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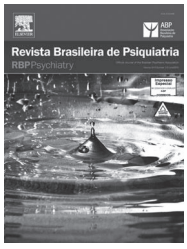

ORIGINAL ARTICLE

Low family support perception: a 'social marker' of substance dependence?

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DESCRIPTORS
Beck Depression Inventory;
Beck Anxiety Inventory;
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Family Support Perception Inventory;
Substance Abuse.

Abstract
Objective: Simultaneously assess the relationship between the family support perception and the intensity of hopelessness, depression, and anxiety symptoms in alcohol or drug dependent (AOD) patients and in non-AOD dependent control group (CON). *Method*: 60 patients who met the DSM-IV criteria for AOD dependence and 65 individuals with similar profile, but not dependent on AOD completed the Family Support Perception Inventory (FSPI), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and Beck Hopelessness Scale (BHS). *Results*: Logistic regression analysis indicated that high scores in family autonomy (OR = 0.08), and low scores in hopelessness (OR = 0.64) were negatively correlated with AOD dependence. Individuals with high scores in BAI had higher probability (OR = 1.22) of belonging to the AOD group, as well as those who reported previous psychiatric treatment (OR = 68.91). Only in the AOD group the total FSPI scores presented significant correlation with depression, anxiety, and hopelessness. *Conclusions*: Individuals with AOD dependence and low scores of family support perception also presented high scores of depression, anxiety, and hopelessness, suggesting that FSPI scores could be a useful 'social marker' of AOD dependence with psychiatric comorbidities. These data also reinforce the relevance of evaluating family support in AOD treatment planning.

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DESCRITORES:
Inventário de Depressão de Beck;
Inventário de Ansiedade de Beck;
Escala de Desesperança de Beck;
Inventário de Percepção de Suporte Familiar;
Abuso de Substâncias.

A baixa percepção de suporte familiar pode ser um "marcador social" da dependência de substâncias?

Resumo
Objetivo: Estudar as relações entre a percepção do suporte familiar e sintomas de desesperança, depressão e ansiedade em pacientes dependentes de álcool ou drogas (AOD) e um grupo-controle (CON). *Método*: Sessenta pacientes que preencheram critérios do DSM-IV para dependência de AOD e um grupo-controle com 65 indivíduos com perfil similar, mas não dependentes de AOD preencheram o inventário de Percepção de Suporte Familiar (IPSF), o Inventário de Depressão de Beck (BDI), o Inventário de Ansiedade de Beck (BAI) e a Escala de Desesperança de Beck (BHS). *Resultados*: Segundo a análise de regressão logística, altos escores de autonomia familiar (OR = 0,08) e baixos escores de desesperança (OR = 0,64) correlacionaram-se negativamente com ser dependente de AOD. Pessoas com altos escores no BAI apresentaram maior chance (OR = 1,22) de pertencer ao grupo AOD, assim como as que relataram já terem sido submetidas a tratamento psiquiátrico (OR = 68,91). Somente no grupo AOD os escores totais no IPSF se correlacionaram significativamente com sintomas de depressão, ansiedade e desesperança. *Conclusões*: Dependentes de AOD com baixa percepção de suporte familiar apresentaram também altos escores de depressão, ansiedade e desesperança, sugerindo que o IPSF poderia ser um útil "marcador social" da dependência de AOD associada a comorbidades psiquiátricas. Os dados reforçam a relevância de avaliar o suporte familiar no planejamento de tratamento para dependência de AOD.

Introduction

Approximately 200 million people use alcohol and other drugs.[1] This high incidence of psychoactive substance use has been associated with several psychiatric disorders, particularly anxiety, depression, and other mood disorders, with major negative impact on the lives of substance dependent individuals.[2,3,4]

Furthermore, even "social drinkers" have shown higher incidence of depressive mood and anxiety than teetotalers.[5,6] Alcohol or drug use frequently triggers feelings of hopelessness and these sensations may facilitate the onset of depression or suicide attempts.[7] In a recent review, Vijayakumar et al.[8] reported a significant association between substance use and suicide. They consider alcohol use disorder a distal risk factor for accomplished suicide and the use of other substances as a trigger for suicidal behavior. However, the direct influence of substances in suicidal behavior needs to be further explored. They also reported that psychiatric comorbidity with substance use increases the risk for suicidal behavior. Several other factors such as family dysfunction and life-cycle problems are also associated with psychiatric disorders and substance abuse risks. Therefore, it is important to evaluate these factors simultaneously, in order to estimate the specific contribution of each one[4]. Although the association between psychoactive substance use and mental health disorders is clear, the causality of this association is not clearly established.[9,10]

Individuals growing up in families lacking clear rules for the use of alcohol or drugs are at greater risk of substance abuse than those who do have clear rules.[11,12] Moreover, poor family relationships, and low self-respect or self-esteem are among the triggering factors associated with alcohol abuse.[13] On the other hand, the family can foster the learning of healthy behaviors and be a source of support for the treatment of individuals with problems due to alcohol or drug abuse.[14] Family support can be demonstrated by the expression of caring, comfort, protection, interest, affection, and empathy among family members.[15] Heavy users or dependents on alcohol or drugs frequently experience severe disorders in their family environments, which could be even worse if they also present psychiatric disorders.[13,16]

Some studies show that substance abuse can aggravate depression and increase the risk of suicide.[17] Other studies indicate that substance use can also increase hopelessness and dissatisfaction feelings.[18] There are some reports on low levels of family support as a risk factor for substance use.[19] In spite of many studies showing the co-occurrence of family and psychiatric disorders in substance abusers, there is a paucity of studies on the relationship among them. To the best of our knowledge, this is the first controlled study in which these factors have been appraised simultaneously. The aim of this study was to evaluate and compare the perception of family support, feelings of hopelessness, and symptoms of depression and anxiety, as well as the relationship among these factors, in a sample of subjects with alcohol or drug dependence and in a control group of non-dependents.

Methods

Participants

In the present study, we used a case-control design with sampling criteria. We invited individuals with alcohol and/or other drug dependence (AOD group, N = 60) who had been admitted to treatment at least three months before in one out of five specialized services (two clinics exclusively for women and three exclusively for men) located in Santos (São Paulo, Brazil) to participate in the study. All of them met the DSM-IV criteria of the American Psychiatric Association[3] for alcohol or drug abuse or dependence confirmed by the

application of a symptom checklist. Before approaching patients, the researchers presented the project to the clinics' managers and requested authorization to invite them. The recruitment of participants in the control group (N = 65) was made simultaneously in public settings (parks, gas stations, stores etc.) located in the same neighborhood, looking for individuals with similar social and demographic profile (regarding gender, age (18-59), education, and family income) who did not meet the DSM-IV criteria for alcohol or other drug dependence (checklist applied by a researcher).

Before participating, all volunteers or their guardians were informed on the objectives of the project, as well as on all procedures and any discomfort involving the evaluation process. All patients or volunteers signed the informed consent to participate in this study. The study was approved by the Ethics Committee on Human Research of the Instituto de Psicologia, Universidade de Sao Paulo (IP-USP) (#3806/06) and conducted in strict adherence to the Declaration of Helsinki.

Instruments

The following instruments were used to collect data:

a*) Questionnaire on social/demographic data and alcohol/drug consumption:* Developed by the authors of this study, containing questions on age, gender, educational level, family income, and kind of drug used.

b) *Brazilian version of the Beck Depression Inventory (BDI) (validated by Cunha[20])*: Used to evaluate the intensity of depression symptoms, containing 21 items, with responses rated on a Likert scale. Scores range from 0 to 63 points (0-11 minimal; 12-19 mild; 20-35 moderate; 36-63 severe). The translated version used was validated for the Brazilian population and its Cronbach's α was 0.79 to 0.91 in psychiatric and non-psychiatric populations, respectively, which were similar to the ones in the original version (whose Cronbach's α were 0.76 to 0.95, respectively).[21] In our sample, the Cronbach's α value was 0.95, which was very similar to that reported by the authors of the original instrument.

c) *Brazilian version of Beck Hopelessness Scale (BHS) (validated by Cunha[20])*: Consisting of 20 items with true-or-false responses. Scores range from 0 to 20 (0-4 minimal hopelessness; 5-8 mild hopelessness; 9-13 moderate hopelessness; 14-20 severe hopelessness).[20] The translated version used was validated for the Brazilian population and its Cronbach's α was 0.85 in psychiatric and 0.77 in non-psychiatric populations, and similar to the ones in the original version whose Cronbach's α were 0.90 and 0.86, respectively.[21] In our sample the Cronbach's α value was 0.84, which was very similar to that reported by the authors of the original instrument.

d) *Brazilian version of Beck Anxiety Inventory (BAI) (validated by Cunha[20])*: Used to assess anxiety level, consisting of 21 statements, with responses rated on a Likert scale from 0 to 63 points (0-10: minimal anxiety; 11-19: mild anxiety; 20-30: moderate anxiety, and 31-63: severe anxiety). The translated version used was validated for the Brazilian population with Cronbach's α 0.92 in psychiatric populations and 0.90 in non-psychiatric populations, similar to the ones in the original version whose Cronbach's α were respectively 0.90 and 0.86.[20,21] In our sample the Cronbach's α value was 0.87, which was very similar to that reported by the authors of the original instrument. Beck inventories present a good factorial structure as well as good internal consistency (reliability indicators) and are considered clinically valid.[22,23]

e) *Family Support Perception Inventory (FSPI)*: Used to evaluate the total perception of family support, with responses rated on a Likert scale. The inventory was developed by Baptista[24] and consists of 42 items and scores ranging from 0 to 84 points, with high scores indicating strong perception of family support, appraised on three dimensions: family adaptation; family affectivity, and family autonomy. The instrument was validated for Brazilian college students, outpatient population, prisoners, and individuals with AOD dependence.[24] In construct validity studies, Baptista[24] used a principal components analysis with oblimin rotation and found 3 factors, explaining 41.43% of variance with the following number of items, respectively: 21, 13, and 8. The Cronbach's α values in our sample were very similar to those reported by the authors of the original instrument,[24] considering the total score as well as the three dimensions. The following values were obtained in our sample and in the instrument manual, respectively: 0.96/0.93 regarding the "total FSPI score"; 0.89/0.87 regarding "family adaptation score"; 0.94/0.92 regarding "family affectivity score"; and 0.85/0.85 regarding "family autonomy score".

f) *Criteria for substance abuse or dependence (DSM-IV)*: Immediately after the questionnaire and inventory application to the volunteers, a psychologist completed a checklist of the nine DSM-IV criteria in order to determine the presence of abuse or dependence on alcohol or other drugs, according to the DSM-IV manual directions.[3]

Procedures

A psychologist explained to the patients how to answer the self-administered instruments, emphasizing that there were no "right" or "wrong" answers and that their answers would be kept strictly confidential. The application took place in a room with eight to twelve volunteers or patients. There was no time limitation for the participants to answer the questionnaires and inventories. On average, it took them 35-40 minutes to complete the instruments. Subsequently, in an isolated place, the researcher completed the DSM-IV checklist on an individual basis

Statistical analysis

The sociodemographic characteristics and previous treatment history of the group of patients with alcohol or drug dependence were compared with those from the control group by Student's t tests (for continuous variables with normal distribution) or x^2 tests (for categorical variables). The BAI, BHS, BDI, and FSPI (total and adaptation, affectivity and autonomy dimensions) scores of the group of patients with alcohol or drug dependence were compared with those from the control group by Mann-Whitney U tests (for numeric variables without normal distribution). Spearman's correlation coefficients were calculated between the scores of depression, anxiety, hopelessness, and family subscales scores for each group. A logistic regression analysis (logit) was used to estimate the odds ratio of being classified as "control group" (reference group = 0) or alcohol/drug dependent group (1). The independent variables

included in the model were: gender, schooling, income, psychiatric treatment and the raw scores in the Beck inventories of depression, anxiety and hopelessness, as well as the FSPI scores (total and autonomy, affectivity and adaptation dimensions scores). We also used a correspondence analysis to assess the relationship between the studied variables, which showed statistical significance in the univariate analysis. In order to represent the association between variables, a 2-dimensional graphic representation of the multidimensional x^2 distances is presented including the variables: BAI, BHS, and BDI and membership (AOD or control). Another similar analysis included family support scores (total and three dimensions: family adaptation; family affectivity, and family autonomy) and membership (AOD or control). The level of significance was set at 5%. All other statistical analyses were performed using the software Statistica®.

Results

Table 1 shows social and demographic data of the alcohol or drug dependent and control groups. They were similar regarding age, educational level, and income. AOD group reported having undergone psychiatric treatment with a significantly higher frequency. The main drugs used by the AOD group were alcohol (35%), cocaine (21.7%), crack (36.7%), cannabis (3.33%), and other drugs (3.4%).

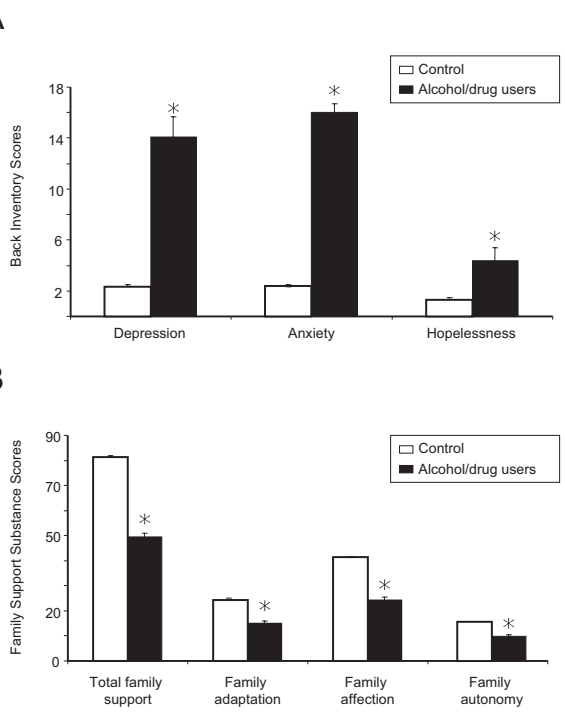
Figure 1 shows the average scores on depression (BDI), anxiety (BAI) and hopelessness (BHS), as well as the average scores in the dimensions of family support in the control and AOD groups. Regarding Beck Depression Inventory (BDI), Beck Hopelessness Scale (BHS) ,and Beck Anxiety Inventory (BAI), the average scores of the control group were within the standard range for the non-clinical Brazilian population, as reported in the Portuguese version of the manual.[17] However, the average scores on BDI, BHS, and BAI from the alcohol or drug dependent group were significantly higher than those from the control group (BDI, U = 1,411; $p < 0.0001$; BAI, U = 1,236; $p < 0.0001$; BHS, U = 1,324; $p < 0.0001$). Regarding the "total perception" dimension of FSPI, the alcohol or drug dependent group differed from the control group, indicating lower perception of family support (U = 0.000; $p < 0.0001$). Similarly, the alcohol or drug dependent group presented lower scores in the specific dimensions *family adaptation* (U = 38.50; $p < 0.0001$), *family affectivity* (U = 46.50; $p < 0.0001$), and *family autonomy* (U = 145.5; $p < 0.0001$) than the control group.

Table 2 shows that in the alcohol or drug dependent group, but not in the control group, significant negative correlations were found between the scores of family support (total and specific dimensions) and the scores of depression, anxiety or hopelessness.

Similarly, we also found negative correlations between family adaptation and scores of anxiety, as well as between family affectivity and scores of depression or hopelessness. The Family Support Perception Inventory "total score" (sum of the partial scores of the specific dimensions: family adaptation, family affectivity, and family autonomy) clearly discriminated between groups (all controls scored

Table 1 Social and demographic characteristics of people with alcohol or drug dependence (AOD) and non-dependent volunteers (control group). Data expressed as percentages (%) or mean and standard deviation (SD)

	Control (n = 65)	AOD group (n = 60)	Student's t or χ^2 (df)	p
Age [mean (SD)]	34 (10)	35 (11)	t = 0.6679 df = 123	0.50
Gender (men %)	64	65	χ^2 = 0.0020 df = 1	0.96
Educational level (%)				
Elementary	37	38	χ^2 = 0.6222 df = 3	0.89
Secondary	45	48		
Higher - incomplete	5	3		
Higher (complete)	13	11		
Income (%)				
up to US$ 200/month	54	57	χ^2 = 0.6620 df = 2	0.71
US$ 420 - 840/month	28	22		
Over US$ 840/month	18	21		
Previous psychiatric treatment (%)	15.4	78.3	χ^2= 49.8 df = 1	0.0001



∗ differs from control, $p < 0.01$.

Figure 1 Average scores on depression, anxiety, hopelessness (A), and family support in the control and AOD groups (B).

Part A: Average scores (mean and SD) of the Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and Beck Hopelessness Scale (BHS) in control (□) and alcohol or drug dependent (■) groups.

Part B: Average scores (mean and SD) of the specific dimensions (adaptation, affectivity, and autonomy) and total score of the Family Support Perception Inventory (FSPI) in the control (□) and alcohol or drug dependent (■) groups.

Table 2 Correlations (Spearman (r_s) coefficients) between scores of depression (BDI), anxiety (BAI), hopelessness (BHS), and family support (FPSI total and autonomy, adaptation and affectivity dimensions) in the control group and in the alcohol or other drugs dependent group

	BDI score	BAI score	BHS score
Control group			
Family autonomy	-0.02	-0.05	-0.05
Family adaptation	-0.00	-0.00	-0.02
Family affectivity	-0.06	-0.01	-0.07
Total family support	-0.22	-0.06	-0.02
Alcohol and/or drug dependents			
Family autonomy	**-0.43***	**-0.31***	**-0.38***
Family adaptation	**-0.59***	**-0.74***	**-0.50***
Family affectivity	**-0.62***	**-0.70***	**-0.62***
Total family support	**-0.80***	**-0.83***	**-0.72***

* In bold: significant Spearman's correlation coefficients (p <.01).
High scores in Beck Inventories indicate severity and high scores in FSPI dimensions indicate good family support.

over 77 and all subjects with alcohol or drug dependence scored under 78). Total score presented a high correlation (r = 0.96) with the scores of the *family affectivity* dimension, as well as with those from the *family adaptation* and *family autonomy* dimensions (r > 0.90). The final logistic regression model presented a significant goodness-of-fit (Maximum likelihood (MS-err. scaled to 1); Final loss: 14,4979, $Chi^2_{(9)} = 144.09$, p < 0.0001), considering as independent significance variables: the BAI (anxiety) scores; the autonomy dimension of the Family Support Perception Inventory (FSPI) scores, and previous psychiatric treatment.

This analysis included data from subjects of the control group (n = 65) and AOD group (n = 60). Other variables included in the model, such as the scores of Beck Depression Inventory scores and Beck Hopelessness Scale, in addition to gender, age, education level, and income did not reach statistical significance (Table 3).

Table 4 shows the distribution of subjects classified according to their scores in the Family Support Perception Inventory, levels of anxiety, hopelessness, and depression in the control (CON) and alcohol/drug dependent (AOD) groups.

Figure 2 shows the correspondence analysis graphics, illustrating the relationship among the variables included in the analysis. We identified two different profiles among subjects. Correspondence analysis showed that low scores in the family support perception, as well as high levels of depression, anxiety, and hopelessness were associated with being part of the AOD group. On the other hand, low levels of anxiety, depression, hopelessness, and high level of family support perception were associated with no use of AOD.

Table 3 Logistic regression analysis to estimate the odds of group membership (dependent variable: control group = 0, N = 65, and alcohol or drug dependence group = 1, N = 60)

Variables	OR	(95% CI)	p
Gender			
control	1		
alcohol/drug dependence	0.26	(0.01-6.78)	0.41
Age			
control	1		
alcohol/drug dependence	1.12	(0.98-1.28)	0.08
Educational level			
control	1		
alcohol/drug dependence	0.60	(0.16-14)	0.42
Income			
control	1		
alcohol/drug dependence	1.19	(0.50-2.81)	0.67
Previous psychiatric treatment			
control	1		
alcohol/drug dependence	**68.91**	**(1.05-7.40)**	**0.001**
BAI score			
control	1		
alcohol/drug dependence	**1.22**	**(1.02 - 1.45)**	**0.001**
BDI score			
control	1		
alcohol/drug dependence	0.94	(0.81-109)	0.46
BHS score			
control	1		
alcohol/drug dependence	0.64	(0.38-1.07)	0.09
FSPI adaptation dimension score			
control	1		
alcohol/drug dependence	2.88	(0.89-1.79)	0.76
FSPI autonomy dimension score			
control	1		
alcohol/drug dependence	**0.08**	**(0.01-0.46)**	**0.001**
FSPI affectivity dimension score			
control	1		
alcohol/drug dependence	3.68	(0.21-6.12)	0.79
FSPI total			
control	1		
alcohol/drug dependence	1.65	(0.99-8.19)	0.62

OR: odds ratio (unit change); CI: confidence interval.
Model: Logistic regression (logit) Loss: Max likelihood (MS-err. scaled to 1)
Final loss: 14.49
$Chi^2(9) = 144,0$; p < 0,0001.

Discussion

In this study, we observed that feelings of hopelessness and negative perception of family support (in general, as well as in its dimensions: affectivity, autonomy, and adaptation) were significantly higher in the AOD group than in the control group. This higher frequency of low perception of family support among subjects with alcohol or other drugs dependence compared to controls may reflect the family and social stigmatization of these patients. These processes of stigmatization or rejection of the patient by the family may be a consequence of substance use-related problems. On the other hand, the low family support may also be a vulnerability factor for the development of substance dependence. Our data suggest that the Family Support Perception Inventory scores could be a useful 'social marker' to discriminate

Table 4 Percentage of subjects classified according to family support perception, levels of anxiety, hopelessness, and depression in the control (CON) and alcohol or other drugs dependent (AOD) groups

Family support perception	Groups	BAI minimal	BAI mild	BAI moderate	BAI severe	BHS minimal	BHS mild	BHS moderate	BHS severe	BDI minimal	BDI mild	BDI moderate	BDI severe
Low	*Control*	0	0	0	0	27.0	29.7	32.4	10.8	45.9	10.8	8.1	35.1
	AOD	13.5	5.4	35.1	45.9	27.0	29.7	32.4	10.8	45.9	10.8	8.1	35.1
Middle Low	*Control*	0	0	0	0	93.7	6.2	0	0	87.5	6.2	0	6.2
	AOD	81.2	6.2	12.5	0	6.2	0	0	6.2	87.5	6.2	0	6.2
Middle High	*Control*	0	0	0	0	0	0	0	0	100	0	0	0
	AOD	100	0	0	0	0	0	0	0	100	0	0	0
High	*Control*	92.3	7.7	0	0	23.0	1.5	1.5	23.0	92.3	7.6	0	0
	AOD	100	0	0	0	0	0	0	0	100	0	0	0

Note: According to the Brazilian version, based on applications to general population Brazilian samples, the Beck scales cut-offs are respectively: BDI: 0-11 minimal; 12-19 mild; 20-35 moderate; 36-63 severe depression; BAI 0 -10: minimal; 11 -19: mild; 20-30: moderate; and 31-63: severe anxiety; BHS 0-4 minimal; 5-8 mild; 9-13 moderate; 14-20 severe hopelessness. The FSPI (total) cut-offs are: 0-53 low, 54-63 middle low, 64-70 middle high, 71-84 high, and the dimensions: family adaptation, family affectivity, and family autonomy.

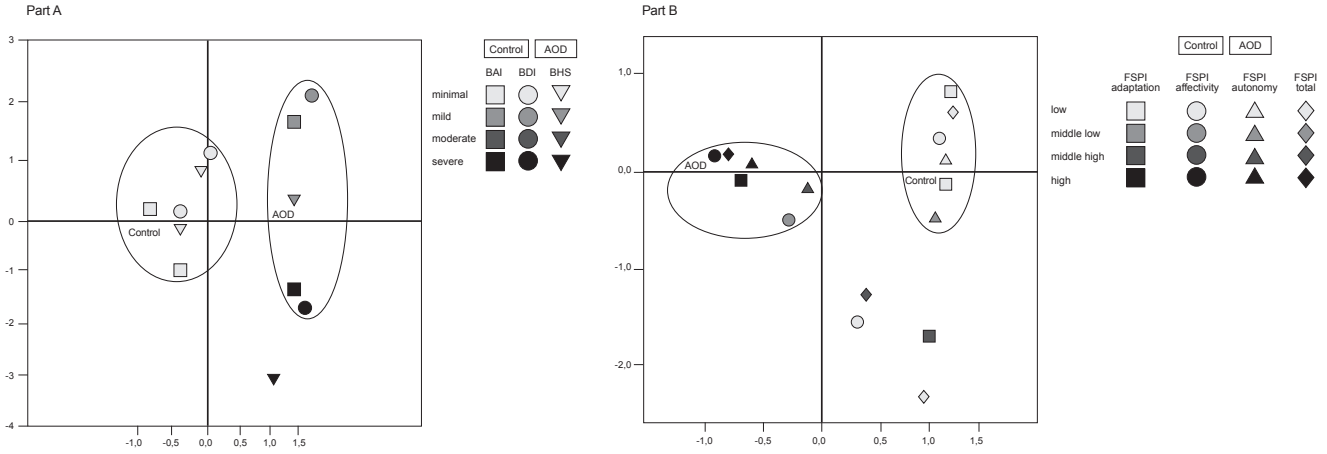


Figure 2 Correspondence analysis graphic illustrating the relationship between pertaining to the alcohol and other drugs problematic users group (AOD) or to the control group (CONTROL) and anxiety (BAI), depression (BDI), and hopelessness (BHS) scores (Part A) or family support scores (Part B).

Part A On the left side of the figure, we observe an association (represented by the ellipse) between being part of the control group and to present minimal, mild, moderate or severe scores in the BAI, BDI, and BHS scales. On the right side, we observe an association between being an AOD and moderate or high scores (indicating high severity) of BHS, BDI, and BAI scores. (Correspondence analysis Cronbach's $\alpha = 0.97$).

Part B Two different profiles are also observed among participants. The first group (on the left side of the figure) represents AOD dependence, with low or middle-low scores in the total FSPI, family adaptation, family affectivity, family autonomy. The second group (on the right side of the figure) represents individuals from the control group with high or middle-high scores of total FSPI, adaptation, family affectivity, family autonomy. (Correspondence analysis Cronbach's $\alpha = 0.95$).

people with alcohol or drug dependence with co-morbidities from non-dependent ones.

The high levels of anxiety, depression, and hopelessness observed in the AOD group are in accordance with previous studies on psychiatric comorbidity.[25,26] According to Sumnall et al.,[27] anxiety or depression are predictors for drug abuse rather than drug abuse being the cause of these disorders.

In our study, the use of alcohol and illicit drugs was also related to hopelessness. According to Alegría et al.,[26] the high scores of hopelessness found in alcohol or drug users were significantly related to the high rates of suicidal behavior in that population. However, as mentioned by Blume et al.[28] the nature of the relationship between alcohol use and hopelessness is not clear and deserves further investigation. According to other authors, alcohol or drug abusers may experience feelings of hopelessness due to alterations in serotonin (5HT) levels, one of the main neurotransmitters responsible for mood states control.[29,30] They suggest that depression may be related to drug abuse because repeated administration of psychoactive substances may cause brain

structural or functional alterations and down-regulate the mesolimbic dopaminergic activity in reward systems, facilitating the development of depression.[31] Nurnberger et al.[32] reported that "*… the aggregation of antisocial personality disorder, drug dependence, anxiety disorders, and mood disorders suggests common mechanisms for these disorders and alcohol dependence within some families*". The presence of such disorders probably contributes to a poor relationship among family members, which may be expressed in low scores in the Family Support Perception Inventory. Alcohol or drug abuse related-problems may also disturb interpersonal relationships and social support. Furthermore, there is high risk of affective disorders development in those who have experienced adversities in childhood, such as lack of affection, traumas or abuse events, inadequate social support, broken families, and parents with high levels of alcohol consumption.[33] There is also compelling evidence that many alcohol or drug abusers have been through several similar negative experiences such as those above mentioned, mainly at an early age.[34]

There is also evidence that family and psychosocial problems contribute to trigger mental disorders, such as depression, anxiety, traumatic events, and childhood abuse. Edwards et al.[35] reported an association between symptoms of traumatic stress and substance abuse, considering that traumatic stress symptoms may lead to substance use in order to cope with them. Additionally, Gonzalez et al.[36] reported problematic alcohol use among students with elevated depression. The authors considered that this can be partly attributed to drinking to cope, as well as to the association of depression with negative urgency. Tucci et al.[34] found a significant association between childhood trauma and a higher prevalence of psychiatric comorbidities (such as substance use and depression) compared to a controlled sample without childhood abuse or neglect. Carrigan et al.[37] reported that repeated alcohol use may be a coping strategy to reduce anxiety and tension in social occasions. On the other hand, a good family support has been related to low prevalence of symptoms of anxiety and depression, and has a positive influence on psychotherapeutic treatment for mood disorders.[21] Some authors suggested that the reasons for young people and adults to cease alcohol or drug use were frequently related to the availability of information and protective family structures.[38] Considering its social related consequences, alcohol or drug abuse or dependence may be considered a family problem that requires approach of all family members as an important part of diagnosis and treatment.[39] Family support may be of extreme help in the recovery of alcohol or drug abusers and it is related to treatment success.[40] Family members' participation in the treatment contributes to the achievement of treatment goals and the monitoring of dependents, significantly improving the outcome.[41]

Conclusions

In summary, we found a significant association between low family support and high scores of depression, anxiety, and hopelessness in alcohol or other drug dependents, but not in the control group. Thus, our data strengthen the importance of family support as a protective factor against alcohol or drug abuse or dependence and lack of family support as a possible vulnerability factor. It also stress the importance of assessing and taking into account the family support for an adequate planning of treatment interventions. The family involvement during treatment may decrease the feelings of lack of support and hopelessness, increasing the rates of adherence to treatment and recovery of alcohol or drug dependents. We also showed that the Family Support Perception Inventory was a sensitive tool to differentiate people with alcohol or drug dependence from a non-dependent control group, suggesting that it could be tested as a kind of indirect, 'social marker' of substance abuse or dependence, preventing problems of stigmatization presented by very specific screening instruments.

Although our data analysis suggests that the family support perception instrument might be a useful screening tool to detect people with alcohol or other drug-related problems, further studies are needed including a sample of people with "moderate" or "risky use" of alcohol and other drugs. A limitation of this study is the fact that our samples were composed of individuals with "extreme profiles": a control group comprising only occasional AOD users compared with a group of dependent drug users.

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