

## Locus of control and alcoholism

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Alcoholism has been described as a chronic behavior disorder, manifested by the repeated drinking of alcoholic beverages in excess of the dietary and social uses of community and which interferes with the drinker's health or his social and economic functioning (WHO, 1952). Drinking is related with many psychological, emotional and behavioral problems, and various psychological factors have been identified that are related with alcoholism. The current paper reviews how locus of control is linked drinking.

Keywords: alcoholism, locus of control

It can be defined as the repetitive intake of alcoholic beverages to a degree that harms the 'drinker in health or socially or economically, with indication of inability consistently to control the occasion or amount of drinking" (Keller, McCormick, & Efron, 1982, p.20). Several most specific definitions have been proposed. Some of these are based on the amount of harm caused (A.P.A. 1980 Feighner et al., 1972), the loss of ability to control alcohol intake (Jellinek, 1960), a core syndrome of alcohol dependence (Edwards, 1977) and the number and type of alcohol problems (Cahalan, 1970).

### *DSM III R (1987) identifies two alcohol disorders*

Alcohol dependence (alcoholism) and alcohol abuse. This separation must be viewed as somewhat arbitrary and has little relevance from a treatment view point. Clinically patients probably shift back and forth between these two categories. According to DSM-III R the essential features of alcohol abuse are : 1. Continuous or episodic use of alcohol for at least a month. 2. Social complications of alcohol use including impairment in social and occupational functioning, such as arguments or difficulties with family and friends over excessive alcohol use, violence while intoxicated, missed work, being tired or legal difficulties, such as being arrested for intoxicated behavior and traffic accidents, while intoxicated.

Either psychological dependence or a compelling desire to use alcohol, an inability to cut down or stop drinking, repeated efforts to control or reduce excess by going on the wagon (periods of temporary abstinence) or restricted drinking to certain times of the days or a pathological pattern of use drinking non-beverage alcohol, going on binges (remaining intoxicated throughout the day for at least 2 days) occasionally drinking a fifth of spirit or its equivalent in wine or beer or having two more black outs (amnesic periods for events occurring while intoxicated).

Alcohol dependence (alcoholism) is described in DSM-III-R as having these features plus either tolerance, that is, increasing amounts of alcohol are required to achieve with desired effects or a diminished effect is achieved with regular use of the same dose or withdrawal symptoms, for example, morning shake and malaise that is relieved by drinking after the cessation or reduction of drinking.

Jellinek (1960) has sub-divided alcoholism into the following types

*Alpha Alcoholism:* Excessive and inappropriate drinking without loss of control or ability to abstain.

*Beta Alcoholism:* Excessive and inappropriate drinking without clear

psychological or physical dependence but with physical complications such as cirrhosis, neuritis or gastritis.

*Gamma Alcoholism:* Characterized by physical dependence, tolerance or inability to control drinking with a progressive course.

*Delta Alcoholism:* This type occurs in wine-consuming countries. and is characterized by inability to abstain, tolerance, withdrawal symptoms, but the quantity consumed can be controlled.

*Epsilon Alcoholism:* Intermittent or spree drinking (characterized as periodic binge drinking).

Locus of control is popular personality dimension that describes the degree to which people perceive and expect that reinforcements or rewards are contingent upon their personal action (Internal control) or upon the result of luck, fate, chance or the actions of powerful others (external control) (Rotter, 1966).

Various studies have been done to relate locus of control with alcoholism, but a general consensus is yet to emerge. Studies show that alcoholics have an external locus of control as a general personality trait (Butts & Chotlos, 1973; Krampen, 1980; Sims 1986; Mills & Taricone 1991; Miller 1991). Other studies show that alcoholics have an internal locus of control (Goss & Morosko 1970; Gazali & Sloan 1971; Rao, Vilyatyethyl, Nagaluxmai 1984; Chakerverty et al., 1990).

Goss and Morosko (1970) investigated inter-correlation of locus of control scale with the sub-scales of the M.M.P.I. For 262 alcoholics. The alcoholic population scored in the internal control direction. Those alcoholics whose scores were lowest (internal) reported least anxiety, depression and clinical pathology on the M.M.P.I.

Prayer and Distenano (1977) examined the relationship between internal/external control and several psychological adjustment indices among 162 male alcoholics (mean age = 40.7) in an inpatient state vocational rehabilitation facility. Rotter's Internal External scale was used to compare three sub-groups of alcoholics (39 internals, 82 moderate scores and 41 externals) on the success-failure inventory, the dogmatism scale, the future outlook inventory, the alcadd test, and the multiple affect adjective check list. Internal alcoholics were found to be significantly more success oriented, less dogmatic and more optimistic in future adjustment outlook. Results suggest that locus of control adjustment correlates exist within alcoholic, as well as within normal samples.

Leary and Donovan (1976 a) categorized alcoholics into four sub-types based upon differential level of perceived locus of control and

experienced control. The relationship between generalized psychopathology, as measured by M.M.P.I. and sub type classification was investigated. Alcoholics with an internal locus of control exhibited the least psychopathology. The more psychopathology was found among subjects with an external locus of control and minimal levels of experienced control.

Weissbach, Vogler and Compton (1976) reviewed and reported a conflicting relationship between alcoholism and locus of control. Data indicate that the locus of control may be related to age and to social desirability but not to alcoholism. They noted the absence of a clear theoretical rationale for relating locus of control to alcohol abuse.

Donovan, Denis and Linda (1977) investigated perceived locus of control as a function of level of depression among 39 alcoholics and 39 matched non-alcoholic controls. Subjects completed the Rotter's Internal External Scale and the Beck depression inventory. Initial analysis of variance indicated a lack of difference between groups on the Internal External Scale.

However, alcoholics were significantly more depressed than were controls. A correlation analysis indicated a significant relationship between an external locus of control and higher levels of depression. When level of depression was controlled statistically, an analysis of covariance indicated that the alcoholic sample was significantly more internal than the non-alcoholics.

These data further support the contention that caution must be used in interpreting comparative locus of control results derived from samples significantly higher on the internality and powerful others- externality scales. Significant correlations were found between dimensions of perceived locus of control and various personality characteristics. The potential clinical utility for effectiveness of alcoholic treatment programme which incorporate the alcoholics beliefs about personal control over health has been recommended.

Rose, Powell and Panick (1978) investigated various demographic correlates of locus of control orientation in 123 male alcoholics. The social functioning of alcoholics was associated significantly with locus of control. It was suggested that conflicting results among similar studies probably are due to the differences in social or demographic characteristics of the samples that were used.

Leary and Donovan (1970 b) administered the locus of control and experienced control scales in a rehabilitation programme and again after approximately 6 weeks of treatment.

During the course of treatment the subjects evidenced an overall shift toward a more internal locus of control and increase in the magnitude and relative degree of control experienced over interpersonal pressures. The overall increase and intra personal in the proportionate experienced control appeared to be accounted for by shifts made by these subjects who entered treatment with an initially internal locus of control.

Sims (1986) conducted a study on 50 dependent drinkers and 50 non-independent drinkers to investigate locus of control, depression and the perception of pain in newly sober alcohol dependent. He found significant relations between locus of control and development of alcohol dependence. Results also revealed that alcohol dependent persons are more depressed and more external than normal population.

Mariano, Anthony, Donovan, Dennis, et.al.,(1989) investigated drinking related locus of control and the drinking status among 70 problem drinkers, 40 non-problem drinkers and 22 recovered alcoholics. They found that the drinking status is significantly associated with drinking related locus of control. The problem drinkers were external in their locus of control.

Caster and Parson (1977a) examined that locus of control in alcoholics and treatment outcome, they found that alcoholic patients were high on external locus of control, they also respond poorly in the treatment and outcome is failure.

Abott (1984) stated that the construct of locus of control has relevance to the treatment of alcoholism as various treatment programmes emphasize in helping alcoholics in exerting control over events that affect them.

Edwards, Griffith and Edna (1987) assessed the outcome of alcoholism in relation to patients' attributes of 66 married male alcoholics. The findings show that alcoholism with internal locus of control dimension favorable outcome than others.

The present study has attempted to study the role of locus of control in treatment outcome of alcoholics.

### *Objectives of the study*

To investigate the role of internal and external locus of control in treatment outcome of alcoholics.

## Method

A simple single group design was employed initially in the present study. Independent variables include locus of control, stress, depression, belief, extraversion and neuroticism. Dependent measure was treatment outcome- Recovered/Relapsed.

### *Participants*

A total of 300 male (150 urban, 150 rural) literate alcoholic patients were selected on the basis of selective quota sampling with a diagnosis of alcohol dependence.

### *Procedure*

In the beginning of study, the subjects were selected on the basis of alcoholism score. Then they were asked to take the psychological tests. After this, the broad spectrum treatment was provided to all subjects i.e.. Chemotherapy, behaviour therapy, individual counselling, group counselling and family counselling. After detoxification they were discharged from hospital and regular follow up was done for one year for treatment outcome with community based approach.

## Results

The initial sample of alcoholics was categorized later into two groups on the basis of their treatment outcome recovered/relapsed. Their means, for all variables are given in Table No.1. To test, if there were significant differences between the means of the two groups, the t-ratios were obtained.

The LOC scores between relapsed and recovered differed significantly as the obtained t-value was 10.74. It was significant at .01 level of probability at 298 degree of freedom. The mean for relapsed group was significantly high on LOC (M 12.71) than recovered alcoholics (7.92). Thus, relapsed Subjects were more external in their locus.

Table 1: Result table showing means and t-values for treatment outcome (relapsed and recovered subjects) of all variables

Variables	Recovered Ss N=192 Mean	Relapsed Ss N=108 Mean	t-value	Level of Significance
Locus of control (I.E.)	7.92	12.71	10.73	P<0.01

df = (N1-1) + (N2-1) = 300-2 = 298, Probability one tailed p<.01, t = 2.59

### Point BI-serial Correlation

The point bi-serial correlation was computed to know the relationship of treatment outcome with locus of control (Table No.2).

The point bi-serial correlation between treatment outcome and LOC score was -.53 (SE .056). The range could vary from .41 to .63. The lower side at .99 confidence level, the correlation between LOC and treatment outcome was significant.

Table 2: Treatment outcome in relation to other variables (point bi-serial correlation)

Variables	Point bi-serial r	Z (±SE .056)	.99 Confidence (±.15 on both)	rbis range level
Locus of control (I.E.)	-.53*	-.59	.44 to .74	.41 to .63

p = .05, r = .148±

It indicated that subjects with internal LOC have favorable outcome. in comparison with who have external locus of control

(high score on locus of control).

Table 3: Rotated factor matrix for relapsed N=108

Variable	Factor 1	Factor 2	Communality
Alcoholism	0.243	0.849	0.781
LOC	0.706	0.025	0.499

Table 4: Rotated factor matrix for recovered N = 192

Variable	Factor 1	Factor 2	Communality
Alcoholism	-.052	.886	.788
LOC	.653	-.319	.529

Table 5: Factor matrix for total alcoholics N=300

Variable	Factor 1	Communality
Alcoholism	.298	.089
LOC	.761	.580

Further more, the recovered alcoholics have significantly more internal locus of control as compared to the relapsed. There is further evidence that the recovered alcoholics perceive that personal events and their consequences depend on their own actions, whereas relapsed alcoholics perceive reinforcements as dependent on external events. This is specifically true with the drinking related aspects as the locus of control scores translate generalized expectancies dealing with various drinking related behavioral (Oziel & Obitz 1975).

The relationship of locus of control with treatment outcome showed that internal locus of control, contribute in positive treatment outcome. This can be called "positive self perception".

Conclusively the findings of present study indicate that relapsed and recovered alcoholics have significant differences on locus of control.

### Implications of the present study

The findings in this study show that locus of control is useful construct that can significantly differentiate between the recovered

and relapsed alcoholics. These findings also demonstrate that these variables can be considered as prognosticators in the intervention programmes for alcoholism. Further, the findings in the present study have specific, clinical implications. In view of the fact that the individuals with external locus of control has the tendency to get relapsed after the conventional treatment programmes, they may need specific treatment programmes with more emphasis on personal control and alcoholic's affective states. These findings may help in developing an intensive follow up and need based community programmes for those who have high susceptibility to get relapsed.

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