

“Usually, I’m not like that”: Toward a Model of Changes in Clinical Pain that Alcohol Drinking Induce”

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Abstract

The purpose of this paper is to study the existing relationships among alcohol-dependent persons between psychological distress and clinical features associated as it is their operation under the influence of alcohol or when n ‘not drinking. To do this we change the set of the DeRogatis” SCL90r by offering inpatient detoxification for a cure to respond in two modes: “when I drank” and “usually”. Using structural equation modelling allowed us to build and test a first model of the interactions between clinical dimensions and psychological distress when the person has been drinking and a second when the person is in its normal state. Despite as certain stability in the implied factors (anxiety, depression, psychosis, sensitivity, and obsession-compulsion), on one hand we can observe that the global severity index (GSI) is underlined by paranoid dimension and on the other had by phobic dimension. Although these facts are coherent with the clinical descriptions, this work should be reproduced among a larger sample.

Keywords: Alcohol-dependency; Psychological functioning; Clinical disorders; Structural equation modelling

Introduction

Many studies have highlighted a link between alcoholism and clinical disorders [1-4]. Turns out the question of the clinical disorders associated with alcoholism be central. Thus, according to some authors, alcoholism is associated with anxious disorders [5-8], mood disorders [9-11] or personality disorders yet.

In terms of research, the use of objective and standardized methods allowed the study of the alcoholic problems in its relations with the other clinical disorders and disorders of personality [12-15]. At the phenomenological level, alcoholic subjects, when they describe themselves, use the type formulas “usually, I’m not like that” or “alcohol turn me to”. These types of formulations raise the question of the representation of self in alcohol depending on whether it is or not, subjects under the influence of alcohol. One wonders then how to establish a model of psychological functioning of the alcoholic subject if the self-assessment of the latter includes a fluctuation which is not taken into account by the methodological device.

Most of the work conducted in alcoholic subjects is conducted with abstinent subjects or having started [16] support. The profiles to which lead these studies do not take into account representation alcoholic subjects have their clinical disorders when they imagine drinking.

The objective of this article is to show that there are changes in the alcoholics psychological functioning, as they imagine to be alcohol or non-alcohol, not only in terms of the intensity of the disorder, but also to plan combinations between strokes.

Method

Data collect

As part of this research, we have proposed to patients (n=172) for a unit of addictions of a hospital and 2 Centres of Consultations mobile alcoholics to complete a self-assessment questionnaire measuring classically difficulties psychological [17]. We’ve changed the policy of this questionnaire to test our hypothesis. Thus, he was asked the

subjects to respond to this questionnaire under 2 conditions: “when I drank” / ‘when I have not drunk. 86 people have agreed to complete this questionnaire. 82 questionnaires were exploitable (23% of women, 77% of men; mean age: 47 years).

The indices to be observed in this research are psychological difficulties. It seemed interesting to measure the representation have alcoholic subjects of psychopathological disorders associated. We opted for the French translation of the Symptom Check List 90 – r (SCL-90-R) DeRogatis [18-20]. This questionnaire consists of 90 items rated on a five-point Lickert scale (from 0: ‘Never’-4: ‘Always’). In regards to the overall scores, we have a score of overall severity (GSI), which is the total divided by the number of items, a variety of symptoms (PST) score that corresponds with the number other than 0, as well as responses to one degree of discomfort (PSDI), which corresponds to the total score divided by the PST. This scale also allows highlighting a factorial structure including 9 psychological factors: “Somatization”, ‘interpersonal sensitivity’, ‘anxiety’, “phobic anxiety”, “obsessive and compulsive disorders”, “depression”, “anger or hostility”, “paranoid traits” and “psychotic features. A 10th dimension, relating to various symptoms, is also evaluated.

Data processing

At first we have shared the sample in two groups (n=86); the first data collect is used to data process; the second to re-test the consistence of the models.

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The collected results will be treated statistically. The realization of student's T distribution has allowed us to analyse the significance of the difference in the results obtained by our sample of alcoholic subjects to the 2 terms ("when I drank" / usually"). SPSS *, specialized software, will enable us to draw up a matrix of correlations of Bravais-Pearson. This matrix will serve as the basis for the calculation of the regressions of data obtained by the first mode ("when I drank") on the one hand, and secondly, by the second mode ("usually"). The results of the regression analysis step allowed us [21,22] to establish a model for each of the 2 terms. Each of the models obtained on the basis of this analysis will be tested by appropriate structural equations modelling software, AMOS*. According to literature [23,24] a model is consistent when it does not differ from the mathematical one (chi square non-significant); therefore some central indexes (global fit index (GFI) or central fit index (CFI) both closed to 1) are often used to complete the conditions of the consistence [17,21-26].

Results

Global outcomes

According to Table 1, it can be seen few stability in the self-perception of the persons among they have drank or when they don't.

Average GSI indicate that alcoholic subjects in our sample to represent their psychological as difficulties being more serious when they think themselves to be under the influence of alcohol (1.22 vs. 0.95, $p < .01$). On the same way, the diversity of the perceptions of their problems changes whether they describe themselves "drunk" or "as usual" (53.83% vs. 46.93%; $p < .05$). Finally, their degree of discomfort (PST) is higher when they imagine to be under the influence of alcohol (1.96) when they imagine not be (1.73).

With regard to the sub-scores obtained by our sample of alcoholic subjects to the nine psychological factors, they are also higher when the alcoholic subjects in our sample imagine be under the influence of alcohol when they imagine not be. We also note that only the features of anxiety, phobia and the "various" did not vary the set point. What would imply a degree of stability in the self-perceptions of their clinical features?

Therefore, we can say that, descriptively, there are differences

	'When I drank'		'Usually'		p
	Mean	S-D	Mean	S-D	
GSI	1.22	0.66	0.95	0.60	$p < 0.01$
PST	53.83	18.59	46.93	19.85	$p < 0.05$
PSDI	1.96	0.60	1.73	0.55	$p < 0.01$
Somatization	12.82	9.51	9.24	8.35	$p < 0.01$
Obsession	14.73	8.24	9.32	6.94	$p < 0.01$
Sensitivity	11.61	6.28	8.80	6.67	$p < 0.01$
Depression	19.02	10.31	14.21	9.48	$p < 0.01$
Anxiety	10.49	8.42	10.06	7.41	$p < 0.8^*$
Hostility	7.66	5.46	4.45	3.60	$p < 0.01$
Phobia	6.17	5.05	5.54	5.66	$p < 0.4$
Paranoia	8.20	4.71	6.76	4.24	$p < 0.05$
Psychose	9.55	6.81	8.00	5.72	$p < 0.10$
Various	10.18	5.52	9.80	5.79	$p < 0.6^*$

*Non-significant

Table 1: Results to the SCL-90-R 2 manner: "when I drank" / "usually".

between the scores obtained by our sample when they imagine to be "in alcohol" and these same scores when they imagine to be alcohol-free. But what are the incidences of the different cognitions on the psychological suffering?

Model of psychological difficulties among the condition "when I drank" and "usually"

If one performs analyses of regression step by step from the score of the GSI, one realizes that two clinical features mainly underpin it: anxiety ($\beta = 92\%$) and depression ($\beta = 91\%$), and that the other traits are involved also in the composition of the score. This confirms, if it were needed, the factor nature of the SCL-90-R.

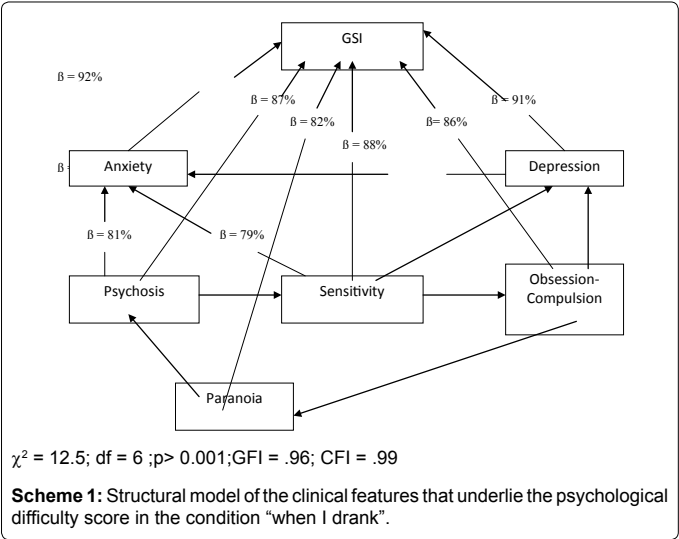
However, if considering, by following the same statistical method, the score of anxiety, invariant of one condition to another, one realizes that it is underpinned by the depressive and sensory traits ($\beta = 79\%$ in both cases), but especially by the psychotic features ($\beta = 81\%$). If we continue the reasoning for the other features, we obtain the following modelling (Scheme 1), consistent to Amos * validity criteria ($\chi^2 = 12.5$; $df = 6$; $p > 0.001$; $GFI = .96$; $CFI = .99$).

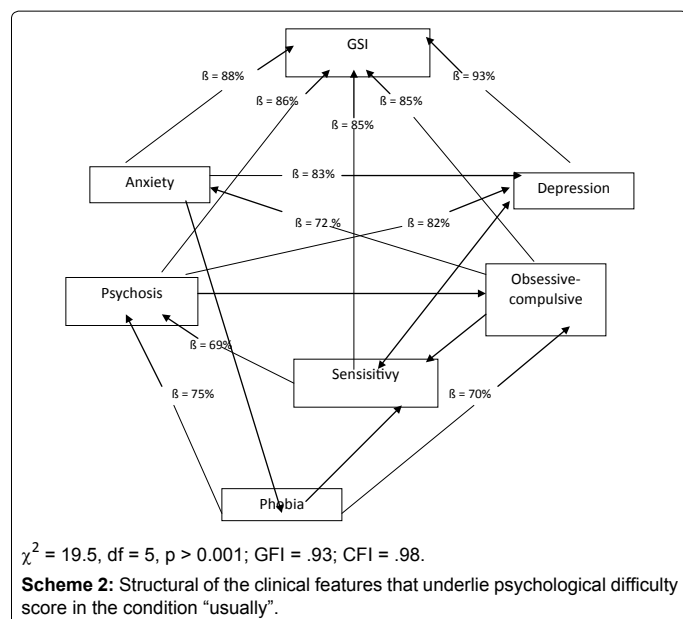
If we compute the model with the data from the second group, it keeps its validity. However, when the model is tested with the data on "usually", the *chi-square* turns significant, that leads to reject it among this condition and built a model of the psychological suffering of alcoholic persons when they have not drunk (Scheme 2).

This model is consistent with the data of the group1 and its validity is confirmed among the second half of the sample.

Comparing the Model "When I drank" and the Model "Usually" allows us to highlight a difference in the combination of the psychological factors underlying psychological difficulties, as the alcoholic subjects in our sample imagine be "drunk" or "as usual".

We thus note that when they imagine being in alcohol, the psychological factor "paranoid traits" is one of the elements underlying psychological difficulties. This factor does not appear as one of the elements underlying psychological difficulties in the model established in the condition off alcohol. Is this fact coherent with the classical clinical description of paranoid states induced by alcohol, as "alcoholic jealousy"? We should explore further this main difference between the self-perceptions among one has drank or not.





Similarly, we see that when they imagine may not be under the influence of alcohol, the psychological factor "phobic anxiety" is one of the elements underlying psychological difficulties. This factor does not appear as one of the elements underlying them in the model established in the condition in alcohol. Is this fact coherent with the descriptions of many alcohol dependent persons who talk about their shyness as a disease cured by alcohol drinking? This question should be explored further.

Discussion

The results obtained by our sample of alcoholic subjects to the SCL-90-R show that they represent their psychological as difficulties being significantly higher when they imagine to be in alcohol than they imagine to be alcohol-free.

This could therefore let us assume that subjects experience less psychological suffering during periods where they don't consume alcohol at the time where they are under the influence of the product.

Before specifically addressing models obtained through the appropriate structural equations model software, we can already note that the differences between the 2 terms - "when I drank" and "when I have not drunk" - exist, not only at the level of the intensity of clinical disorders, but also at the level of the combination problems. We also note that some factors such as "paranoid traits" or "phobic anxiety" are absent of any of the terms and present in the other.

Examination of the resulting model in condition "when I drank" tells us that 6 factors directly underlie the psychological difficulties at over 80%. It is anxiety and depression (over 90%), interpersonal sensitivity (88%), psychotic features (87%), obsessive and compulsive disorders (86%) and paranoid traits (82%).

Examination of the resulting model in condition "when I did not drink" tells us that 5 factors directly underlie the psychological difficulties at over 80%. It's depression (93%), anxiety (88%), psychotic features (86%), obsessive and compulsive disorders (85%) and interpersonal sensitivity (85%).

The results concerning the importance of anxiety and depression in

the representation that the alcoholic subjects in our sample have their psychological difficulties are consistent with work on co-morbidities of alcoholism with anxiety disorders and disorders of mood [5-11].

One could however object to the mentioned results previously because the factors that under tend the psychological difficulties in our models are sub scores that compose the GSI of the SCL-90-R. It is therefore logical that they contribute to the explanation of this variable.

Should subsequently to verify these results, carry out an assessment of anxiety, depression and other factors underlying psychological difficulties in our models in an autonomous way. In other words, it would be necessary to measure each of these elements using a test used to measure (for example, the BDI to measure depression). Despite the objections issued previously, the models that we end up allow us to highlight the existence of differences between the representations that alcoholic subjects in our sample do their psychological difficulties, as they imagine to be under the influence of alcohol or not. These differences are noted not only at the level of intensity of the disorders, but also at the level of the combination of different factors.

In addition to the factors present or not in or the other conditions, it seems important to note that there are differences in the relationship between the various factors. In addition, the couple of factors 'anxiety' - 'depression' appears in both conditions.

However, we can note that in the modality in alcohol "anxiety" is underpinned by "depression" while in mode excluding alcohol, "depression" is underpinned by the "anxiety". This study allowed us to highlight the complex relationship between the psychological difficulties of our sample of alcoholic subjects and the factors underlying them.

The integration of a new variable in our search - representation the alcoholic subject is its clinical disorders when he imagines to be in alcohol - has enabled us to highlight that there are changes in psychological functioning of alcoholics not only in terms of intensity, but also in terms of the combinations of traits. If the use of the methodology used in this research is confirmed by further work, it would be interesting to apply it to other pathologies than alcoholism.

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