Aggression among Alcoholics

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Summary

Two groups of alcoholics were investigated in this study: sentenced and hospitalized. The groups were compared according to aggression as a relatively stable personality trait and the test for aggression by Žužul - the level of manifest aggression (LMA) was also applied. The sentenced alcoholics' group differed from the hospitalized group of alcoholics only by the manifest aggression and by the behavioral disorders. The hospitalized alcoholics showed a higher level of latent and manifest aggression as a personality trait.

The results of our research indicate that the personality features weren't decisive to whether alcoholic would commit a felony and since the alcoholism factor were kept under control (both groups were alcoholics) the conclusion is that circumstantial factors were those that determined the act most frequently. Alcoholics are a high-risk criminogenic group, therefore only the preventive intervention and treatment can indirectly prevent their criminal behavior.

Key words: aggression; alcoholic; criminal behavior

INTRODUCTION

There are many theories of aggression in contemporary science that can, for sake of better understanding, be divided in four groups.1,2

1. The first group consists of theories of instinct, primarily the theory of Sigmund Freud, which is also the first psychological theory of aggression.3,4 Fromm's theory also belongs to this group,5 although its principal standpoint is criticising the theories that favour instinct and surroundings. That is to say, Fromm's basic directions...
to understanding the men are based on instincts and they specifically influence his
tory of aggression. Gillespie,8 Hartman et al.7 and A. Freud8 also insist on bi-
ologically determined instinct which represents a motivator for aggressive behaviour,
while McDougal9 believes that, in contrary to all other instincts, there is no specific
class of objects which would, when perceived, initiate the first phase of instinctive
process in aggression. Thus, the aggressive instincts are usually caused by certain
situations (frustration) or interference with other instincts.
Freud10 was the first to determine that the aggression is instinctive. He believed
that the instincts represent energy that is biologically directed towards certain object
and specifically aimed. The instincts are, according to him, a borderline phenomen-
on between the organic and the mental life. In his second theory of instincts,
Freud has separated the urge to live from the urge to die and introduced the term of
fusion, i.e. merging of two urges and repetitive compulsion, i.e. permanent need
and tendency to return to inorganic state.

Thus, the urge to live (Eros) is the origin of sexuality and appears in the forms of
primary narcissism, objective libido and secondary narcissism. The urge to die
(Thanatos) is the source of destruction and it appears in forms of primary sadism
and masochism and secondary sadism, where the aggression is directed towards an
object.

Among the theories of instinctive behaviour, a special place belongs to the
ethological theories presented by Lorentz,11 Morris,12 Scott,13 Montagu14 and Hinde
and Groebel.15 The idea common to these theories is that the majority of discover-
ies about aggression can be obtained by observing the world of animals.

2. The second group of theories considers aggression more like a reaction to certain
situation, i.e. the aggression is primarily considered through the situation that leads
to it. These theoretical foundings occur as a result of Yale group studies, whose
primary aim had been to rephrase and terminologically improve the aggression
theories of instinct. However, these theories have lead towards the entirely different
teaching and greatly contributed to the development of behavioristic theories in
psychology.

These theories suppose that there is a causal relationship between the frustration
and aggression. Thus, frustration always leads to aggression, while aggression ap-
pears only as a result of frustrations. Although these theories have achieved consid-
erable popularity, they could not provide the answers to basic objections, such as
why some frustrations do not lead to aggression and how come that some aggres-
sion is not motivated by frustration.

3. The third group of theories consists of behaviouristic theories of learning, which
consider the aggressive behaviour as a learned pattern, based on two mechanisms
of learning: classical and instrumental conditioning, modelling by imitation and
similar. These theories have been developed by Bandura,16 Bandura et al.,17,18
Eron,19 Eron and Huesmann,20 They are supported also by some anthropological
investigations of primitive tribes, which differed greatly considering the level of
aggression.
4. The fourth group considers aggression from the aspect of function of certain biological structures or physiological changes in the organism. These studies are mostly directed in three main directions and the basic principle is to find the physiological basis of aggression.

a) In the year of 1973, Jarvik et al.\textsuperscript{21} has shown that there is a chromosome aberration, consisting of additional male chromosome, appearing in about 0.13% of population. Although the investigations so far have not been altogether in agreement with each other, many of them point to the connection between aggression and such chromosome structure. Hock\textsuperscript{22} reports that people with XYY chromosome structure can be found more frequently in prison population than in general population. One of the main objections to these studies is that the incidence of this chromosome aberration in general population is generally too small to provide explanation for the complex phenomenon of aggression.

b) Aggression is explained considering the effect of certain hormones. These ideas origin from the fact that the aggressive behaviour is met more frequently among male members of all animal species, so, since different sexes have different hormones, the scientists tried to explore the relationship between aggression and testosterone. The investigations have mostly shown three things: person with higher levels of testosterone are more prone to aggressive behaviour, addition of testosterone increases the inclination towards aggression and reducing the content of testosterone also reduces the aggressive fits.\textsuperscript{2}

c) Next group of investigations dealing with aggression can be understood as an effort to connect the aggressive behaviour with particular brain regions. According to these studies, the regions responsible for the aggression are situated deep in the temporal lobe of the forebrain and inside the subcortical structures (limbic system). The results of these investigations suggest that these regions of the brain are connected both with initiation and inhibition of the aggressive reactions. However, when we apply the conclusions of these studies, carried out mostly on animals, to general population, we have to bear in mind what Lefkowitz points out,\textsuperscript{23} that the function of higher centers affects the limbic system of men, modulate it or inhibit it, reducing its significance and its influence on behaviour.

Since the theories of aggression differ greatly, the results obtained by the investigations carried out to prove one theory can rarely be explained in the frame of other theories and that is why some scientists suggest that aggression should not be understood as a single phenomenon. So Feshbach\textsuperscript{24} already introduces distinction between expressive and instrumental aggression, Fromm\textsuperscript{7} speaks of difference of malignant and benign aggression and Skinner introduces the terms of philogenetical and ontogenetical aggression.

From this standpoint, Žužul\textsuperscript{1} defines aggression as more or less pronounced, relatively stable tendency to, in certain (provoking) situations reacts by attacking or threatening and seeking conflict and fight in broader sense. From this definition, it is obvious that the aggression is defined here as a character feature, meaning exclusively impulsive aggression, while the instrumental aggression can not be considered unique character feature.
According to him, aggression is manifested on two levels - as a latent tendency towards aggression and as a manifest behaviour.

The latent aggression is caused by the emotional changes that happen in the organism after perceiving some provoking situation and its development is mostly mediated by changes in autonomic nervous system.1,2,3,27

As the men has adopted a relatively stable mechanism of inhibiting aggression thorough maturation and socialisation, the manifest aggression, as a habitual feature of an individual, will be defined by two characteristics: mostly inherited determined latent aggression and mostly learned and adopted mechanism of inhibiting the aggression.

Nowadays, the dominant attitude towards aggression is that it is a stable character feature which, on one hand, causes that in the same situations, some individuals behave aggressively and others do not, and on the other hand, is the reason that the individuals who are aggressive in one situation or one part of their lives, have tendency to behave aggressively also in other situations and other parts of their lives.28

Among the character features, the aggression represents one of the most important variables in criminal behaviour. It can be the direct cause of criminogenic behaviour (causal relationship), but more often it influences the way some criminal deed had been carried out (modus operandi).29

The connection between alcohol and criminal is certain, and special attention is being directed towards the role of alcohol in criminogenic behaviour and towards the relationship between alcohol and aggression.30

**AIM OF THE STUDY**

In this study, the basic idea was to investigate if some character features, such as aggression, are those that determine if the alcoholic commits a criminal deed. If they are, there will be a significant difference between the group of convicted and the group of hospitalised alcoholics, measured by means of standardised tests. If the difference does not prove significant, we would suppose that the situational factors are those mostly determining the criminal behaviour in this population, when we keep the factor of alcoholism under control, i.e. when both groups consist of alcoholics, and the only difference between them is if they had committed a criminal deed or had not.

The aim of this study was to determine the influence of alcoholics' aggression, as a character feature, upon committing a criminal deed. For sake of investigation, we have defined the zero-hypothesis, which goes as follows: there is no significant difference considering aggression as a character feature between the alcoholics who had committed a criminal deed and those who had not.

The problem of this investigation was to check if the group of subjects who had committed a criminal deed and is consequently doing time in prison differs from
the group of hospitalised alcoholics, considering the results they display on standardised psychological aggression testing.

METHODS

Since the aim of this study was to check if the alcoholics who had committed a criminal deed and are consequently doing time in prison differ in some personality features from those undergoing a hospital treatment, but had not committed any criminal deed, we ought to have formed two groups of subjects:

- the first group consisted of 82 persons sentenced to prison and doing their prison time in Open prison Lipovica, in frame of which they had been included to alcoholological treatment, based on the recommendation of the team of professionals and according to the law on mandatory treatment in conditions of penal institution.
- the second group consisted of 82 alcoholics undergoing the hospital treatment at the Department for Alcoholism of Neuropsychiatric Hospital "Dr. Ivan Barbot" in Popovača at the time of investigation.

The groups have been matched according to age.

The aggression has been tested using the questionnaire for aggression testing according to Žužul level of manifest aggression (LMA).

The level of manifest aggression (LMA) questionnaire has developed based on Žužul's previous studies from the field of aggression. This questionnaire measures:

1. The level of latent aggression
2. The level of manifest aggression
3. The difference between the former two.

The data obtained by tests and by questionnaire were analysed using a personal computer, according to methods of scientific statistics and displayed using tables and graphs.

STUDY RESULTS

The significance of differences between these two groups has been tested using the Student's T-test for large independent samples, after it had been established, by means of F-test, that data are normally distributed and that there is a statistical reason for using the parametric statistical tests.

The Table T. 1 shows the mean values and standard deviations in two groups and the results of tests listed above. The statistical significance of differences determined has been marked. The significance of differences at the risk level of 5% has been found for the results of scales of latent and manifest aggression from the LMA questionnaire. For the variable "differential" from the LMA questionnaire,
### Table 1. Statistical data analysis.

<table>
<thead>
<tr>
<th>Test</th>
<th>No</th>
<th>Mean</th>
<th>St. dev.</th>
<th>Var.</th>
<th>Estim. S-1</th>
<th>No</th>
<th>Mean</th>
<th>St. dev.</th>
<th>Var.</th>
<th>Estim. S-1</th>
<th>F</th>
<th>Fo</th>
<th>Signif.</th>
<th>S.d.</th>
<th>t</th>
<th>Signif.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMAM</td>
<td>82</td>
<td>40.79</td>
<td>10.67</td>
<td>113.90</td>
<td>115.30</td>
<td>82</td>
<td>44.43</td>
<td>9.95</td>
<td>99.07</td>
<td>100.30</td>
<td>1.15</td>
<td>1.45</td>
<td>no</td>
<td>2.63</td>
<td>2.24</td>
<td>1.96</td>
</tr>
<tr>
<td>LMAL</td>
<td>82</td>
<td>53.39</td>
<td>14.77</td>
<td>218.14</td>
<td>220.83</td>
<td>82</td>
<td>59.87</td>
<td>15.69</td>
<td>246.19</td>
<td>249.23</td>
<td>1.13</td>
<td>1.45</td>
<td>no</td>
<td>5.73</td>
<td>2.70</td>
<td>1.96</td>
</tr>
<tr>
<td>LMAD</td>
<td>82</td>
<td>12.60</td>
<td>11.29</td>
<td>127.44</td>
<td>129.01</td>
<td>82</td>
<td>15.44</td>
<td>16.49</td>
<td>271.86</td>
<td>275.21</td>
<td>2.13</td>
<td>1.45</td>
<td>yes</td>
<td>4.93</td>
<td>1.28</td>
<td>1.96</td>
</tr>
</tbody>
</table>

LMAM – manifest aggression  
LMAL – latent aggression  
LMAD – differential between the manifest and the latent aggression
we have obtained the significant values of F-test, meaning also that there is a statistically significant difference between the two groups.

The feature that differs between the two groups tested is aggression as a character feature. We have found that the alcoholics undergoing a hospital treatment are more aggressive than convicted alcoholics, considering both latent and manifest aggression. Similarly, the differential between the latent and the manifest aggression is greater among the hospitalised alcoholics. Graphic display of average results of LMA questionnaire for both groups are given on figures 1, 2, 3 and 4.

Figure 1. Manifest aggression.

Figure 2. Latent aggression.
DISCUSSION

The numerous factors determining if a person commits a criminal deed can be roughly divided: primarily to factors of character or the relatively permanent characteristics of every individual, then the factors of situation and the presence of alcohol abuse. The role of alcoholism is especially important in the aggressive criminality (murders, severe wounding, violent behaviour and sexual criminal deeds), but it is also a cause of different violations, especially in traffic and those of public law and order.\textsuperscript{33,34} The relation between aggression and alcoholism is not simple, partly because of the different theoretical bases of aggression in previous investigations.

LMA questionnaire consists of questions concerning the manifest and the latent aggression, and as a result of relationship between those two kinds of aggression, their differential is calculated. The difference is statistically significant. The level of
Aggression among alcoholics

aggression in general is higher among the hospitalised alcoholics compared to convicted ones. This result can be partly explained by the efforts of convicted alcoholics to provide a better image of themselves by means of choosing the socially more favourable answers in LMA questionnaire, i.e. choosing the socially more favourable reaction solutions in particular situations. The second part of explanation considers the lack or partial insight of convicted alcoholics in problems caused by alcohol abuse. Among the hospitalised alcoholics, the better insight has helped them accept the aggression as a part of their drinking problems, which may be potentiated by the acute alcohol intoxication or the long-lasting alcoholism.

There are also numerous other reasons that lead to the fact that hospitalised alcoholics are the more aggressive group. One of those reasons is the resistance to institution, because the surroundings have actually forced them to undergo the treatment "conditionally volunteering", although the results indicate that 31.70% of them claim that they have come to treatment of their own free will. The resistance raises the level of excitation and anxiety (arousal) and increases the aggression, providing the possibility for hospitalised alcoholics to manifest more aggression through their resistance. There is depression, anxiety and paranoia present among alcoholics, so they shift the problem from themselves to their surroundings via certain paranoid trend, directing their aggression outwards and helping them bear the anxiety resulting from the guilt feeling more easily. One study dealing with a group of alcoholics has discovered a correlation between anger and paranoia with the factor of aggressive behaviour, while no signs of depression had been detected among the aggressive alcoholics. In contrast, another study has found a high level of depression among the persons who committed crimes against life and body. The question if the depression occurred secondarily after the deed or had been present in the first place is left open.

The depression of alcoholics is not detected in some particular type of alcoholics, but is an integral part of clinical picture consisting of depression, anxiety, paranoia and aggression, with alcohol as a factor that can modify certain states of mind, reduce or induce them, or form a vicious circle, as it has been described in literature.

The further explanations are confirmed by considering the period that precedes the moment of carrying out the penal measures, when the convicted person is passively enduring the situation, because he is not in position to influence the fact that he will be put in the penal institution. Once in the institution, he adjusts the required answers according to the picture that he knows is favourable in given situation. The individual analysis of questionnaires filled shows that is one of the reasons. It was obvious that, choosing the favourable reaction solutions for the situations offered in questionnaires, the convicted subjects had chosen those answers that would manifest an inversion. For example, the latent aggression tended to be smaller than manifest aggression, and the differential was negative.

The tendency of giving the socially favourable answers among the convicted subjects is a negation of problems caused by aggressive behaviour and also the result of weaker insight in their own behaviour.
The alcoholic undergoing the treatment displays a constant level of aggression, what makes him more noticeable in his surroundings from the beginning, so even at lower levels of aggression, his surroundings want to get rid of him and send him to undergo a course of treatment. The convicted alcoholic displays a constant level of aggression and controls it well, displaying his aggression without control only in situations where alcohol removes the inhibitions and the urges take control of his personality. After letting of some aggression, he calms and the control is established again.

The explanation partly lies in fact that the convicted alcoholics are more primarily sociopathic and had learned during the diagnostic procedures and their stay in penal institutions to inhibit the displays of socially unfavourable behaviour. That is acceptable considering the high values of L-scales of MMPI-20 and EPQ and low values on Pd-scale and Ma-scale in few similar investigations on the same group and some other studies.36 Including the features that can be recognised from certain items of LMA, it is possible to say that an average alcoholic tends to be alone, “difficult” as a person, not easily adapting, oriented more towards himself than towards the others, passively aggressive, a person that becomes aggressive towards the others only according to situation, when he needs more energy and impulse than in the passive aggressive situation where his aggression is directed inside.

CONCLUSION

At the beginning of our study, we have hypothesised that three groups of factors are crucial for committing a criminal deed: the personality of alcoholic, alcohol as a facilitating factor and numerous situational factors that are very hard to be put in operation. The factors of alcoholism are kept under control, because both groups consisted of alcoholics and the aggression as a character feature had been investigated. Based on previous results, it has been shown that the character differences in the group of alcoholics are not the crucial factor which would determine if an alcoholic would commit a criminal deed.

The groups of alcoholics tested differ significantly according to area of aggression. The results of this study suggest that the alcoholics undergoing a hospital treatment are the more aggressive group compared to the convicted alcoholics doing their time in penal institutions.

Sažetak

AGRESIVNOST ALKOHOLIČARA

U istraživanju su promatrane dvije skupine alkoholičara: osuđeni i hospitalizirani. Skupine su uspoređene s obzirom na agresivnost kao relativno stabilnu crtu ličnosti, a primijenjen je test za agresivnost po Zužulu - stupanj manifestne agresivnosti (LMA).
Skupina osuđenih alkoholičara razlikuje se od hospitaliziranih po iskazanoj agresivnosti. Hospitalizirani alkoholičari iskazali su veću latentnu i manifestnu agresivnost kao crtu ličnosti.

Rezultati istraživanja pokazuju da faktori ličnosti nisu presudni u tome hoće li će alkoholičar izvršiti krivično djelo, a budući da su faktori alkoholizma držani pod kontrolom (obje skupine su alkoholičari), preostaje da su faktori situacije ono čime je kazneno djelo najčešće determinirano. Alkoholičari su visoko rizična kriminogena skupina, te jedino zahvat u prevenciji i liječenju indirektno prevenira njihovo kriminogeno ponašanje.

**Ključne riječi:** agresivnost; alkoholičari; kriminogeno ponašanje

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