

**RESEARCH ARTICLE****Alcohol Consumption among Sexual Offenders in the Context of Analysis of Forensic Psychiatric Assessments.****Authors**

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**Abstract**

**Introduction:** The association of alcohol use with committing sexual offences is well established. However, there are still gaps in knowledge about the mechanisms which lead to alcohol overuse and related sexual violence occurring under the influence of alcohol among this group of perpetrators.

**Goal:** The goal of this paper is to describe characteristics of perpetrators of sexual offences with regards to their self-declared alcohol use status: “overusing” – declaring overusing alcohol, “not-overusing” – declaring not overusing alcohol, and “abstaining” – declaring abstinence from alcohol.

**Material and Methods:** Material for this study consisted of 180 individual forensic psychiatric reports issued by the experts from the Mental Health Clinic at the 10th Military Clinical Hospital in Bydgoszcz. The reports were reviewed by the study authors. Relevant data from was extracted using the survey tool developed for the purpose of this study: “Survey of Factors Determining Sexual Criminal Behaviour”

**Results:** Statistically significant associations between several studied variables were noted and presented in table format, see tables 1-3 for details.

**Conclusions:**

1. Disinhibiting effect of alcohol on sexual offending is associated with coexisting personality disorders and organic personality disorders.
2. Perpetrators of sexual offences overusing alcohol are characterized by poor levels of social functioning and personal history of being raised in dysfunctional families with alcohol problems.

**Key words:** sexual offences, alcohol overuse, personality disorders.

## **Introduction:**

Sexual offenders are often already linked to psychiatric care and the health care system in general prior to criminal offending.<sup>1</sup> The phenomenon of criminal sexual offending creates challenges with regards to terminology and diagnosis as well as several forensic, legal, ethical and methodological considerations.<sup>2</sup> For example, a diagnostic tool such as penile plethysmography (PPG) has gained both proponents and opposition from the experts. The proponents emphasize the utility of PPG in determining response to various types of sexual stimuli, including those considered deviant, as well as determining the risk of sexual re-offending.<sup>3-8</sup> The opponents of PPG raise concerns about lack of standardization and ethical and legal implications of PPG methodology involving exposure to stimuli such as paedophilic content, and overall limitations related to interpreting responses in laboratory environment.<sup>9,10</sup> Furthermore, the use of PPG has objectively demonstrated that images depicting exposed underage females, or their genital regions, could result in sexual arousal in adult males without deviant tendencies, which further complicates existing methodological challenges with PPG.<sup>11</sup> It should be emphasized that deviant sexual fantasies are common in a population of individuals who do not commit acts of sexual violence and only a small proportion of sexual offenders exhibits signs of paraphilia.<sup>12</sup> Sexual violence is determined by multiple factors and interactions between these factors.<sup>13</sup> Some authors emphasize the importance of general criminogenic theories.<sup>14</sup> Factors related to criminogenicity *sensu lato* are often accurate predictors for sexual offences.<sup>15</sup> Most sexual offenders do not present with major mental illness.<sup>16</sup> The factors influencing the risk of sexual offending and future re-offending can be generally categorized in two major groups:

1. Static variables. These variables include pre-existing personality disorders and psychosocial problems, alcohol overuse, severity of committed sexual violence and prior antisocial incidents.<sup>17-20</sup>
2. Dynamic variables. These variables include deficits in the ability to form close relationships, impairment of sexual autoregulation, pre-existing patterns of aggressive behaviour, low level of interpersonal functioning, general impairment of self-regulation, deviant arousal and psychological identification with minors for paedophilic offences.<sup>21-25</sup>

The factors determining high and low risk of re-offending have not yet been identified.<sup>26</sup>

However, it has been demonstrated, that a prior category of criminal sexual offence can be predictive of a category of offence in the event of re-offending.<sup>27</sup> The rate of recidivism for subsequent sexual offences is generally considered low and estimated to be 13.4-13.7% on average.<sup>15</sup>

An accurate estimate of re-offending risk requires a combination of multiple assessment tools (tests, questionnaires) and comprehensive clinical examination.<sup>28</sup>

A complex model describing processes related to sexual offences is being proposed by a Multiaxial Risk Appraisal (MARA).<sup>29</sup> This model takes into account the current research on autoregulation and mechanisms by which the perpetrators control and direct their own behaviours.

With regards to alcohol use and its role in sexual offending, the emphasis is on the complexity of the phenomenon and dynamic association between alcohol use and criminal behaviours overall.<sup>30,31</sup> The model of alcohol consumption is determined by socio-cultural conditions. For example, the association between alcohol use and acts of violence reflects cultural expectations regarding the effects of alcohol and can include alcohol consumption as justification for these acts.<sup>32</sup> Alcohol use is also being linked to other issues broadly considered as social stress.<sup>33,34</sup>

The research done by *Pernanen K*,<sup>35</sup> on the relationship between alcohol use and criminal behaviours proposed four possible mechanisms:

1. Alcohol reduces inhibitions which enables criminal and deviant behaviours.
2. Alcohol changes the activity of neurotransmitters, which leads to an increase in aggressive behaviours.
3. Chronic alcoholism leads to cerebral cortex dysfunction, specifically of the temporal lobes, which facilitates pathological behaviour.
4. Alcohol leads to hypoglycaemia and disruption of the REM phase of sleep, which leads to irritability and aggressiveness.

Generally, addictions are considered to be the contextual factors (triggers) leading to sexual criminal behaviours.<sup>36-40</sup>

The population of convicted individuals and sexual offenders is typically characterized by a high prevalence of psychoactive substance use, including alcohol.<sup>41,42</sup> Alcohol overuse affects approximately 30% of perpetrators with and without diagnosed paraphilia,<sup>43</sup> whereas 60% of persons committing paedophilia exhibit disorders related to the overuse of psychoactive substances in general.<sup>44</sup> Sexual offenders with paraphilia present with a combination of alcohol use and anxiety disorders.<sup>45</sup>

Nearly half of the victims of rape reported that the perpetrator was under the influence of alcohol or drugs.<sup>46</sup> The population of perpetrators of sexual offences demonstrates a combination of psychoactive substance overuse, personality disorders,<sup>47,48</sup> and a poor level of social functioning.<sup>49-51</sup>

**Goal:** The goal of this paper is to describe the characteristics of perpetrators of sexual offenders with regards to their self-declared alcohol use status: „overusing” – declaring overusing alcohol, „not- overusing” – declaring not overusing alcohol, „abstainers” – declaring abstinence.

### **Materials and methods:**

Material for this study consisted of 180 individual forensic psychiatric reports issued by the experts from the Mental Health Clinic at the 10th Military Clinical Hospital in Bydgoszcz.

The reports were reviewed by the study authors. Relevant data from was extracted using the survey tool developed for the purpose of this study - „Survey of Factors Determining Sexual Criminal Behaviour”.

The reports were issued for male individuals who committed sexual offences (Chapter XXV of the Polish Criminal Code: „Offences against sexual inviolability and morality”).

Paraphilia (sexual preferences disorder) was identified in 5 subjects which constituted 2.8% of all offenders for whom the forensic psychiatric reports were issued.

The survey tool captured data regarding details of the committed offence. Only offences for which the studied offenders were convicted were included in the survey. The category of offences was determined according to the classification found in the Polish Criminal Code from 1997. The survey captured the individuals’ prior criminal and regulatory offences record, demographics, psychomotor development during childhood and adolescence, details of their family situation and factors affecting early childhood development, educational achievement, military service, history of alcohol and other substance use, somatic conditions, prior psychiatric therapy and any prior clinical diagnosis according to ICD-10. The psychological assessment used the following diagnostic tests: 1. A Visual Motor Gestalt Test Lauretta Bender. 2. Benton Visual Retention Test. Abigail Benton Sivan. 3. Minnesota Multiphasic Personality Inventory (MMPI).

The survey was completed by the researchers using information from the forensic psychiatric reports for all individual subjects of this study. Data from the survey were transferred to the Excel spreadsheet and

statistical analysis was done using features of the Excel spreadsheet.

The analysis was conducted to determine the strength of association between alcohol intake level (overusing, not-overusing, abstainers) and other variables. The descriptive interpretation of results included associations for which the p-value of Chi square Person's test was less than 0.05.

**Results:**

General characteristics (structural indicators)

In the study group (N=180) alcohol overuse was declared by 19.49% (n=35) perpetrators. Not overusing was declared by 77.8% (n=140) perpetrators, whereas abstinence was declared by 2.8% (n=5). Due to the small number of this last group it has been excluded from further analysis.

With regards to the particular types of sexual offences committed (n=180), the analysis revealed the following: rape of an adult in 22.8% (n=41), paedophilic act in 49.5% (n=89), rape of a minor in 23.3% (n=42), other sexual offences in 4.4% (n=8) of all perpetrators.

Detailed characteristics of perpetrators (statistical associations)

Based on the results, several characteristic features have been identified in the perpetrators of sexual offences. The associations between declared alcohol use status (overusing, not-overusing, abstainers) and other variables are presented in the tables below (the p-value <0.05 Pearsons's Chi square) (Tables 1-3).

**Table 1.** Summary of features characterizing perpetrators of sexual offences – psychosocial features and their association with declared pattern of alcohol use (*p < 0.05 for Pearson  $\chi^2$* ).

<b>Perpetrator's characterizing feature</b>	<b>Overusing (N=35)</b>	<b>Not-overusing (N=140)</b>	<b>Abstainers (N=5)</b>
Commitment of sexual offence under the influence of alcohol	68.6% (24)	44.3% (62)	40% (2)
Prior criminal record:			
- no prior conviction	22.9% (8)	75.7% (106)	100% (5)
- prior conviction as a minor	0.0% (0)	2.1% (3)	0.0% (0)
- one court conviction	34.3% (12)	7.1% (10)	0.0% (0)
- multiple court convictions	42.9% (15)	15.0% (21)	0.0% (0)
Prior criminal activity:			
- no prior	22.9% (8)	75.0% (105)	100% (5)
- against property	34.3% (12)	12.1% (17)	0.0% (0)
- against family (domestic violence)	22.9% (8)	0.0% (0)	0.0% (0)
- against sexual inviolability and morality	5.7% (2)	0.7% (1)	0.0% (0)
- other	14.2% (5)	12.2% (17)	0.0% (0)

Age (years):			
- < 18	0.0% (0)	2.1% (3)	0.0% (0)
- 19-35	40.0% (14)	39.3% (55)	0.0% (0)
- 36-50	57.1% (20)	41.4% (58)	60% (3)
- 51-65	2.9% (1)	13.6% (19)	40% (2)
- > 60	0.0% (0)	3.6% (5)	0.0% (0)
Marital status:			
- single	40.0% (14)	35.0% (49)	0.0% (0)
- married	31.4% (11)	41.4% (58)	60% (3)
- divorced	14.3% (5)	8.6% (12)	0.0% (0)
- widower	0.0% (0)	2.9% (4)	40% (2)
- separated	2.9% (1)	3.6% (5)	0.0% (0)
- common law	11.4% (4)	8.6% (12)	0.0% (0)
Education:			
- elementary	71.4% (25)	38.5% (54)	40% (2)
- vocational	20% (7)	27.9% (39)	40% (2)
- secondary	8.6% (3)	22.9% (32)	0.0% (0)
- post secondary	0.0% (0)	10.7% (15)	20% (1)
Employment status:			
- full time	40% (14)	64.3% (90)	0.0% (0)
- part time/seasonal	34.3% (12)	16.4% (23)	20% (1)
- not employed	5.7% (2)	2.9% (4)	40% (2)
- receiving disability benefits	20% (7)	16.4% (23)	40% (2)
Residence:			
- urban	68.6% (24)	87.9% (123)	80% (4)
- rural	31.4% (11)	12.1% (17)	20% (1)

**Table 2.** Summary of features characterizing perpetrators of sexual offences – sexual development and their association with declared pattern of alcohol use ( $p < 0.05$  for Pearson  $\chi^2$ ).

<b>Perpetrator's characterizing feature</b>	<b>Overusing (N=35)</b>	<b>Not-overusing (N=140)</b>	<b>Abstainers (N=5)</b>
Self-assessment of current relationship			
- positive	8.6% (3)	23.6% (33)	80% (4)
- negative	28.6% (10)	23.6% (33)	0.0% (0)
- neutral	14.3% (5)	13.6% (19)	0.0% (0)
- not applicable (single, divorced)	48.6% (17)	39.3% (55)	20% (1)
Source of information regarding sexuality:			
- parents	0.0% (0)	5.0% (7)	0.0% (0)
- peers	68.6% (24)	84.3% (118)	100% (5)
- media	31.4% (11)	10.7% (15)	0.0% (0)
Number of sexual relationships:			
- many (> 5)	5.7% (2)	20.0% (28)	0.0% (0)
- few (< 5)	94.3% (33)	72.9% (102)	80% (4)
- brak odpowiedzi	0.0% (0)	7.1% (10)	20% (1)
Parents' health status:			
- healthy	11.4% (4)	27.1% (38)	40% (2)
- somatic diseases	80.0% (28)	50.0% (70)	60% (3)
- psychiatric diseases	8.6% (3)	22.9% (32)	0.0% (0)
Raised in families with alcohol problems	42.9% (15)	23.6% (33)	0.0% (0)
Experiencing learning difficulties during school years	71.4% (25)	42.9% (60)	0.0% (0)

**Table 3.** Summary of features characterizing perpetrators of sexual offences – psychobiological factors and their association with declared pattern of alcohol use ( $p < 0.05$  for Pearson  $\chi^2$ ).

<b>Perpetrator's characterizing feature</b>	<b>Overusing (N=35)</b>	<b>Not-overusing (N=140)</b>	<b>Abstainers (N=5)</b>
Past history of treatment for alcohol addition	37.1% (13)	4.3% (6)	0.0% (0)
Select elements of somatic condition: - tattoos - presence of scarring post self-mutilation	25.7% (9) 37.1% (13)	13.6% (19) 8.6% (12)	40% (2) 0.0% (0)
Organic CNS changes on psychologic exam	31.4% (11)	21.4% (30)	100% (5)
Clinical assessment of alcohol use pattern: - overuse with harm - addiction syndrome	14.3% (5) 51.4% (18)	3.6% (5) 5.7% (8)	0.0% (0) 0.0% (0)
Organic personality disorders	8.6% (3)	20.7% (29)	60% (3)
Permanent personality disorders: - with antisocial features - personality disorders otherwise not classified	88.6% (31) 62.9% (22) 25.7% (9)	57.9 (81) 28.6% (40) 29.3% (41)	0.0 % (0) 0.0% (0) 0.0% (0)
Assessment of competence: - deemed incompetent - significantly impaired - partially impaired - full	0.0% (0) 5.7% (2) 8.6% (3) 85.7% (30)	5.0% (7) 2.1% (3) 12.9% (18) 80.0% (112)	0.0 % (0) 0.0 % (0) 80% (4) 20% (1)

**Discussion:**

The conducted analysis revealed the prevalence of alcohol overuse among the perpetrators of sexual offences,<sup>41-43</sup> – in the study group alcohol overuse was declared by 19.4% of all perpetrators whereas only 2.8%

of the perpetrators declared abstaining from alcohol.

The results obtained from our study group were lower compared to the results presented by Kafka MP, and Prentky RA, which estimated alcohol overuse prevalence at approximately 30%.<sup>43</sup>



Notably, a large subset of perpetrators in our study reported not overusing alcohol (77.8%) which suggests that self-reported alcohol consumption pattern is not a sole factor determining criminal sexual behaviour, and an indirect influence of alcohol consumption on psychopathological *tempore criminis* should be considered. Although the percent of crime committed under the influence of alcohol among the perpetrators declaring alcohol overuse in our study population is higher than the figure for the general population of perpetrators of sexual offences, as described in the study by Marshall VL,<sup>52</sup> – 68.6% vs 50% respectively, it has also been noted that a high percentage of perpetrators acting under the influence of alcohol in our study group (44.3%) were among those declaring not-overusing alcohol, similar to the findings in the study by Marshall WL. The above findings support the notion that alcohol is a primary factor triggering a criminal sexual activity.<sup>41-45</sup> This supports a hypothesis regarding the association of alcohol use (disinhibiting effect) with personality disorders in this population of offenders.<sup>47,48</sup> Overall, the prevalence of diagnosed personality disorders in this population is 88.6%. The predominant disorder is the antisocial personality disorder in 62.9% of the offenders. This notable association between alcohol overuse and antisocial personality disorder has been also indicated in the previous study.<sup>53</sup> This study also confirmed an association between alcohol overuse and poor levels of social functioning,<sup>49-51</sup> which is corroborated by other data from this population such as multiple court convictions, low level of education, difficulty with getting or maintaining employment, marital conflict, inability to initiate and maintain relationships. Notably, personality disorders are also prevalent in the group not overusing alcohol (57.9%), which is consistent with overall high prevalence of personality disorders

(approximately 50%) among all perpetrators of sexual offences.<sup>54</sup>

Both groups, overusing and non-overusing alcohol, are characterized by a history suggestive of a disrupted socializing role of the family (families with alcohol related problems) – 42.9% and 23.6% respectively for individuals declaring overusing and not overusing alcohol. This is likely linked to subsequent poor educational attainment described in individuals declaring overusing and not overusing alcohol, 71.4% and 42.9% respectively.

The studies conducted also reveal a high proportion of individuals with organic CNS pathology, 31.3% of the study population declaring alcohol overuse, which has not been previously demonstrated in methodologically similar studies.<sup>55,56</sup>

It is difficult to determine if the organic CNS pathology is a result of alcohol use or whether it constitutes one of its many determinants. However, a significant proportion of individuals experiencing learning difficulties at school (71.4%) would suggest that their primary cause was related to the personality maldevelopment most likely resulting from pathological family relationships – individuals in the study group indicated problems with alcohol use in 42.9% of their parents. Parental use could be considered as a predisposing factor for chronic alcohol use based on the compensation for maladaptive personality defence mechanisms.<sup>47,48</sup> This mechanism and pathway could explain an outcome of an organic CNS injury.

Perpetrators not overusing alcohol often (21.4%) demonstrate changes in the CNS but these changes are more commonly presenting clinically with an organic personality disorders (20.7% vs 8.6%), which would justify the assumption of their role as a primary pathophysiological factor decompensated during alcohol intoxication.

The above data support the hypothesis that the relationship between sexuality and alcohol intoxication alone creates a complex



psychopathological picture.<sup>57</sup> The alcohol is thought to neutralize intrinsic factors inhibiting sexual drive in humans especially when other anomalies in the psychological sphere exist.<sup>58</sup>

To summarize, our research findings are consistent with three major multifactorial theories describing mechanisms of sexual violence towards children.<sup>21,59,60</sup> In the theory by Finkelhor D,<sup>59</sup> the mechanism related to disinhibition of the perpetration resulting from alcohol consumption and presence of impulsive disorders, which can be linked to organic personality disorder. In the theory of Marshall WL and Barbaree HE,<sup>60</sup> mechanism related to poor social functioning skills since the early years of life and elements of inconsistent parenting (parental alcoholism). Whereas in the theory by Hall GCN and Hirschman R,<sup>21</sup> mechanism including features of poor affective control which could be caused by organic changes in the CNS (15.7% of perpetrators). In summary, the mechanisms proposed in all three theories are complementary and constitute a dynamic model for various initial factors and their compilation which in effect leads to sexual offending as indicated by Beech AR and Ward T.<sup>61</sup> This also leads to a hypothesis that the presence of psychopathological changes could constitute a basis for insufficient inhibition during sexual arousal which would

be otherwise present and regulate behaviours in persons without underlying psychopathological changes.<sup>58</sup>

The main limitation of the present study is the lack of comparison of association with alcohol use between the perpetrators of sexual offences with and without coexisting paraphilia. Given that paraphilia was diagnosed only in a small percentage of perpetrators (2.8% of the study group – in 5 individuals), it can be assumed that the data presented are representative only for the perpetrators of sexual offences without coexisting paraphilia.

Our suggestion for future direction of studies involving perpetrators of sexual offences overusing alcohol is a continuation to explore cultural,<sup>32</sup> biological,<sup>35</sup> and psychological,<sup>62</sup> aspects and how their interrelationships influence criminal sexual behaviour.

## **Conclusions**

1. Disinhibiting effect of alcohol on sexual offending is associated with coexisting personality disorders and organic personality disorders.
2. Perpetrators of sexual offences overusing alcohol are characterized by poor levels of social functioning and personal history of being raised in dysfunctional families with alcohol problems.

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