

Self-mutilation among male patients with alcohol dependency: the role of dissociation

Cuneyt Evren^{a,*}, Vedat Sar^b, Bilge Evren^c, Ercan Dalbudak^a

^a*Alcohol and Drug Research, Treatment and Training Center (AMATEM), Bakirkoy State Hospital for Mental Health and Neurological Disorders, Istanbul 34147, Turkey*

^b*Clinical Psychotherapy Unit and Dissociative Disorders Program, Department of Psychiatry, Medical Faculty of Istanbul, Istanbul University, Istanbul 34093, Turkey*

^c*Department of Psychiatry, Baltalimani State Hospital for Muskuloskeletal Disorders, Istanbul 34470, Turkey*

Abstract

The aim of this study was to investigate the relationship of self-mutilative behavior with dissociative experiences among men who are alcohol dependent. Participants were 176 inpatients consecutively admitted to an alcohol dependency treatment center. Dissociative Experiences Scale, Beck Depression Inventory, State-Trait Anxiety Inventory, Symptom Checklist-Revised, and Michigan Alcoholism Screening Test were conducted to all participants. A sizable proportion of patients (29.0%) reported self-mutilation (SM). Childhood abuse, younger age, early onset of alcoholism, and dissociative taxon membership predicted SM. The overall severity of clinical condition and the frequency of suicide attempts among those who reported SM were higher than those of the remaining patients. The Dissociative Experiences Scale-Taxon item “auditory verbal hallucinations” and the Symptom Checklist-Revised dimension “hostility” were predictors of SM. There is a complex relationship between dissociation, alcohol use, and SM. Increased awareness among clinicians on this relationship may increase the effectiveness of treatment interventions.

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1. Introduction

Self-mutilation (SM) has been defined as “deliberate self-injury to body tissue without the intent to die” [1–4]. This is an act performed by oneself intentionally and purposefully but without having any aim of suicide. Self-mutilation typically starts in adolescence and involves numerous episodes and a variety of methods, including cutting, burning, slapping, binging, picking, and bone breaking [5,6]. Self-mutilation has not been defined as a syndrome with clear boundaries because acts of SM vary greatly and depend on the imagination of the self-mutilator. As a symptom, SM has typically been regarded as a self-destructive behavior and may be misidentified as a suicide attempt [2]. Self-mutilators report a range of motivations, including self-punishment, tension reduction, improvement

in mood, and distraction from intolerable affects, all which might be at least a partial explanation for this act [2,7].

In addition, it has been hypothesized that SM terminates the discomfort of dissociative experiences, in particular, the feeling of deadness and depersonalization [4]. Indeed, many patients report feeling of numb and “dead” before they mutilate themselves [8]. They often claim not to experience pain during self-mutilative act and report a sense of relief and feeling better afterward [2,7,8], which was supported by physiological evidence [9]. Bohus et al [10] distinguished analgesic SM, in which there is increased threshold for pain perception, from nonanalgesic SM. They report that analgesic SM begins at a younger age, and patients who engage in this are likely to have more abuse histories and higher dissociation scores than do those with nonanalgesic SM. Nevertheless, episodes of dissociation may also occur because of the intense emotions that self-mutilators feel [11]. Individuals who dissociate may describe feeling unreal or nothing at all, and SM may be a way to generate emotional and physical sensations that allow individuals to feel real or alive again, thus ending episodes of dissociation, depersonalization, or derealization [11]. After evaluation of both

* Corresponding author. Icadiye Cad, Mentesh Sok, Selcuk Apt, 1/17 Kuzguncuk, 34674 Uskudar, Istanbul, Turkey. Tel.: +90 216 3410609, +90 532 6040946 (GSM); fax: +90 212 6600026.

E-mail addresses: cuneytevren@yahoo.com, cuneytevren@hotmail.com (C. Evren).

types of findings, studies provide modest evidence for antidissociation function of SM [11].

Self-mutilation is encountered frequently in inpatient [6] and outpatient [12] psychiatric settings. These patients may have major depression, anxiety, posttraumatic stress disorder, schizophrenia [4,13,14], impulse control disorder [3], eating disorder [14,15], and last but not the least, dissociative disorder [1]. Self-mutilation may also be present among patients with various personality disorders [16], especially antisocial [3] and borderline personality disorder [4,17,18]. Mixed results have been found regarding the associations between SM and substance abuse. Several studies have reported associations between substance abuse and SM [4,19–21], but at least one study has not confirmed this relationship [22]. In a sample of general psychiatric outpatients, substance abuse was significantly related to SM, independent of borderline personality and antisocial personality disorder [4]. The rate of SM ranged between 33.0% and 34.6% among treatment-seeking patients who were substance dependent in Turkey [23,24], whereas this rate was found to be 21.4% among high school students [25] and 4% in the general population [1]. None of these studies are longitudinal, and therefore, they do not provide information about causal relationships among dissociation, SM, and substance abuse.

The present study hypothesizes that there is a relationship between SM and dissociative experiences among male patients with alcohol dependency. To take the possible influence of other factors in consideration, we also assessed the severity of alcoholism and various dimensions of psychopathology. We assume that a possible relationship between dissociation and SM has clinical relevance because there are reports that both phenomena may point to treatment resistance in this population [23,26]. To our knowledge, this is the first study evaluating the relationship between SM and dissociative experiences among subjects with alcohol dependency, which is an important phenomenon in clinical settings. Conducted in Turkey, this study provides knowledge in a cross-cultural context as well.

2. Methods

2.1. Settings and sample

The study was conducted in Bakirkoy State Hospital for Psychiatric and Neurological Diseases, Alcohol and Drug Research, Treatment and Training Center (AMATEM) in Istanbul between December 2005 and July 2006. AMATEM is a specialized center for substance use disorders with 100 inpatient beds and accepts patients from all over Turkey. The ethical committee of the hospital approved the study. Patient's written informed consent was obtained after the study protocol was thoroughly explained.

Two hundred consecutively admitted inpatients who were alcohol dependent without history of any other substance abuse were considered for participation in the study. All

participants fit the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* diagnostic criteria for alcohol dependence. Excluding criteria were illiteracy, mental retardation or cognitive impairment, and comorbid psychotic disorder. Five patients were excluded because of illiteracy and 3 patients, because of cognitive deficits. Although none of the patients refused to participate in the study, 16 patients were excluded because they left some parts of the scales unanswered, did not give the forms back, or left the treatment program prematurely, that is, before filling the forms. A total of 176 inpatients who were alcohol dependent participated in the study. Interviews with the study group were conducted after a detoxification period, that is, 4 to 6 weeks after the last day of alcohol use. Of the 176 patients, 101 were married, 52 were divorced or separated, and only 23 had never married. Eighty-seven patients were employed, 32 were either retired or on education, and 57 patients were unemployed. The mean duration of education was 9.8 years (SD = 4.0 years). Inpatients who were alcohol dependent with a history of SM constituted the SM group ($n = 51$), and those without SM constituted the group without SM ($n = 125$). Consistent with previous studies conducted among inpatients who were substance dependent [23,24], the rate of SM among male inpatients who were alcohol dependent was 29.0% in present study.

2.2. Measures

2.2.1. Dissociative Experiences Scale

Dissociative symptoms were assessed using the 28-item self-report Dissociative Experiences Scale (DES) [27]. The DES is not a diagnostic tool but serves as a screening device for chronic dissociative disorders. Responders are asked to rate various dissociative experiences that are occurring in their daily life when they are not under the influence of alcohol or drugs. For each item, possible scores range from 0 to 100. The DES is a highly reliable and internally consistent questionnaire. It has adequate test-retest reliability, good split-half reliability, and good clinical validity. The Turkish version of the scale has reliability and validity as high as those of its original form [28,29]. Cronbach α was .95 in the present study. There is also a taxon form of the scale (DES-T) derived from 8 of the original items. Taxometric analysis of these items yields a high probability that an individual is in 1 of 2 discrete categories: normal or having pathological dissociation [30]. The DES-T has the potential to be used as a dimensional measure but might also be used as a categorical index of high and low dissociators [31]. Cronbach α was .86 for DES-T in the present study.

2.2.2. Michigan Alcoholism Screening Test

The severity of dependence was assessed by using the Michigan Alcoholism Screening Test (MAST) [32], which was developed as a "rapid and effective screening for lifetime alcohol-related problems and alcoholism" for a variety of populations. It consists of 25 brief true-false items that are self-administered in approximately 10 minutes.

Scoring is accomplished after reverse scoring 4 of the 25 items and assigning weighed scores. These weighed scores are then summed; the sum represents a total score reflecting severity of alcohol-related problems. The Turkish version of the MAST is valid and reliable for screening the severity of dependency of both patients who are alcohol dependent and patients who are drug dependent [33]. The Cronbach α was .74 in the present study.

2.2.3. Symptom Checklist–Revised

Psychopathological symptoms were assessed using the widely used 90-item Symptom Checklist-Revised (SCL-90-R), a self-rating inventory with 9 clinical scales for somatization, obsessive compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism [34]. The total score and the global severity index (GSI) were considered as a measure of overall psychopathology. The SCL-90-R is a reliable and valid measure of psychopathology and is widely used in psychosomatic researches. In the present study, the Turkish version of the SCL-90-R was used [35]. Cronbach α was .98 in the present study.

2.2.4. Childhood trauma reports

Childhood emotional, physical, and/or sexual abuses were screened using a history form based on definitions by Walker et al [36] for emotional abuse and Brown and Anderson [37] for physical and sexual abuse. Report of any of these abuse types was considered as the presence of a history of childhood trauma. Physical abuse cases included injuries such as bruises, welts, burns, abrasions, lacerations, wounds, cuts, bone and skull fractures, and other evidence of physical injury. Sexual abuse cases varied from those involving relatively nonspecific charges of “assault and battery with intent to gratify sexual desires” to more specific ones as “fondling or touching in an obscene manner,” sodomy, incest, and so forth. Emotional abuse involves the use of excessive verbal threats, ridiculous and personally demeaning comments, derogatory statements, and threats against the young person to the extent that a child’s emotional and mental well-being will be jeopardized. This semistructured form was developed for and used successfully in previous studies on patients with substance dependency in Turkey [23,24].

2.2.5. Interview for self-mutilative behavior

A semistructured interview inquiring a history of self-mutilative behavior was conducted to all patients. This interview was developed for and used successfully in previous studies on patients with substance dependency in Turkey [23,24]. Self-mutilation was defined as “deliberate self-injury to body tissue without having the intent to die” [11]. Subsequent items concerning type of self-mutilative behavior were also included in the interview (cutting, burning, hitting oneself, inserting sharp objects into body orifices, and pulling out body hair). This definition is similar to the superficial/moderate SM in Favazza’s [2] classifica-

tion. After detailed inquiry, all patients who had an affirmative answer got a physical examination concerning any sequelae of SM. This was done to gain some information about the presence, the severity, and the frequency of SM. Duration and number of lifetime episodes of self-mutilating behavior and the age at onset of self-mutilating behavior were also inquired. Each incidence of self-mutilative behavior separated from other was considered as episode of SM, which supplied information about the recurrence and the severity of SM. Prompting events for SM were not assessed.

2.2.6. State-Trait Anxiety Inventory

As a measure of state and trait anxieties, the state and trait form of Spielberger’s State-Trait Anxiety Inventory (STAI) [38] was used. The STAI is a 40-item self-report instrument designed to assess state and trait anxiety. Participants indicated their agreement with each item on a Likert scale ranging from 1 = “not at all” to 4 = “very much so.” The Cronbach α was .91 for state anxiety and .87 for trait anxiety in the present study.

2.2.7. Beck Depression Inventory

Symptoms and severity of depression were evaluated by using the Beck Depression Inventory (BDI) [39], Turkish version [40]. The Cronbach α was .90 for BDI in the present study.

2.2.8. Sociodemographic and clinical history form

Patients were also assessed using a semistructured sociodemographic and clinical history form. Other sources like clinical charts and family and hospital records were used as much as possible for the purpose of the best estimate diagnostic process and to obtain other relevant clinical information. The presence of suicide attempts was assessed by the clinical interview or through the review of the clinical charts. A suicide attempt was defined as the intent to die accompanied by self-destructive behavior, thus not including suicidal ideation, rumination, or plans.

2.3. Data analyses

The statistical package SPSS 11.5 for Windows was used for all the analyses. Categorical variables were compared by means of the χ^2 statistics. Odds ratios and 95% confidence intervals (CIs) were calculated. We used independent samples *t* test to compare the groups on continuous variables. Taking SM as dependent variable, forward stepwise logistic regression model was performed. For all statistical analyses, *P* values were considered significant at *P* < .05.

3. Results

Among 176 patients, 29% (*n* = 51) reported SM. The types of SM were self-cutting (*n* = 25), hitting one’s head or extremities to the wall or another hard surface (*n* = 19), and self-burning (*n* = 7). The mean \pm SD number of SM episodes

Table 1
Scale scores among men who are alcohol dependent according to the SM status

Scale scores	No SM (n = 125)		With SM (n = 51)		t	P
	Mean	SD	Mean	SD		
	SCL-90-R GSI	1.3	0.7	1.8		
MAST	28.0	10.4	32.2	8.3	-2.84	.005 ^a
STAI-II (trait anxiety)	49.1	9.4	53.7	8.1	-3.05	.003 ^a
DES	22.2	16.6	31.0	21.3	-2.63	.010 ^a
BDI	15.4	9.8	19.7	10.3	-2.57	.011 ^a
STAI-I (state anxiety)	40.8	10.9	44.0	10.0	-1.84	.068

^a Statistically significant.

was 4.7 ± 4.6 (range, 1 to 15). Patients with SM were younger (mean age = 38.8 years, SD = 7.7 years) than the patients without SM (mean age = 44.8 years, SD = 7.9 years) ($t = 4.56, P < .001$). There was no difference in education between self-mutilators (mean = 9.3 years, SD = 3.8 years) and non-self-mutilators (mean = 10.0 years, SD = 4.0 years) ($t = 1.11, P = .27$). Mean \pm SD age at first SM was 25.2 ± 9.6 years (range, 11.0- 48.0 years). Patients with SM started alcohol use earlier (mean age = 16.1 years, SD = 4.0 years) than did the remaining patients (mean age = 19.7 years, SD = 5.6 years) ($t = 4.79, P < .001$). Similarly, the alcohol use became regular for the SM group at a younger age (mean = 22.9 years, SD = 6.7 years) than for the non-SM group (mean = 27.8 years, SD = 7.5 years) ($t = 4.06, P < .001$). Both mean age of alcohol use onset ($r = 0.30, P = .32$) and mean age at regular alcohol use ($r = 0.50, P < .001$) were correlated with the mean age of SM onset. Forty-five (88.2%) patients reported that they were intoxicated with alcohol before the act of SM.

The mean scores of all scales used in the study were higher in the SM group than in the non-SM group, except state anxiety (Table 1). This observation suggests that the SM group had, overall, a more severe psychopathological condition, as represented also in the increased GSI score of the SCL-90-R.

Dissociative taxon membership, suicide attempt history, and childhood abuse history were higher among the group with SM (Table 2). However, when only the SM group was evaluated, age at onset of SM (23.9 ± 8.2 years) and number of SM episodes (4.2 ± 3.9) in the dissociative taxon members

Table 2
DES-T membership, childhood abuse, and suicide attempt history among men who are alcohol dependent with and without SM

	No SM (n = 125)		With SM (n = 51)		χ^2	SD	P
	n	%	n	%			
	DES-T membership ^a	32	25.6	26			
Suicide attempt ^b	16	12.8	21	41.2	17.57	1	<.001
Any childhood abuse ^c	53	42.4	39	76.5	16.85	1	<.001

^a Odds ratio = 3.02 (95% CI = 1.53-5.97).

^b Odds ratio = 4.77 (95% CI = 2.22-10.26).

^c Odds ratio = 4.42 (95% CI = 2.11-9.23).

Table 3
Determinants of SM in forward stepwise logistic regression model

	B	SE	Wald	df	P	Exp(B)	95% CI
Young age	-0.099	0.029	11.451	1	.001	0.91	0.86-0.96
Childhood abuse	-1.294	0.415	9.720	1	.002	0.27	0.12-0.62
Early onset of alcohol use	-0.143	0.048	8.980	1	.003	0.87	0.79-0.95
DES-T membership	-0.954	0.402	5.636	1	.018	0.39	0.18-0.85

Age, age at first alcohol use, DES-T membership, history of any childhood abuse, history of suicide attempt, scores on the BDI, STAI and MAST were covariates.

(dissociative group) (n = 26) did not differ from those in nonmembers (n = 25) (26.5 ± 10.9 years and 5.3 ± 5.4 , respectively) ($t = 0.99, P = .33; t = 0.83, P = .41$, respectively). Similarly, in the SM group, age at onset of SM (26.1 ± 10.1 years) and number of SM episodes (5.0 ± 4.9) in patients with a history of childhood abuse (n = 39) did not differ from those in patients without such history (n = 12) (22.3 ± 7.5 years and 3.9 ± 3.9 , respectively) ($t = -1.20, P = .24; t = -0.69, P = .50$, respectively). But among patients in the SM group, age at onset of SM (22.1 ± 8.6 years) was lower and number of SM episodes (6.7 ± 5.3) was higher in patients with a history of suicide attempt (n = 21) than in patients without history of suicide attempt (n = 30) (27.3 ± 9.8 years and 3.4 ± 3.6 , respectively) ($t = 1.96, P = .056; t = -2.48, P = .018$, respectively).

Taking SM as a dependent variable, forward stepwise logistic regression model was performed. Age, age at first alcohol use, DES-T membership, history of any childhood abuse, history of suicide attempt, BDI, STAI, and MAST scores were covariates in this model. Younger age, childhood abuse, earlier onset of alcohol use, and DES-T membership were determinants for SM (Table 3).

A logistical regression analysis when SM was taken as dependent variable and the 8 DES-T items as independent variables revealed that only 1 item predicted SM significantly: hearing voices inside one's head ($B = 0.016, P = .005, Wald = 7.74, Exp(B) = 1.02, 95.0\% CI = 1.01-1.03$).

Table 4 demonstrates the determinants of SM and dissociation when the 9 dimensions of SCL-90-R were taken as independent variables. Both hostility and obsessions predicted dissociation, whereas hostility was the only predictor for SM.

Table 4
Determinants of DES-T membership and SM (logistic regression analysis when the SCL-90-R dimensions are taken as independent variables)

Dependent variable	B	SE	Wald	df	P	Exp(B)	95% CI
DES-T membership							
Obsessionality	0.98	0.35	7.66	1	.006	2.66	1.33-5.31
Hostility	0.75	0.25	8.84	1	.003	2.12	1.29-3.48
Constant	-3.63	0.61	35.29	1	<.001	0.03	
SM							
Hostility	1.25	0.21	28.94	1	<.001	3.08	2.04-4.64
Constant	-2.81	0.39	44.84	1	<.001	0.08	

Table 5
Predictors of age of onset and number of episodes of SM among male patients with alcohol dependency

	<i>B</i>	SE	β	<i>t</i>	<i>P</i>
Constant ^a	11.496	4.517		2.545	.014
BDI	-0.225	0.107	-.240	-2.095	.042
Early onset of alcohol use	0.789	0.164	.551	4.821	<.001
Constant ^b	1.813	3.362		0.539	.592
MAST	0.195	0.076	.348	2.575	.013
BDI	0.162	0.061	.358	2.650	.011
Early onset of alcohol use	-0.174	0.084	-.252	-2.068	.044
DES-T	-0.101	0.030	-.471	-3.363	.002

^a Dependent variable: age of SM onset ($F = 14.28$; $df = 2, 48$; $P < .001$; adjusted $R^2 = 0.35$).

^b Dependent variable: number of SM ($F = 6.44$; $df = 4, 46$; $P < .001$; adjusted $R^2 = 0.30$).

In a linear regression analysis, both BDI and early onset of alcohol abuse predicted early onset of SM. On the other hand, number of SM episodes was predicted by severity and early onset of alcohol use, BDI, and dissociation (Table 5). Thus, dissociation does not affect age of onset of SM but its repetitiveness, that is, chronicity.

4. Discussion

Young age [24], childhood physical abuse [23,24], suicide attempt history [23,24], and having a personality disorder [23] have been proposed as determinants of SM among subjects with substance dependency. The present study documented that besides childhood trauma history, young age, and early onset of alcohol use, dissociation is also one of the predictors of SM among men with alcohol dependency. Notwithstanding the possibility of a nondissociative type of SM as well [41], this finding is in accordance with observations gathered by several previous studies indicating a close link between SM and dissociation [42].

Dissociation has been proposed to be a mediator of a possible relationship between childhood abuse and alcohol dependency [43]. Studies usually demonstrate an association between SM and childhood abuse as well [1,2,4,14,18,44–46]. Consistent with previous research conducted among different populations [1,18,44] as well as samples who are substance dependent [23,24], the present study revealed that high rates of childhood abuse were also associated with SM. However, there are also studies showing no link between SM and childhood trauma [47,48]. Among male patients with personality disorder, Zweig-Frank et al [48] found no relationship between childhood abuse and SM, whereas the opposite was shown for female patients [44]. Most subjects with substance dependency report at least 1 traumatic event in their life [46]. These subjects were at higher risk both for SM and an increased level of dissociation. Childhood physical abuse was one of the predictors of SM in 2 further studies on substance dependents [23,24].

In a study conducted on patients with borderline personality disorder, Paris [17] proposed that one of the

functions of SM is to serve as coping with dissociative states. Although personality disorder predicted SM among patients who are substance dependent [23], among them, those with SM had higher rates of dissociation [44]. Favazza [2] suggested that SM could best be understood as a morbid self-help effort providing rapid but temporary relief from feelings of depersonalization, which is a common symptom seen among patients with a dissociative disorder. Auditory verbal hallucinations were a significant predictor of SM in the present study. Because patients with a psychotic disorder were not included in the present study, it is highly probable that the auditory verbal hallucinations reported here belong to dissociative spectrum of psychopathology. Namely, most of the patients with dissociative disorder report hallucinations, which are proposed to be qualitatively distinct than those of a primary psychotic disorder such as schizophrenia [49].

Hostility and obsessionality were predictors of dissociation in the present study, pointing to an inner tension between impulsive tendencies due to anger and compulsive strivings for control of these strong emotions among these patients, an experience of internal dividedness common to patients with dissociative psychopathology. It is noted that SM, dissociation, and childhood abuse are all related to personality disorders, particularly borderline personality disorder, which was not assessed in the present study. However, as borderline personality disorder and dissociative disorders overlap phenomenologically to a large extent, including symptoms such as hearing voices [50], an inquiry on dissection of these phenomena from each other in context of their relationship to SM exceeds the limits of the present study. This overlap between the 2 categories is valid for hostility, obsessionality, and child abuse history as well.

Self-mutilation was also related to suicide attempt history [51,52]. In previous studies among people who are substance dependent [23,24], suicide attempt history predicted SM. Similarly, those with SM in the population among male inmates scored significantly higher on the dissociation scale and suicide attempt–predicted SM in this population [53]. Approximately 55% to 85% of self-mutilators have made at least 1 suicide attempt [54]. This rate was found to be 53.2% [24] and 67.6% [23] in previous studies conducted among people who are substance dependent and 41.2% in the present study among those who were alcohol dependent. It has been hypothesized that the difference between attempted suicide and SM is that in a suicide attempt the person truly wants to die, whereas in the case of SM, the person merely wants to feel better [2]. Self-mutilation is considered distinct from suicidal behavior in its intent of ideation, lethality, and repetition, but they share common experimental qualities [54]. The antisuicide model views SM function as a coping mechanism for resisting urges to attempt suicide, such that SM serves as a replacement for or compromise with the desire to commit suicide [11]. Consistent with this, male sex and substance use disorders are significant risk factors for later suicide in patients with SM [55].

As reflected by several scale scores including the SCL-90-R GSI and the MAST score in the present study, men who are alcohol dependent who have SM had, overall, a more severe clinical condition than did those without SM. In a general population survey, Briere and Gil [1] yielded a link between SM and young age. Previous studies in Turkey also documented that patients with SM were younger, with an earlier age of onset of substance use [23,24]. In one study, SM was found to be related with early-onset (type II) alcoholism [56]. Thus, the relationship between SM and dissociation may illuminate one factor, which leads to earlier onset and to more severe course of alcoholism among men.

Langeland et al [57] proposes that individuals may abuse alcohol to achieve dissociative-like states. Briere and Gil [1] stated that SM may serve to distract the individual from internally experienced emotional distress and may reduce anxiety and depression. Ross and McKay [58] proposed that the ingestion of drugs and alcohol itself is an act of SM and that a drug-induced state may actually trigger SM because of impaired judgment, reduced pain perception, and fantasy stimulation. Whatever the causal relationship of alcohol abuse and SM is, almost 90% of the patients in the present study reported that they were intoxicated with alcohol before the act of SM, supporting the idea that the association between alcohol misuse and SM may reflect the disinhibiting role of alcohol [59]. This may also be the reason for the high correlation between the age of onset of SM and the age at onset of regular alcohol use. The mean age of onset of SM (25.2 years) in the present study was higher than those reported in previous studies conducted among various clinical populations. An average figure obtained in populations who are alcohol dependent that is suitable for comparison is not known yet.

The present study has several limitations. First, the assessment of SM was dichotomous rather than continuous and therefore did not reflect severity. Furthermore, regardless of the objective criteria provided in the definition of physical abuse to include specific physical injuries, these measures are all ultimately based on self-report by the patient and not on objective measures of injury. Second, the findings of this study are of correlational nature, and they cannot speak of the causal relationships among the primary constructs of interest. Third, the inpatient stays in this population are relatively long, which may have led to potential bias of the sample toward severely ill patients who are alcoholic dependent. Fourth, bipolarity was not assessed, which may be also associated with SM [60]. However, it is also possible that SM is a correlate of childhood trauma history and concurrent dissociation among patients with bipolar mood disorder. Fifth, all patients were male. Namely, female patients may have a different profile concerning both dissociative experiences [61] and SM [45]. Nevertheless, Briere and Gil [1], in their general population and clinical population study, found no sex differences in the occurrence of SM. Sixth, regardless of the objective criteria provided for the definition of childhood abuse types, these measures are all ultimately

based on self-report. Seventh, the symptom of hearing voices in one's head could be part of a withdrawal syndrome or alcoholic hallucinosis, which can be quite chronic, even long after detoxification in severely dependent alcoholics.

The main finding of the present study is the consistency with which men who are alcohol dependent who have dissociation and SM are more deviant on virtually every measure assessed. At a minimum, this suggests to the clinician that a history of SM or significant dissociation may alert clinicians to patients with difficult and complex psychopathology who may have more severe and chronic illness. Almost 1 of 10 ($n = 26$; 11.5%) patients with alcohol dependency had both SM and high levels of dissociation in the present study. This subgroup of patients may warrant special attention in management of their clinical condition. Given previous findings about the negative impact of dissociative disorders on short-term treatment outcome among populations who are substance dependent [61], further inquiries on correlates of the SM and dissociation among men who are alcohol dependent may lead to insights useful in treatment interventions with this population.

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