satisfactory
2. Satisfactory
3. Unsatisfactory
4. Very unsatisfactory

State Reasons

Change

0. No answer +3 +2 +1 0 -1 -2 -3
091 Code: Interviewer's Assessment of Employment Stability before $T_1$ (37, 40, 41 & 42)

0. No answer
1. Very stable (1 maj. occupation with few changes and without periods of unemployment.)
2. Stable (1-3 maj. occupations, but several different jobs held within each one.)
3. Unstable (Several maj. occupations, many different jobs, many shorter periods of unemployment.)
4. Very unstable (No maj. occupation, many diff. jobs, many prolonged periods of unemployment.)

092 Code: Interviewer's Assessment of Employment Stability after $T_1$ (37, 38, 39 & 43)

0. No answer
1. Very stable
2. Stable
3. Unstable
4. Very unstable

093 Code: Change

0. 1. 2. 3. 4. 5. 6. 7.
No answer +3 +2 +1 0 -1 -2 -3

094 Code: Interviewer's assessment of appropriateness of jobs held in accordance with abilities, education and training, before $T_1$ (37, 40, 42, 44 & 45)

0. No answer
1. Appropriate
2. Not appropriate

095 Code: Interviewer's assessment of appropriateness of jobs after $T_1$ (37, 38, 43 & 45)

0. No answer
1. Appropriate
2. Not appropriate

096 Code: Change

0. 1. 2. 3.
No answer +1 0 -1
Code: Interviewer's Assessment of Relationships with fellow workers and boss before $T_1$ (43)

0. No answer
1. Good
2. Poor

Code: Interviewer's assessment of relationships with fellow workers and boss after $T_1$ (44)

0. No answer
1. Good
2. Poor

Code: Change

0. 1. 2. 3.

No answer +1 0 -1

Code: Interviewer's overall comparison of patient's working history from before $T_1$ to after $T_1$, taking into consideration: (a) Stability, (b) Appropriateness of job, (c) Relationships on job, (d) Patient's assessment of work satisfaction.

0. No answer
1. Greatly improved
2. Improved
3. No change
4. Deteriorated
5. Greatly deteriorated
IV FAMILY HISTORY

A. General

I would now like to ask you a few questions regarding your family and living arrangements. (For the following 4 questions do present first, then go back and ask about past)

48) What is your present marital status?

<table>
<thead>
<tr>
<th>Present (48)</th>
<th>Past (49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Single</td>
<td>a. Single</td>
</tr>
<tr>
<td>b. Married</td>
<td>b. Married</td>
</tr>
<tr>
<td>c. Common-law</td>
<td>c. Common-law</td>
</tr>
<tr>
<td>d. Separated</td>
<td>d. Separated</td>
</tr>
<tr>
<td>e. Divorced</td>
<td>e. Divorced</td>
</tr>
<tr>
<td>f. Widowed</td>
<td>f. Widowed</td>
</tr>
</tbody>
</table>

50) In what type of accommodation are you presently living?

<table>
<thead>
<tr>
<th>Present (50)</th>
<th>Past (51)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Own house</td>
<td>a. Own House</td>
</tr>
<tr>
<td>b. Parent's accommodation</td>
<td>b. Parent's accommodation</td>
</tr>
<tr>
<td>c. Rented house</td>
<td>c. Rented house</td>
</tr>
<tr>
<td>d. Apartment or suite</td>
<td>d. Apartment or suite</td>
</tr>
<tr>
<td>e. Rooming or Boarding house</td>
<td>e. Rooming or Boarding house</td>
</tr>
<tr>
<td>f. Hotel</td>
<td>f. Hotel</td>
</tr>
<tr>
<td>g. Other</td>
<td>g. Other</td>
</tr>
</tbody>
</table>

52) With whom are you living at this place?

<table>
<thead>
<tr>
<th>Present (52)</th>
<th>Past (53)</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Wife only</td>
<td>b. Wife only</td>
</tr>
<tr>
<td>c. Children only</td>
<td>c. Children only</td>
</tr>
<tr>
<td>d. Parents</td>
<td>d. Parents</td>
</tr>
<tr>
<td>e. Other relatives</td>
<td>e. Other relatives</td>
</tr>
<tr>
<td>f. Friends</td>
<td>f. Friends</td>
</tr>
<tr>
<td>g. Alone</td>
<td>g. Alone</td>
</tr>
<tr>
<td>h. Other</td>
<td>h. Other</td>
</tr>
</tbody>
</table>
Who is presently paying for the place in which you are living?

<table>
<thead>
<tr>
<th>Present (54)</th>
<th>Past (55)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Self</td>
<td>a. Self</td>
</tr>
<tr>
<td>b. Wife</td>
<td>b. Wife</td>
</tr>
<tr>
<td>c. Self &amp; Wife</td>
<td>c. Self &amp; Wife</td>
</tr>
<tr>
<td>d. Parents and/or other rel.</td>
<td>d. Parents and/or other rel.</td>
</tr>
<tr>
<td>e. Friends</td>
<td>e. Friends</td>
</tr>
<tr>
<td>f. S. A.</td>
<td>f. S. A.</td>
</tr>
<tr>
<td>g. Other</td>
<td>g. Other</td>
</tr>
</tbody>
</table>

Could you now look back to the time just immediately before you came to the Foundation and tell me:

What your marital status then was?

In what type of accommodation you were then living?

With whom you were then living?

Who was then paying for the accommodation?

Roughly into what category does your own personal income fall at the present time?

<table>
<thead>
<tr>
<th>Present (56)</th>
<th>Past (57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Under</td>
<td>a. Under $1,000</td>
</tr>
<tr>
<td>b. 1,000 - 1,499</td>
<td>b. 1,000 - 1,499</td>
</tr>
<tr>
<td>c. 1,500 - 1,999</td>
<td>c. 1,500 - 1,999</td>
</tr>
<tr>
<td>d. 2,000 - 2,499</td>
<td>d. 2,000 - 2,499</td>
</tr>
<tr>
<td>e. 2,500 - 2,999</td>
<td>e. 2,500 - 2,999</td>
</tr>
<tr>
<td>f. 3,000 - 3,999</td>
<td>f. 3,000 - 3,999</td>
</tr>
<tr>
<td>g. 4,000 - 4,999</td>
<td>g. 4,000 - 4,999</td>
</tr>
<tr>
<td>h. 5,000 &amp; over</td>
<td>h. 5,000 &amp; over</td>
</tr>
</tbody>
</table>
At the present time, does someone help you to meet your financial needs? That is, does your wife work, do you have outstanding loans, etc.

At the time you came to the Foundation, did someone help you to meet your financial needs? (Probe)

### Present (58)
- a. No one
- b. Wife (work)
- c. Wife (independent income)
- d. Parents
- e. Children
- f. Other relatives or friends
- g. Loans of any kind
- h. Unemployment Ins.
- i. Social Assistance
- j. Other

### Past (59)
- a. No one
- b. Wife (work)
- c. Wife (independent income)
- d. Parents
- e. Children
- f. Other relatives or friends
- g. Loans of any kind
- h. Unemployment Ins.
- i. Social Assistance
- j. Other

Reasons: (probe)

During the time you went to the Foundation, what was the reaction of your family members or closest friends to your going there; that is, how did they support you emotionally?

Elaborate:

**101 Code**: Patient's assessment of support received (60)

0. No answer
1. Strong support
2. Mild support
3. Neutral
4. Opposition
Interviewer's Assessment

102 Code: Marital Status (48 & 49) taking into consideration (75) as well.

0. No answer

1. Improved (was separated, now reconciled; was separated, now divorced because wife's behaviour was detrimental to rehabilitation; lived common-law, now married)

2. Same or "neutral" change (no value judgement involved - was widowed, now remarried was single, now married was divorced, now remarried)

3. Deteriorated (was married, now separated due to drinking, was married, now divorced due to man's drink, was married or divorced, now living c.l.)

103 Code: Accommodation (50 & 51)

0. No answer

1. Improved (value judgement - better quality, movement from non-ownership to ownership)

2. Same or "neutral" change (no value judgement)

3. Deteriorated (value judgement - poorer quality, movement from ownership to non-ownership)

104 Code: Living with whom (52 & 53)

0. No answer

1. Improved (value judgement - applies to married men mostly)

2. Same or "neutral" change (no value judgement)

3. Deteriorated (value judgement - applies to married men mostly)
105 **Code:** Who is paying for accommodation (54 & 55)

0. No answer

1. Improved (value judgement - was unnecessarily dependent, now independent)

2. Same or "neutral" change (no value judgement)

3. Deteriorated (value judgement - was independent, now unnecessarily dependent)

106 **Code:** Personal Income (56 & 57)

0. No answer

1. Improved (value judgement - marked upward change)

2. Same or "neutral" change (no value judgement)

3. Deteriorated (value judgement - marked downward change)

107 **Code:** Being able to meet expenses by oneself (58 & 59)

0. No answer

1. Improved (If help needed in past, now help not needed)

2. Same or "neutral" change (No change - change in help from others not needed)

3. Deteriorated (If no help needed in past, but help now needed)
I would now like to ask you a few general questions about the way you spend your time. I wonder, could you give me a brief rundown of the major things you do during a typical month including days, evenings and the weekend?

<table>
<thead>
<tr>
<th>Activities</th>
<th>Specify</th>
<th>When</th>
<th>How Often</th>
<th>With Whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. House &amp; Garden</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Hobbies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. T. V.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Reading</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>g. Entertainment at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Sports or Social Clubs</td>
<td></td>
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</tr>
<tr>
<td>j. Community Club Work; Relig. Activities</td>
<td></td>
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<tr>
<td>k. Entertainment outside home</td>
<td></td>
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<tr>
<td>l. Driving</td>
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</tr>
<tr>
<td>m. Visiting</td>
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</tr>
<tr>
<td>n. Drinking</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>o. Other</td>
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</tbody>
</table>

Additional Details:
Could you now look back to the time you first came to the Foundation and tell me how you spent your time then?

<table>
<thead>
<tr>
<th>Activities</th>
<th>Specify</th>
<th>When</th>
<th>How Often</th>
<th>With Whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. House &amp; Garden</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>c. Children</td>
<td></td>
<td></td>
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<tr>
<td>d. Hobbies</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>e. T. V.</td>
<td></td>
<td></td>
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<tr>
<td>f. Reading</td>
<td></td>
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<tr>
<td>g. Entertainment</td>
<td></td>
<td></td>
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<tr>
<td>at home</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>h. Sports</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>i. Sports or Social Clubs</td>
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<td>j. Community Club</td>
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<tr>
<td>Work; Relig. Activities</td>
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<tr>
<td>k. Entertainment</td>
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<tr>
<td>outside home</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>l. Driving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>m. Visiting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n. Drinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>o. Other</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Additional Details:
108 **Code:** Typical month's activities, with emphasis on "leisure" time pursuits, at $T_2$ (61)

0. No answer

1. Constructive (balance of various activities, including social interaction

2. Non-constructive (no balance of various activities, not enough social interaction, but no heavy drinking)

3. Destructive (Drinking is the major social activity)

109 **Code:** Typical month's activities with emphasis on "leisure" time pursuits before $T_1$ (62)

0. No answer

1. Constructive

2. Non-constructive

3. Destructive

110 **Code:** Change in activities: (61 & 62)

0. 1. 2. 3. 4. 5.

No answer +2 +1 0 -1 -2
B. For married or once married men only

So far we have covered quite a few areas in your life. May I now ask you a few questions about your relationships with your wife and children.

(63) How many children do you have? _______ (Check question)

<table>
<thead>
<tr>
<th>No.</th>
<th>Sex</th>
<th>Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

111 Code: Children

0. No answer
1. Yes
2. No

(64) Do you get to see much of your children?

Yes: (Elaborate)

No: (Elaborate)

(65) Has this changed since before you came to the Foundation?

How
For children living with father

(66) Are your children living with you?

112 Code: Children living with father (66)

0. No answer
1. Yes
2. No

(67) There are certain general areas in their children's lives in which father and mother share a general concern, and others which they feel are more the concern of one than the other. Who, at the present time, looks after the following areas in your home?

<table>
<thead>
<tr>
<th>Areas</th>
<th>Husband</th>
<th>Wife</th>
<th>Both</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Discipline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Affections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Activities &amp; companions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. School activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(68) At the time immediately prior to your coming to the Foundation, who looked after the following areas then?

<table>
<thead>
<tr>
<th>Areas</th>
<th>Husband</th>
<th>Wife</th>
<th>Both</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Discipline</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Affections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. School activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(69) How would you say your relationship between you and your children is at the present?

(70) At the time you came to the Foundation, how was your relationship then?

113 Code: Father's assessment of relationship with children at T₂ (69)
0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

114 Code: Father's assessment of relationship with children at T₁ (70)
0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

115 Code: Change (69 & 70)
0. 1. 2. 3. 4. 5. 6. 7.
No answer +3 +2 +1 0 -1 -2 -3

(71) Would you say that your present drinking behaviour has anything to do with the relationship between you and your children?

a. Yes  b. No  c. Can't say

(72) Would you say that at the time you came to the Foundation your drinking behaviour had anything to do with the relationship between you and your children?

a. Yes  b. No  c. Can't say

116 Code: Interviewer's assessment of degree of insight at T₂ (71 & 72)
0. No answer
1. Great insight (Yes-Yes)
2. Slight insight (can't say, can't say)
3. No insight (no-no)
In a typical week, how many hours do you really involve yourself with your children; that is, take them for a drive, to a sports activity, play with them, look over their homework, etc.)

How was this at the time you came to the Foundation?

117 Code: Hours spent with children at $T_2$ (73)

0. No answer
1. None (hours)
2. 1-4
3. 5-9
4. 10-14
5. 15-19
6. 20 & over

118 Code: Hours spent with children at $T_1$ (74)

0. No answer
1. None (hours)
2. 1-4
3. 5-9
4. 10-14
5. 15-19
6. 20 & over

119 Code: Interviewer's assessment of father's relationship with children, taking into account, (1) areas involved, (2) degree of insight, (3) time spent with children at $T_2$ (64, 67, 69, 71-73)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

120 Code: Interviewer's assessment of father's relationship with children, taking into account, (1) areas involved, (2) degree of insight, (3) time spent with children at $T_1$ (65, 68, 70, 71, 72, 74)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

121 Code: Change

0. 1. 2. 3. 4. 5. 6. 7.

No answer $+4 +3 +2 +1 0 -1 -2 -3 -4$
Husband-Wife Relationships

(75) A little while ago you told me that you are now (married), (separated), (divorced), (living common-law), (widowed). Have there been any changes in your marital status over the past ten years, including periods of short (although not legal) separations?

a. Yes   b. No

If yes, could you tell me when you changed your status, what the reasons were, etc.

<table>
<thead>
<tr>
<th>Changed Status</th>
<th>Time Period</th>
<th>Reasons</th>
<th>Wife Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>A.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(76) At the present time, how would you sum up your relationship with your wife, taking into consideration all areas of life.

(77) In the month prior to your coming to the Foundation, how would you have then summed up your relationship with your wife.

122 Code: Patient's assessment of relationship with wife at T₂ (76)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

123 Code: Patient's assessment of relationship with wife at T₁ (77)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

124 Code: Difference between relationship with wife at T₁ & T₂ (76&77)

0. 1. 2. 3. 4. 5. 6. 7.
No answer +3 +2 +1 0 -1 -2 -3
At the present time, what interests do you and your wife have in common and share? In other words, what sort of things do you do together?

Just prior to your coming to the Foundation, what interests did you then have in common and share?

<table>
<thead>
<tr>
<th>T2 (78)</th>
<th>T1 (79)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Work around home</td>
<td>a. Work around home</td>
</tr>
<tr>
<td>b. Recreation in home</td>
<td>b. Recreation in home</td>
</tr>
<tr>
<td>c. Recreation outside home</td>
<td>c. Recreation outside home</td>
</tr>
<tr>
<td>d. Community and/or religious activities</td>
<td>d. Community and/or religious activities</td>
</tr>
<tr>
<td>e. Other</td>
<td>e. Other</td>
</tr>
</tbody>
</table>

125 Code: Number of areas in common at T2 (78)
0. No answer
1. None
2. 1
3. 2
4. 3
5. 4
6. 5

126 Code: Number of areas in common at T1 (79)
0. No answer
1. None
2. 1
3. 2
4. 3
5. 4
6. 5

127 Code: Change
0. 1. 2. 3. 4. 5. 6. 7. 8. 9.
No answer +4 +3 +2 +1 0 -1 -2 -3 -4
Just as people have certain things in common and share, they also do have strong disagreements about certain issues. I wonder could you tell me over what issues you and your wife strongly disagree at the present time?

At the time just prior to your first contact with the Foundation, over what issues did you then strongly disagree?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Leisure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Drinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

128 Code: Percentage of disagreements in applicable areas, $T_2$ (80)

0. No answer
1. None
2. 0-25%
3. 26-50%
4. 51-75%
5. 76-100%

129 Code: Percentage of disagreements in applicable areas, $T_1$ (81)

0. No answer
1. None
2. 0-25%
3. 26-50%
4. 51-75%
5. 76-100%

130 Code: Change (80 & 81)

0. 1. 2. 3. 4. 5. 6. 7. 8. 9.
No answer +4 +3 +2 +1 0 -1 -2 -3 -4
When people live together for a while they tend to take each other for granted and sooner or later one or the other feels he or she is not getting enough attention from the other. How do you feel about the amount of attention you are getting from your wife at the present? How does your wife feel about the amount of attention she is getting from you?

How were things in this regard around the time you came to the Foundation?

131 Code: Patient's assessment of attention received from wife at T₂ (82)
0. No answer
1. Enough
2. Not enough

132 Code: Patient's assessment of attention received from wife at T₁ (83)
0. No answer
1. Enough
2. Not enough

160 Code: Change
0. 1. 2. 3.
No answer +1 0 -1

133 Code: Patient's assessment of how wife feels about attention she is getting from husband at T₂ (82)
0. No answer
1. Enough
2. Not enough

134 Code: Patient's assessment of how wife feels about attention she is getting from husband at T₁ (83)
0. No answer
1. Enough
2. Not enough

161 Code: Change
0. 1. 2. 3.
No answer +1 0 -1

Details:
Interviewer's assessment of relationship between husband and wife; taking into consideration (1) marital status, (2) patient's assessment of relationship; (3) common interests; (4) areas disagreed upon; (5) attention; at T2 (75, 76, 78, 80, 82)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

Interviewer's assessment of relationship between husband and wife; at T1 (75, 77, 79, 81, 83)

0. No answer
1. Very good
2. Good
3. Poor
4. Very poor

Change

0. 1. 2. 3. 4. 5. 6. 7.

No answer +3 +2 +1 0 -1 -2 -3

Interviewer's assessment of patient's overall responsibility towards family members at T2 (50, 54, 56, 58, 64, 67, 73, 75)

0. No answer
1. Very responsible
2. Somewhat responsible
3. Very irresponsible

Interviewer's assessment of patient's overall responsibility towards family members at T1 (51, 55, 57, 59, 66, 68, 74, 75)

0. No answer
1. Very responsible
2. Somewhat responsible
3. Very irresponsible

Change

0. 1. 2. 3. 4. 5. 6. 7.

No answer +3 +2 +1 0 -1 -2 -3
General Assessment (to be asked of all respondents)

Now I would just like to ask you one more question. Taking into account all the areas we have now talked about, looking back to the time when you came to the Foundation and comparing it with the present time, in what areas would you say there has been a change in your life, regardless of what has brought about this change.

Patient's overall assessment:

141 Code: General Health (84)
0. No answer
1. Improved
2. Same
3. Deteriorated

142 Code: Work History (85)
0. No answer
1. Improved
2. Same
3. Deteriorated

143 Code: Drinking History (86)
0. No answer
1. Improved
2. Same
3. Deteriorated

144 Code: Leisure Time Pursuits (87)
0. No answer
1. Improved
2. Same
3. Deteriorated

145 Code: Relationships with other people (88)
0. No answer
1. Improved
2. Same
3. Deteriorated

146 Code: Relationship with wife (89)
0. No answer
1. Improved
2. Same
3. Deteriorated

147 Code: Relationship with children (90)
0. No answer
1. Improved
2. Same
3. Deteriorated
Well, we have covered a large number of questions and quite a few areas of your life. Is there still anything important that you would like to tell me?

If not, I have asked you all I need to ask. I certainly would like to thank you very much for coming here and talking with me. Of course, as I have said before, all information contained in this interview schedule will be treated confidentially, and will not be released to anyone, other than in statistical form.
INTERVIEWER'S COMMENTS

Name of interviewer:
Date of interview:
Hour of interview:
Length of interview (to nearest 5 min.,):
Place of interview:

151 Code: Rating on cooperation:
0. No answer
1. Excellent
2. Good
3. Fair
4. Poor
5. Inaccessible

152 Code: Rating on frankness:
0. No answer
1. Very frank
2. Moderately frank
3. Not frank

If cooperation is: fair, poor, or inaccessible, give conditions of respondent affecting interviewability:

Too drunk __________
Too ill __________
Too hostile __________
Other, specify __________

Other comments:

153 Code: Interview Completion:
0. No answer
1. Complete
2. Incomplete

If incomplete, which sections ______________________

Why?
156 **Code:** Person interviewed

0. No answer  
1. Self  
2. Wife  
3. Other collateral  

157 **Code:** Place of interview

0. No answer  
1. Respondent's home  
2. Offices or hotel rooms  
3. Jail  
4. Mental Hospital  
5. Other
APPENDIX  B

Rules for Scoring Categories
Rules for Scoring Categories

One of the major problems encountered in the construction of an interview schedule such as we have used is the development of categories for measurement which will adequately represent the often finely detailed information which is gathered and, at the same time, facilitate the analysis of the data. As was mentioned earlier, we translated the information we were seeking into categories which would permit pre-coding for I.B.M. key-punching. In most cases the information was recorded on rating scales.

The majority of our categories were designed to measure rehabilitation, comparing the patient’s behaviour at the time of interview with that at the time the subject first came to the Foundation, and for this two main types of scales were employed. The first involves a separate rating for each of the two times (time of interview and time of intake), and then by subtraction of one rating from the other, arriving at an index of change. For example, for the interviewer’s assessment of change in overall husband-wife relationships, the interviewer made ratings in the following categories:

\[ T_1 \text{ (time of intake)} \]

1. Very good
2. Good
3. Poor
4. Very poor

\[ T_2 \text{ (time of interview)} \]

1. Very good
2. Good
3. Poor
4. Very poor
The amount of change was then determined by the difference between \( T_2 \) and \( T_1 \), defined so that movement upward (in the expected direction of rehabilitation) is represented as positive. In this case we have the following scale:

1. 2. 3. 4. 5. 6. 7.
+3 +2 +1 0 -1 -2 -3

Thus +3, for instance, would represent a movement from "very poor" at \( T_1 \) to "very good" at \( T_2 \). Since we are measuring change here, not final state, the lesser degrees of change than +3 can involve movement between differing positions. For example, +1 can mean a movement from "very poor" to "poor," from "poor" to "good," or from "good" to "very good."

The second type of scale of rehabilitation used (the choice between the two being governed by the specific information involved) is a simple rating of change between the two times. For example, the interviewer's assessment of overall change in the area of work contains five categories:

1. Greatly improved
2. Improved
3. No change
4. Deteriorated
5. Greatly deteriorated

Other types of scales were used for measuring such factors as motivation; in most cases the rules for categorization are given on the interview schedule itself (Appendix A). For example, the interviewer's assessment of attitude on coming to the Foundation is defined as follows:
1. Manipulative (was looking for handout, etc.)
2. Unrealistic (was looking for "magical" solution)
3. Neutral (did not know -- no explicit expectations)
4. Realistic (willing to "do his part")

This is also an example of an instance where we have included more than a scale of change. The basic scale underlying this one is negative/neutral/positive or poor/neutral/good. We have, however, differentiated between two different kinds of inadequate attitudes -- manipulative or unrealistic. For some aspects of our analysis, though, we combined these two.

Another example of a scale which contains some aspect other than a continuum is the assessment of change in drinking problem. The categories and their definitions are given below:

1. **Much more severe problem**: has undergone a marked downward change in drinking pattern to the point where the person seems to have given up all hope of change and lost all control

2. **More severe problem**: drinking pattern has become somewhat worse and person shows less control

3. **Same problem**: no real change evident

4. **Less severe problem**: drinking less heavy, and somewhat better controlled

5. **Much less severe problem**: drinking is largely under control, with only very occasional minor "slips"

6. **No problem**: drinking is under control to the point where it no longer represents a problem to the person

Here the category of "no problem" contains a conception of final
state as well as of change.

The definitions used for the interviewer's assessment of change in overall behaviour are as follows:

1. **Much improved**: drinking much improved or no problem, as well as improvement in major areas of life where changes were possible

2. **Somewhat improved**: improvement in drinking only, or some improvement in drinking and some improvement in other areas of life

3. **Same**: None other than very slight changes

4. **Somewhat worse**: drinking has deteriorated, but other areas of life have not, or some degree of deterioration has taken place in all areas

5. **Much worse**: drinking and other major areas of life have all deteriorated substantially
APPENDIX C

Additional Tables
TABLE I  Percentage Comparison between Total Experimental and Control Groups on Age, Marital Status, Occupation, and Employment Status

<table>
<thead>
<tr>
<th>Group</th>
<th>Age Group</th>
<th>Marital Status</th>
<th>Occupation</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21 - 30</td>
<td>31 - 40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>6 42 32 20</td>
<td>17 52 23 3 4 1</td>
<td>26 50 24</td>
<td>64 36</td>
</tr>
<tr>
<td>(N=91)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>8 41 34 17</td>
<td>19 50 26 3 2 0</td>
<td>23 46 31</td>
<td>59 41</td>
</tr>
<tr>
<td>(N=64)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>2 1 2 3</td>
<td>2 2 3 0 2 1</td>
<td>3 4 7</td>
<td>5 5</td>
</tr>
</tbody>
</table>

\[ X^2 = 0.248; \quad \text{d.f.} = 4; \quad p > .99 \]
\[ X^2 = 0.591; \quad \text{d.f.} = 6; \quad p > .99 \]
\[ X^2 = 0.726; \quad \text{d.f.} = 4; \quad .90 < p < .95 \]
\[ X^2 = 0.394; \quad \text{d.f.} = 1; \quad .50 < p < .70 \]
TABLE II: Percentage Comparison Between Total Experimental and Control Groups on Selected Control Factors

<table>
<thead>
<tr>
<th>Selected Characteristics</th>
<th>Experimental N=91</th>
<th>Control N=64</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious Affiliation</td>
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<tr>
<td>Protestant</td>
<td>76</td>
<td>81</td>
<td>$X^2=0.541$</td>
</tr>
<tr>
<td>Catholic</td>
<td>20</td>
<td>17</td>
<td>df=2</td>
</tr>
<tr>
<td>None or Other</td>
<td>4</td>
<td>2</td>
<td>$0.70&lt;p&lt;0.80$</td>
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<tr>
<td>Under 8 years</td>
<td>12</td>
<td>13</td>
<td>$X^2=1.338$</td>
</tr>
<tr>
<td>8 - 11</td>
<td>60</td>
<td>53</td>
<td>df=3</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 - 13</td>
<td>23</td>
<td>23</td>
<td>$0.70&lt;p&lt;0.80$</td>
</tr>
<tr>
<td>University</td>
<td>5</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Alcoholics</td>
<td></td>
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</tr>
<tr>
<td>None</td>
<td>46</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Anonymous</td>
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<td></td>
</tr>
<tr>
<td>1 - 10</td>
<td>18</td>
<td>11</td>
<td>$X^2=8.894$</td>
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<tr>
<td>Meetings</td>
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<tr>
<td>11 - 30</td>
<td>18</td>
<td>5</td>
<td>df=4</td>
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<tr>
<td>Attended</td>
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<td></td>
</tr>
<tr>
<td>31 - 50</td>
<td>1</td>
<td>2</td>
<td>$0.05&lt;p&lt;0.10$</td>
</tr>
<tr>
<td>Since T₁</td>
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<tr>
<td>50 +</td>
<td>15</td>
<td>14</td>
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<tr>
<td>No Answer</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Perceived Seriousness</td>
<td></td>
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<tr>
<td>Serious Problem</td>
<td>65</td>
<td>52</td>
<td>$X^2=10.118$</td>
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<tr>
<td>Moderate Problem</td>
<td>27</td>
<td>23</td>
<td>df=2</td>
</tr>
<tr>
<td>No Problem</td>
<td>4</td>
<td>20</td>
<td>$0.001&lt;p&lt;0.01$</td>
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<td>Problem at T₁</td>
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<tr>
<td>No Answer</td>
<td>3</td>
<td>5</td>
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<tr>
<td>Length of Recognized</td>
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<tr>
<td>Over 5 Years</td>
<td>38</td>
<td>36</td>
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<td>1-5 Years</td>
<td>37</td>
<td>21</td>
<td>$X^2=3.447$</td>
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<td>Drinking</td>
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<tr>
<td>Under 1 Year</td>
<td>15</td>
<td>20</td>
<td>df=3</td>
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<td></td>
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<tr>
<td>No Problem</td>
<td>4</td>
<td>20</td>
<td>$0.10&lt;p&lt;0.20$</td>
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<tr>
<td>No Answer</td>
<td>6</td>
<td>3</td>
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</table>
TABLE III: Percentage Comparison Between Total Experimental and Control Groups on Motivational Indices

<table>
<thead>
<tr>
<th>Motivational Indices</th>
<th>Experimental N=91</th>
<th>Control N=84</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X^2= .924</td>
<td>df=2</td>
</tr>
<tr>
<td>Self-Instigation</td>
<td></td>
<td></td>
<td>.50&lt;p&lt;.70</td>
</tr>
<tr>
<td>Great</td>
<td>60</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>15</td>
<td>20</td>
<td></td>
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<tr>
<td>Slight</td>
<td>24</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>No Answer</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Manipulative or</td>
<td></td>
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</tr>
<tr>
<td>Unrealistic</td>
<td>26</td>
<td>52</td>
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<tr>
<td>Attitude</td>
<td></td>
<td>X^2=12.135</td>
<td>df=2</td>
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<tr>
<td>Neutral</td>
<td>31</td>
<td>30</td>
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<tr>
<td>Toward</td>
<td></td>
<td></td>
<td>.001&lt;p&lt;.01</td>
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<td>Realistic</td>
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<td>17</td>
<td></td>
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<td>Treatment</td>
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<tr>
<td>No Answer</td>
<td>4</td>
<td>1</td>
<td></td>
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<tr>
<td>Reasons for Stopping</td>
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<td>X^2=10.262</td>
<td>df=2</td>
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<tr>
<td>Legitimate</td>
<td>26</td>
<td>8</td>
<td></td>
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<tr>
<td>Illegitimate</td>
<td>67</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Return to Treatment</td>
<td>7</td>
<td>2</td>
<td>.001&lt;p&lt;.01</td>
</tr>
<tr>
<td>Subjects</td>
<td>Abstinence</td>
<td>Alcohol offences</td>
<td>Employment status</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>-----------------</td>
<td>------------------</td>
</tr>
<tr>
<td>PA-Overall</td>
<td>0.01</td>
<td>0.001</td>
<td>0.1</td>
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<tr>
<td>IA-Overall</td>
<td>0.01</td>
<td>0.001</td>
<td>0.1</td>
</tr>
<tr>
<td>IA-Reasons for drinking</td>
<td>0.01</td>
<td>0.001</td>
<td>0.1</td>
</tr>
<tr>
<td>IA-Financial responsibility</td>
<td>0.01</td>
<td>0.001</td>
<td>0.1</td>
</tr>
<tr>
<td>IA-Leisure time</td>
<td>0.01</td>
<td>0.001</td>
<td>0.1</td>
</tr>
<tr>
<td>IA-Responsibility</td>
<td>0.01</td>
<td>0.001</td>
<td>0.1</td>
</tr>
</tbody>
</table>

*TABLE IA: Case of statistically significant at the 0.05 level or above in the re-analysis between socio-economic factors and rehabilitation for all subjects.*