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Original Article

Substance use disorders and social functioning from an occupational perspective: a pre and post-study[1]

Transtornos pelo uso de substâncias e funcionamento social sob uma perspectiva ocupacional: um pré e pós estudo

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Abstract

Introduction: Improvements in the social functioning (SF) of people experiencing substance use disorders (SUD) can occur even without use discontinuation. Occupational Therapy (OT) performs multifaceted work on it. **Objective:** This study analyzes the SF of people experiencing SUD before and after treatment and the contributions of OT. **Method:** A pre and post-study before and after starting treatment for SUD in a Psychosocial Care Centre – Alcohol and other Drugs (CAPS-AD) in Brasilia, Brazil – was conducted with 35 clients based on an SF questionnaire. A measure of the participant's SF improvement was defined as the difference between the SF before treatment (SF_{pre}) with the SF after treatment (SF_{after}). The association between SF and sociodemographic variables/drug/previous treatment was verified by linear regression; all analyses considered a significance level <5%. **Results:** Most of the 35 participants were male (83%), 30-49 years old (77%), attended elementary school (57%), unemployed (57%), single (46%), Black (40%), had been treated previously (60%) and had present alcohol use disorder (46%). Overall, people undergoing treatment significantly improved their SF. Multivariate analysis showed that Whites improved their SF more (mean of 18.8± 10.4) than *Pardos*/Blacks (10.8± 8.7; 14.1± 6.4), and the improvement in SF was lower for participants who were taking treatment for the first time (10.3± 5.7) compared with those

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who had previous treatment (17.2± 9.4). **Conclusion:** Treatment in CAPS-AD improved the SF of people experiencing SUD, and the OT professional is a key agent in improving SF due to its performance and approach to clients in vulnerable contexts.

Keywords: Substance Use Disorders, Psychosocial Support Systems, Mental Health Services, Occupational Therapy, Brazil.

Resumo

Introdução: Melhorias no funcionamento social (FS) de pessoas com transtornos pelo uso de substâncias (TUS) podem ocorrer mesmo sem descontinuar o uso. A terapia ocupacional realiza um trabalho multifacetado sobre isso. **Objetivo:** Este estudo analisa o funcionamento social das pessoas com transtornos pelo uso de substâncias antes e depois do tratamento e contribuições da terapia ocupacional. **Método:** Um pré e pós-estudo – antes e depois do tratamento para TUS em um Centro de Atenção Psicossocial álcool/drogas (CAPS-AD) em Brasília, Brasil – foi realizado com 35 clientes com um questionário sobre FS. A melhora do FS foi definida como a diferença entre o valor do FS antes (FS_{pre}) e depois do tratamento (FS_{after}). A associação entre o FS e as variáveis sociodemográficas/drogas/tratamento anterior foi verificada por regressão linear; foi considerado um nível de significância <5%. **Resultados:** A maioria era homens (83%), 30-49 anos de idade (77%), com ensino fundamental (57%), desempregados (57%), solteiros (46%), negros (40%), com tratamento anterior (60%), e apresentavam TU de álcool (46%). Em geral, as pessoas submetidas a tratamento melhoraram significativamente seu FS. A análise multivariada mostrou que os brancos melhoraram mais seu FS (média de 18.8± 10.4) que os Pardos/Negros (10.8± 8.7; 14.1± 6.4), e foi menor entre os que estavam fazendo tratamento pela primeira vez (10.3± 5.7) em comparação com os que o fizeram anteriormente (17.2± 9.4). **Conclusão:** O tratamento no CAPS-AD melhorou o FS das pessoas com TUS, o profissional terapeuta ocupacional é um agente chave para melhorar o FS devido a sua atuação e abordagem em contextos vulneráveis.

Palavras-chave: Transtornos Relacionados ao Uso de Substâncias, Sistemas de Apoio Psicossocial, Centro de Atenção Psicossocial, Terapia Ocupacional, Brasil.

Introduction

Historically, the scientific literature on the treatment of people experiencing substance use disorders (SUD) has conceptualized as a synonym for therapeutic success the total interruption of substance use, not considering possible improvements in their social functioning (SF) even if they continued using or reduce the pattern of substance use (Crocq, 2022; Huber et al., 2011). The SF of people experiencing SUD can be defined as the individual's ability to perform the activities of managing social roles and responsibilities and engaging with other people and social activities, interpersonal relationships in the family and at work, quality of sleep and appetite, and well-being (Ghitza et al., 2007; Singh et al., 2015). However, in the last two decades, the understanding of therapeutic success in SUD has been increasingly discussed and expanded beyond being abstinent (Narasimha et al., 2022; Tiffany et al., 2012).

The use of alcohol and other drugs is a widespread practice worldwide, and this is not different in Brazil. The estimate of people who meet the criteria for SUD in the country is 10-12% for alcohol, 10-17% for tobacco, 1.2% for cannabis, 1% for cocaine/crack, and <0.5% for sedatives and other stimulants (Bastos, 2017; Bastos & Bertoni, 2013; Laranjeira, 2014). After alcohol, crack/cocaine use disorder was the most common driver for seeking treatment at 65% of people, followed by cannabis at 14%, solvents, and inhalants at 8%, and tranquilizers/sedatives and opioids at 5% (United Nations Office on Drugs and Crime, 2021).

Aligned with international changes in the approach to people experiencing mental disorders and/or SUD, in 2001 Brazil redirected its care model, leaving a hospital perspective embodied in former insane asylums and centered on the remission of symptoms and abstinence, to adopt a community perspective guided by social participation and harm reduction through the implementation of Psychosocial Care Centers (Centro de Atenção Psicossocial – CAPS) (Araujo, 2019; Hirdes, 2009; Brasil, 2001; Machado & Miranda, 2007).

The objective of CAPS is to offer individual and group care to the population in its geographic area of coverage, performing medical, psychological, and occupational monitoring, as well as social reintegration through access to work, leisure, the exercise of civil rights, and strengthening of family and community ties to improve health and SF of the clients (Lacerda & Fuentes-Rojas, 2016). It is a community-based "open door" mental health facility created to substitute the long-stay admissions in psychiatric hospitals, playing a central role in the Brazilian Psychosocial Care Network (Brasil, 2011). CAPS are differentiated by size, service capacity, and clientele served and are organized according to the population profile of Brazilian municipalities (Barros & Salles, 2011).

The CAPS – Alcohol and other Drugs (CAPS-AD) is a health facility composed of a multi-professional team – nurse, social worker, physician, pharmacist, psychologist, and occupational therapist – focused on providing care for people with needs arising from the SUD (Brasil, 2002). The Singular Therapeutic Project (PTS – acronym in Portuguese for *Projeto Terapêutico Singular*) is the tool that guides the intervention to be carried out with clients in the service. It indicates different therapeutic activities they should participate in according to their interests and needs. It can be revised at any time, by client demand or by indication of the team (Gallassi et al., 2016; Mota et al., 2019).

The CAPS-AD, working from a psychosocial perspective and having as one of its axes the improvement of the SF of people experiencing SUD, requires a multi-professional team with various possibilities of knowledge. The occupational therapist is part of the CAPS-AD team and performs multifaceted work since its training allows intervention in various contexts such as health, education, and the social field (Silva et al., 2015). With a specialized approach to social skills, activities of daily living (ADL) and instrumental activities of daily living (IADL), and occupational repertoire, the OT professional can help in the assessment, intervention, recovery and rehabilitation, promotion and prevention of problems involving SUD. Thus, they have the potential to implement and produce an expanded comprehension of the individual, challenging the reductionist paradigm, and thereby promoting a significant improvement in their SF (Amorelli, 2016).

The activities developed by the occupational therapist in CAPS-AD for people experiencing SUD may include individual care (e.g. clients who seek the service for the first time, clients who arrive under the influence of substances and need assistance,

clients who benefit more from individual than group activities), group activities (e.g. thematic workshops, family orientation, support for employment and social rights), community activities in partnership with other health, social welfare, and sports and leisure services that exist in the community (e.g. income-generating projects), home visits for new clients/already followed by the service who are experiencing health/social difficulties that prevent them from going to the service, and also CAPS-AD coordinator (Mota et al., 2019; Brasil, 2002; Silva et al., 2015).

Following this perspective and considering the need and relevance of investigating and discussing the SF improvement of people experiencing SUD beyond the focus on the interruption of substance use – especially after the Covid-19 pandemic, which greatly impacted this population as well as worsened their SF (Gallassi et al., 2022; Madrigal et al., 2021) – this study aims to analyze the SF of people experiencing SUD before and after treatment in a CAPS-AD in Brasilia, Brazil, and the contributions of Occupational Therapy (OT) in this field.

Method

Sample and instruments

This is a descriptive and pre and post-study (with two measures – before and after starting treatment) based on a semi-structured questionnaire containing 50 closed and four open questions (later categorized according to the answers) applied to individuals who sought treatment in a CAPS-AD in Brasilia, Brazil.

The questionnaire used was developed from a compilation of questions extracted from instruments already validated and frequently used for research with people experiencing SUD, such as the Composite International Diagnostic Interview (Kessler & Ustün, 2004), Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) (Henrique et al., 2004), the Self Report Questionnaire (SRQ-20) (Harding et al., 1980), and the Rutgers Alcohol Problem Index (RAPI) (White & Labouvie, 1989).

Two questionnaires were applied to each participant. The clients who arrived at the service were assessed by the CAPS-AD team, which performed the reception to treatment. After this initial care, the research team invited them to participate in the study. The research team – which is not part of the service team – remained at the CAPS-AD from 8:00 am to 5:00 pm Monday to Friday waiting for clients who arrived seeking treatment. Those who accepted answered the questionnaire which lasted approximately 20 minutes and was invited to participate in a second round of questions 4 months later. Only individuals seeking treatment at the CAPS-AD for the first time in their lives and/or those who had already had any treatment, but abandoned it more than six months ago, were included in the study.

The first round of questionnaire application was conducted over four weeks between March and April 2018. The second round was conducted four months after the initial intake, in August and October 2018. Those who participated in the first round were contacted by phone and invited to return to CAPS-AD to answer the second questionnaire with the research team at a pre-scheduled time. The same questionnaire was applied in the second meeting, except for questions that were not subject to change, such as some sociodemographic data. During the 4-month study interval, the participants should follow

the treatment project proposed by CAPS-AD, planned according to the needs of each one (PTS), to be re-evaluated by the research team in the second round of questionnaire application to verify changes in the SF.

Of the 50 closed questions in the questionnaire, only the sociodemographic questions (8) and those referring to SF (21) were considered for the present study to match the occupational component object of this research. The SF questions were extracted and adapted from the RAPI questionnaire (White & Labouvie, 1989), already used in previous studies conducted in Brazil (Gallassi et al., 2016; Silva & Tucci, 2015), and translated into Brazilian Portuguese (Dimeff et al., 2002). RAPI is a screening tool (questionnaire) for self-completion to assess problems associated with SUD. Participants circle the item corresponding to the times they have experienced certain situations.

Participants and public involvement

The study design and goal were built based on previous studies performed by the research team with clients who attend CAPS-AD (Carvalho et al., 2021; Fonseca & Gallassi, 2021; Gallassi et al., 2016; Mota et al., 2019). Also, before the participants be part of this study, they received all possible information about the research procedures, its objectives, about the confidentiality of the information provided, and answered any questions they raised. All the information about the study was also described in simple language in the Informed Consent Form (ICF) for participation in the study, which was read by the research team to the participant. This document explains the research procedures, ensures the confidentiality of the information collected, and voluntary participation according to the Brazilian National Research Ethics Commission (Brasil, 2012).

In the end, all participants were contacted by phone call/text message (even those who interrupted the study) to schedule a presential agenda for both – participants and the research team –to receive a return about her/his participation and be invited to return to the CAPS-AD treatment.

Data processing and analysis

Descriptive categorical variables were presented as frequencies and percentages, and quantitative variables were described as mean and standard deviation. All statistical analyses considered two-sided hypotheses and a significance level of <5%. Analyses were performed using R-open-source software *R* (R Core Team, 2018).

The SF before and after starting treatment was considered to calculate the evolution of the participants. It was built on the response to each item of the questionnaire and was scored as follows (scoring analogous to the cutting adopted in the RAPI): zero points for the answer "none"; one point for "one to three times" and two points for "more than three times". The observed responses were classified into three possible outcomes: worsened, improved, or remained the same (no change). The Sign Test verified the significant change (Conover, 1999).

The value of the SF was calculated as the sum of the scores for the 21 items. Thus, the SF value ranges from 0 to 42 points, and the higher the SF value, the greater the problems related to the SUD.

A measure of the participant's SF improvement was defined as the difference between the SF value before treatment (SF_{pre}) with the SF value after treatment (SF_{after}), that is, $SF_{final} = SF_{pre} - SF_{after}$. The higher value of SF_{final}, the greater client's SF improvement after treatment in CAPS-AD. A possible association between SF and sociodemographic variables/drug used/previous treatment was verified by simple (univariate analysis) and multiple (multivariate analysis) linear regression models.

This study was approved by the Research Ethics Committee of the [removed for blind review] under CAAE number 37372114.0.0000.0030. All participants signed the ICF individually and in person.

Results

Of the 44 participants who answered the questionnaire in the first round, 35 were found after calls for the second one. Of the nine participants not located, six were people experiencing homelessness, and three had died (data obtained from the medical records of these clients).

Table 1 shows the sociodemographic data of the 35 participants who responded to the two stages of the survey. Most were male (83%), between 30-49 years old (77%), had attended elementary school (57%), were unemployed (57%), single (46%), declared themselves Black (40%), had been treated previously (60%; but not in CAPS-AD), and indicated alcohol as the substance of use that motivated seeking for treatment in CAPS-AD (46%).

Table 1. Sociodemographic, SUD, and treatment data of participants (n=35), 2018.

		Frequency	Percentage
Sex	Male	29	83%
	Female	6	17%
Age	Up to 29 years old	6	17%
	30 to 49 years old	27	77%
	50 years and older	2	6%
Education	Some elementary school	20	57%
	High School	10	29%
	Graduate	5	14%
Employment	Employed	15	43%
	Unemployed	20	57%
Marital Status	Single	16	46%
	Married/Common union	11	31%
	Separated/widowed	8	23%
Race	Black	14	40%
	*Pardo (*Brazilians with varied ethnic ancestry)	11	31%
	White	10	29%
First treatment?	Yes	14	40%
	No	21	60%
Drug that motivated seeking treatment (SUD)	Alcohol	16	46%
	Crack/cocaine	12	34%
	Other drugs	4	11%
	Marijuana	3	9%

Table 2 details the frequency with which the described situations occurred before and after starting treatment in CAPS-AD, ranging from none, one to three, and more than three times. Participants were asked in the first round of the questionnaire application how often the situations occurred in the last month before starting treatment. The same occurred in the second round (4 months later), when they were asked about the frequency of occurrence of the situations in the last month, after starting treatment.

Assuming that "more than three times" is the worst-case scenario because of the repetition of unwanted situations, after starting treatment, there was an overall decrease in this response, except for one – "was not able to have fun."

Table 2. Distribution of participants' responses on problems in the SF resulted by SUD before and after treatment in CAPS-AD, according to the questionnaire adapted from RAPI (n=35), 2018.

Variables*	Before (pre) treatment			After treatment		
	None	One to three times	More than three times	None	One to three times	More than three times
1. Unable to perform tasks or study for a test	46%	17%	37%	60%	26%	14%
2. You fought, acted badly, or did wrong things	46%	17%	37%	60%	37%	3%
3. You have lost assets by spending on alcohol and/or drugs	23%	23%	54%	51%	46%	3%
4. You went to an appointment under the influence of alcohol and/or drugs	34%	23%	43%	57%	34%	9%
5. Caused shame or embarrassment to someone	43%	14%	43%	57%	37%	6%
6. Did not fulfill its responsibilities	20%	14%	66%	57%	37%	6%
7. A family member or friend has shunned you	34%	9%	57%	60%	34%	6%
8. You felt you needed more alcohol and/or other drugs to feel the same effect	23%	17%	60%	60%	29%	11%
9. Tried to control the use, using only at certain times and in a few places	3%	29%	69%	63%	20%	17%
10. Had withdrawal symptoms because you stopped using alcohol and/or drugs	14%	29%	57%	49%	29%	23%
11. Noticed personality change	26%	14%	60%	49%	31%	20%
12. Realized that had problems performing tasks in general	34%	17%	49%	51%	34%	14%
13. Missed a day (or half a day) of school or work	34%	14%	51%	51%	31%	17%
14. Tried to stop using	6%	34%	60%	40%	31%	29%
15. Suddenly you were in a place and didn't remember entering	40%	14%	46%	57%	31%	11%
16. Lost consciousness or fainted	63%	14%	23%	63%	31%	6%
17. Fights or arguments with friends or family members	37%	26%	37%	60%	31%	9%
18. Have continued to use it when had promised yourself that would no longer use it	6%	14%	80%	60%	23%	17%
19. Felt like I was going crazy	43%	9%	49%	57%	29%	14%
20. Was not able to have fun	60%	31%	9%	57%	26%	17%
21. A friend, relative or neighbor told you to cut down or stop using	6%	4%	91%	66%	26%	9%

*The questions were asked to self-report on the occurrence of each criterion within the last month (before and after starting treatment).

Table 3 details the changes that occurred in the participants' SF by comparing the responses given at the initial interview and after four months of treatment, which were grouped into

"worsened," "improved," or "same" (no change). Except for "lost consciousness or passed out" and "felt like I was going crazy," the SF improvement after starting treatment at CAPS-AD was statistically significant in all other situations, even though in some of them (7) the SF of most participants remained the same before and after treatment, and none of the "worsened SF" percentages was higher compared to the other two parameters.

Table 3. Distribution of participants' responses about the changes that occurred in the SF after treatment in CAPS-AD, according to the questionnaire adapted from RAPI (n = 35), 2018.

Variables	Situation after treatment			*p*-value*
	Worsened	Improved	Same	
1. Unable to perform tasks or study for a test	1 (3%)	11 (31%)	23 (66%)	0.006
2. You fought, acted badly, or did wrong things	2 (6%)	14 (40%)	19 (54%)	0.004
3. You have lost assets by spending on alcohol and/or drugs	2 (6%)	23 (66%)	10 (29%)	<0.001
4. You went to an appointment under the influence of alcohol and/or drugs	2 (6%)	17 (49%)	16 (46%)	0.001
5. Caused shame or embarrassment to someone	4 (11%)	15 (43%)	16 (46%)	0.019
6. Did not fulfill its responsibilities	0 (0%)	23 (66%)	12 (34%)	<0.001
7. A family member or friend has shunned you	2 (6%)	18 (51%)	15 (43%)	<0.001
8. You felt you needed more alcohol and/or other drugs to feel the same effect	3 (9%)	21 (60%)	11 (31%)	<0.001
9. Tried to control the use, using only at certain times and in a few places	1 (3%)	25 (71%)	9 (26%)	<0.001
10. Had withdrawal symptoms because you stopped using alcohol and/or drugs	2 (6%)	18 (51%)	15 (43%)	<0.001
11. Noticed personality change	2 (6%)	17 (49%)	16 (46%)	<0.001
12. Realized that had problems performing tasks in general	3 (9%)	14 (40%)	18 (51%)	0.013
13. Missed a day (or half a day) of school or work	4 (11%)	17 (49%)	14 (40%)	0.007
14. Tried to stop using	2 (6%)	19 (54%)	14 (40%)	<0.001
15. Suddenly you were in a place and didn't remember entering	4 (11%)	16 (46%)	15 (43%)	0.012
16. Lost consciousness or fainted	7 (20%)	11 (31%)	17 (49%)	0.481
17. Fights or arguments with friends or family members	3 (9%)	16 (46%)	16 (46%)	0.004
18. Have continued to use it when had promised yourself that would no longer use it	0 (0%)	26 (74%)	9 (26%)	<0.001
19. Felt like I was going crazy	5 (14%)	13 (37%)	17 (49%)	0.096
20. Was not able to have fun	1 (3%)	16 (46%)	18 (51%)	<0.001
21. A friend, relative, or neighbor told you to cut down or stop using	1 (3%)	30 (86%)	4 (11%)	<0.001

*Sign test.

Table 4 presents the mean values (and their respective standard deviations) of the SF before and after treatment and measures of improvement in final SF for all sociodemographic and drug used/previous treatment variables considered in the study.

Table 4. Mean, standard deviation, and *p-value* of the association of sociodemographic, substance use, and treatment variables with improved SF after treatment in CAPS-AD of participants (n=35), 2018.

		SF pre Mean± SD***	SF after Mean± SD	Improved Social Functioning ($SF_{final} = SF_{pre} - SF_{after}$)		
				SF_{final} Mean± SD	Univ. p^*	M ult. p^{**}
TOTAL	(n=35)	26.2± 10.1	11.7± 10.0	14.5± 8.8	---	---
Sex	Male (n=29)	29.9± 10.2	12.3± 10.2	14.6± 9.1	0.812	0.344
	Female (n=6)	22.8± 10.1	9.2± 9.9	13.7± 7.2		
	Up to 29 years old (n=6)	28.7± 10.2	13.0± 8.6	15.7± 8.1		
Age	30 to 49 years old (n=27)	25.8± 9.3	11.5± 10.4	14.3± 9.1	0.891	0.700
	50 years and older (n=2)	23.5± 26.2	11.0± 15.6	12.5± 10.6		
	Up to elementary school (n=20)	26.8± 11.2	11.9± 11.5	14.9± 8.3		
Education	High school (n=10)	24.1± 9.3	8.7± 6.9	15.4± 11.0	0.546	0.186
	Graduate (n=5)	27.8± 7.9	17.2± 8.1	10.6± 5.6		
Employment	Employed (n=15)	26.8± 7.7	12.9± 8.3	13.9± 10.5	0.738	0.546
	Unemployed (n=20)	25.7± 11.8	10.9± 11.3	14.8± 7.4		
	Single (n=16)	26.1± 10.5	11.1± 11.7	15.0± 10.9		
Marital Status	Married/common union (n=11)	23.0± 10.6	9.5± 10.1	13.5± 6.8	0.898	0.911
	Separated/widowed (n=8)	30.6± 7.9	16.0± 4.4	14.6± 6.9		
	Black (n=14)	25.5± 10.8	11.4± 10.2	14.1± 6.4		
Race	*Pardo* (n=11)	24.9± 8.8	14.1± 11.1	10.8± 8.7	0.075	0.002
	White (n=10)	28.5± 11.2	9.7± 9.1	18.8± 10.4		
First	Yes (n=14)	18.8± 8.0	8.5± 8.9	10.3± 5.7	0.012	0.020
Treatment?	No (n=21)	31.1± 8.3	13.9± 10.4	17.2± 9.4		
Substance that motivated seeking treatment	Alcohol (n=16)	25.4± 10.2	10.9± 8.3	14.4± 7.8		
	Crack/cocaine (n=12)	29.9± 9.5	13.3± 12.7	16.6± 10.7		
	Other drugs (n=4)	18.7± 11.2	7.5± 8.8	11.3± 5.8		
	Marijuana (n=3)	25.3± 9.3	15.3± 10.7	10.0± 8.7	0.530	0.108

*Simple regression (univariate analysis). **Multiple regression (multivariate analysis). ***SD: standard deviation.

Table 4 shows that before starting treatment at CAPS-AD, the participants had a mean SF of 26.2± 10.1, dropping to 11.7± 10.0 after treatment, which implies the average improvement of the n=35 individuals in the study was 14.5± 8.8 points. Like the results presented in Tables 2 and 3, the results obtained by the SF analysis confirm the hypothesis that people who undergo treatment for SUD at CAPS-AD had a significant improvement in their SF.

Evaluating a possible association between improvement in SF, sociodemographic and drug used/previous treatment variables, it was observed that only race (multivariate analysis) and the fact of not being the first treatment showed a significant association (Table 4). The results showed that Whites improved more (mean improvement of 18.8± 10.4 points on the scale) than *Pardos* – Brazilians with varied ethnic ancestry*;*(10.8± 8.7) – and Blacks (14.1± 6.4), and the improvement in SF was lower (10.3± 5.7) for those participants who were taking treatment for the first time when compared to those who had taken treatment previously (17.2± 9.4). Whites started with the worst scores, so they had more room for improvement. Similarly, those seeking treatment for the first time started with low SF scores, so there was less room for improvement.

However, it is important to observe that although *Pardos* and Black individuals showed less improvement than Whites, this improvement was still significant (more than 10 points on average). The same occurred for those individuals seeking

treatment for the first time; although treatment performed less well for these individuals, the improvement also still been significant (more than 10 points on average).

Discussion

The SF of people experiencing SUD before and after treatment in a sample of the CAPS-AD clients in Brasilia, Brazil, significantly improved. Among the 21 situations described on the SF questionnaire, only two – "lost consciousness or passed out" and "felt like he was going crazy" – didn't present a significant result after starting treatment at CAPS-AD, even though in some of the situations the SF of most participants remained the same before and after treatment. Also, the participants who declared themselves White showed more significant improvement in SF than *Pardos* and Black individuals after treatment, and those who had previous treatment showed better results than participants who received the treatment for the first time.

The sample study was mainly composed of men, young and unemployed people. This finding is commonly identified in the literature; men use alcohol and other drugs more intensively than women (Guinle & Sinha, 2020; Laranjeira, 2014; Bastos, 2017), even though women have been increasing their pattern of alcohol consumption in recent years (Geels et al., 2013; McCaul et al., 2019). Regarding working conditions, the decrease in labor productivity related to alcohol use disorder has already been reported in the literature (Böckerman et al., 2017; Duailibi & Laranjeira, 2007; Thørrisen et al., 2019); some studies, also performed in Brazil, show a large portion of individuals experiencing SUD, are unemployed or working in informal activities (Aas et al., 2017; Duailibi et al., 2008; Oliveira & Nappo, 2008). A New Zealand study that linked SUD and unemployment concluded that not only does unemployment aggravate the use of marijuana, but the severity of the use reduces the chances of getting and maintaining employment (Boden et al., 2017).

The literature reports the desire of the people experiencing SUD to change their lives and solve their problems related to this drug use (Pettersen et al., 2019; Worley, 2017). However, the stigma associated with SUD can delay seeking help, which occurs when several domains of people's lives are already affected (Brown, 2011; Gallassi et al., 2021; Crapanzano et al., 2019). Thus, when seeking treatment, they often have additional social and health problems, including mental disorders, unemployment, poor housing, and some justice involvement (Daley, 2013; Dir et al., 2022; Reif et al., 2014), which systemically compromising their SF.

Even though Whites started the treatment with worse SF scores than Blacks and Pardos, and therefore had more room for improvement, it is important to mention a current discussion about the influence of racism on health care. Several international studies, including a systematic review, demonstrate that for the same health condition, as mental disorders, implicit racial bias is pervasive and manifests in patient-provider interactions, exacerbating health disparities in minorities (Bailey et al., 2017; Cénat, 2020; Hamed et al., 2022; Pugh Junior et al., 2021; Sim et al., 2021). This is a complex situation that requires not only political and institutional will and resources, but also clear guidelines and new approaches.

This study shows that clients who had received previous treatments for SUD, presented better results on SF, even though they started with worse SF scores and

therefore had more room for improvement. On the one hand, the literature shows that repetition of treatment is related to better results, precisely because of the knowledge that the person has of the process and its distinct phases, the bond with the team, and with other treatment partners (Melemis, 2023; Zaidi, 2020), on the other hand, relapses often lead people experiencing SUD to worse health conditions/SF than when they first started treatment; it can be associated with the tolerance, which is when the individual needs higher and higher doses of substances to get the desired effect, with clinical and social consequences due to increased consumption (Lim & Ersche, 2023).

In this sense, it reinforces the importance of services adapting the therapeutic project (the PTS) to the client's level of motivation/clinical and social conditions to achieve better results. The motivation degree of the individual experiencing SUD seeking treatment is a significant factor for adherence to the service and therapeutic success. Thus, it is expected that these clients still in a phase of ambivalence do not manage to adhere to treatment and consider it a "failure" to continue to use alcohol and/or other drugs (Meyer et al., 2015; Sousa et al., 2013). Some studies point out the enhancements that services can offer to increase client's retention: detailed mapping of the client's profile, a specialized team trained to serve this population, with a combination of various therapeutic activities, and constant discussion of cases in periodic team meetings (Gallassi et al., 2016; McClelland, 2005; Meirelles et al., 2015).

The present study also pointed to an improvement in SF among the individuals who underwent treatment at CAPS-AD. It is important to emphasize that the progress after treatment in almost all situations did not necessarily imply that the participants quit using alcohol and/or other drugs, although the decrease was evident. The United Nations Office on Drugs and Crime (UNODC) defines treatment as including diagnosis, health care, and social reintegration of those affected to reduce the pattern of drug use, improve health and quality of life, make the most of the individual's abilities, and provide access to services, opportunities, and full social rehabilitation (United Nations Office on Drugs and Crime, 2020).

The therapeutic project for people experiencing SUD should be constructed from the assumptions of harm reduction, which aims to minimize the risks and damage caused by drug use without the mandatory abstinence that, although desired, is not necessarily considered the primary outcome of treatment. From this perspective, whose principles include humanism, pragmatism, individualization of therapy, and valuing autonomy independent of abstinence (Hawk et al., 2017; Messas et al., 2019), CAPS-AD should exercise the function as a network, of supporting, promoting health, and providing the creation and strengthening of new social bonds in the community. The treatment offered by CAPS-AD, with emphasis not only on medication but also on psychosocial aspects, such as income-generating projects, was shown to be more effective for therapeutic success (including maintenance of abstinence) than only pharmacological therapy in a review study that evaluated publications in the area (Crescenzo et al., 2018).

In this sense, the treatment proposal of CAPS-AD plays an important role in improving the SF of people experiencing SUD. The improvement of self-esteem, social support, and social reintegration are essential factors for the individual to be able to reduce the pattern of use or even achieve and maintain abstinence; treatments with this type of therapeutic management have shown positive results (Frings & Albery, 2015; Nogueira & Pereira, 2014).

OT contributions to improving SF

Although OT was not the main object of the present study, the composition of the research and the CAPS-AD team, combined with the results obtained brought up reflections about the important role of this profession in the treatment and rehabilitation process of people experiencing SUD regarding SF.

The OT professional is a key agent in psychosocial care, especially in community-based facilities such as CAPS-AD, and is essential in promoting the assistance and self-care of people experiencing SUD. The Brazilian legal frameworks that define therapeutic interventions in mental disorders and SUD, as well as the professionals competent to act in treatment services, include the occupational approach (Brasil, 2001) and the occupational therapist (Brasil, 2002) as an integral part of the psychosocial care model.

According to a Brazilian study (Pontes & Polatajko, 2016), the rescue of personal and social values and the re-signification of ADL, IADL, and routines are essential interventions of the occupational therapist in the SUD context. The practice of OT can be based on the occupation (Gomes et al., 2021), which is to ground the therapy on the activities that the individual needs, wants, and is expected to do (Benetton, 2010), centered on the client, always considering and respecting their vision about their problem, their choices, goals, and objectives.

OT assesses activities and attitudes by classifying them within the individual's life project as protective factors or risk factors for substance use, just as it identifies activities that occupy a place of fragility, insecurities, deficiencies, and losses for that individual (Fejes et al., 2016; Lima, 2006; Pontes & Polatajko, 2016). This view breaks a logic that isolates substance use without considering it as a process and as a relevant occupational activity (or occupation) present in the client's routine, as this substance use can give meaning to life (Kiepek & Magalhães, 2011), even if it is not a healthy action. In many cases, SUD plays a role in the client's daily life as a reward producer. In a study conducted in the Philippines, a country internationally known for applying the death penalty to drug-related crimes, the authors discuss drug use as a non-sanctioned occupation, according to occupation-related concepts of form, function, and meaning; it becomes apparent that drug use may, in some ways, conform to Filipino social norms, values, and moral standards, such as enhancing productivity and economic participation (Sy et al., 2020).

This broadened understanding that OT plays regarding the problems presented by people experiencing SUD is a powerful tool to offer expanded care, overcoming the abstinence paradigm as the only intervention strategy, focusing on improving SF even if they continue to use drugs. Also, the OT approach contributes to building with the clients and the service team views and strategies to overcome (or protect) external contexts, including the social determinants of gender and race - factors evidenced in this study - urban violence, poverty, and others. In this sense, the Social Occupational Therapy approach offers important contributions in this field, considering that the condition of vulnerability and social determinants permeate the populations assisted in public health services for people experiencing SUD in Brazil (Lopes & Malfitano, 2021). Inclusive and emancipatory approaches, such as the use of occupation-based social participation interventions, client engagement in decision-making, and multi-professional collaboration, are essential in discussing and addressing social injustices, and deliberate use of political activities of daily living (Godoy-Vieira et al., 2018; Sy et al., 2021).

Producing and stimulating the improvement of SF should be the primary intervention of OT with people experiencing SUD in community-based facilities, such as CAPS-AD. By focusing on improving clients' SF, OT begins to consider as therapeutic strategies the relationships with society, community, territory, families, friends, work institutions, and welfare support.

Study limitations

The study has some limitations that must be mentioned. Considering that one of the study criteria included only people who had never received treatment in CAPS-AD, few cases were eligible, consequently, the sample was smaller than expected. The study was conducted with people coming from one CAPS-AD site, so in the future, a similar study could be done including more sites.

Conclusion

Overall, the SF of people experiencing SUD after undergoing treatment in CAPS-AD improved. Some particular characteristics were observed, such as the racial issue and the treatment history of the participants, which impacted the improvement of the SF. Considering the Brazilian legal framework that regulates the composition of CAPS-AD teams – and the OT is one of the professionals who should be part of them – as well as the OT performance and approach to people experiencing SUD in vulnerable contexts, these findings reinforce the worldwide trend to evaluate the therapeutic success of treating these clients beyond abstinence, focusing on other domains of life that are positively impacted by treatment, even if abstinence has not yet occurred. In this context, it is essential to bring the contributions of OT due to its potential to promote actions of participation and social function of the people experiencing SUD with stimulation of their autonomy and of new possibilities and ways to perform their ADL and IADL, which impacts their SF improvement.

The relationship between improvement in SF of people experiencing SUD and OT intervention in community-based facilities, such as CAPS-AD, should be explored in future studies to better understand how the skills and competencies of this professional can contribute to the design and implementation of therapeutic projects that prioritize SF as the outcome of greatest interest in the treatment of people experiencing SUD.

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References

Aas, R. W., Haveraaen, L., Sagvaag, H., & Thørrisen, M. M. (2017). The influence of alcohol consumption on sickness presenteeism and impaired daily activities. The WIRUS screening study. *PLoS One*, *12*(10), 1-14.

Amorelli, C. R. (2016). Psychosocial occupational therapy interventions for substance-use disorders: a narrative review. *Occupational Therapy in Mental Health*, *32*(2), 167-184.

Araujo, F. S. (2019). Quebrando estigmas: uma alternativa ao proibicionismo das drogas por meio da redução de danos. *Cadernos de Saúde Pública*, *35*(3), 1-3.

Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequities in the USA: evidence and interventions. *Lancet*, *389*(10077), 1453-1463.

Barros, S., & Salles, M. (2011). Mental health care management in the Brazilian National Health System. *Revista da Escola de Enfermagem da USP*, *45*(Spe 2), 1780-1785.

Bastos, F. I. P. M. (2017). *III levantamento nacional sobre o uso de drogas pela população brasileira*. Retrieved in 2023, May 2, from https://www.arca.fiocruz.br/handle/icict/34614

Bastos, F. I., & Bertoni, N. (2013). *Estimativa do número de usuários de crack e/ou similares nas capitais do País.* Retrieved in 2023, May 2, from http://infograficos.estadao.com.br/especiais/crack/perfilusuarios.pdf

Benetton, J. (2010). O encontro do sentido do cotidiano na Terapia Ocupacional para a construção de significados. *Revista CETO*, *12*(12), 32-39.

Böckerman, P., Hyytinen, A., & Maczulskij, T. (2017). Alcohol consumption and long-term labor market outcomes. *Health Economics*, *26*(3), 275-291.

Boden, J. M., Lee, J. O., Horwood, L. J., Grest, C. V., & McLeod, G. F. (2017). Modelling possible causality in the associations between unemployment, cannabis use, and alcohol misuse. *Social Science & Medicine*, *175*, 127-134.

Brasil. (2001, April 6). Lei n. 10.216/2001, de 06 de abril de 2001. Dispõe sobre a proteção e os direitos das pessoas portadoras de transtornos mentais e redireciona o modelo assistencial em saúde mental. *Diário Oficial [da] República Federativa do Brasil*, Brasília. Retrieved in 2023, May 2, from http://hpm.org.br/wp-content/uploads/2014/09/lei-no-10.216-de-6-de-abril-de-2001.pdf

Brasil. (2002, February 19). Portaria nº 336, de 19 de fevereiro de 2002. *Diário Oficial [da] República Federativa do Brasil*, Brasília, seção 1.

Brasil. (2011, December 23). Portaria nº 3.088/2011, de 23 de dezembro de 2011. Institui a Rede de Atenção Psicossocial para pessoas com sofrimento ou transtorno mental e com necessidades decorrentes do uso de crack, álcool e outras drogas, no âmbito do Sistema Único de Saúde (SUS). *Diário Oficial [da] República Federativa do Brasil*, Brasília. Retrieved in 2023, May 2, from https://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt3088_23_12_2011_rep.html

Brasil. Conselho Nacional de Saúde – CNS. Comissão Nacional de Ética em Pesquisa – CONEP. (2012, December 12). Resolução nº 466, de 12 de dezembro de 2012. *Diário Oficial [da] República Federativa do Brasil*, Brasília. Retrieved in 2023, May 2, from: https://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf

Brown, S. A. (2011). Standardized measures for substance use stigma. *Drug and Alcohol Dependence*, *116*(1-3), 137-141.

Carvalho, L. D. F., Rodrigues, L. A., Pandossio, J. E., & Gallassi, A. D. (2021). Análise crítica sobre medicamentos prescritos para o uso problemático de crack. *Psicologia: Teoria e Pesquisa*, *37*, 1-11.

Cénat, J. M. (2020). How to provide anti-racist mental health care. *The Lancet. Psychiatry*, *7*(11), 929-931.

Conover, W. J. (1999). *Practical nonparametric statistics*. New York: John Wiley & Sons.

Crapanzano, K. A., Hammarlund, R., Ahmad, B., Hunsinger, N., & Kullar, R. (2019). The association between perceived stigma and substance use disorder treatment outcomes: a review. *Substance Abuse and Rehabilitation*, *10*, 1-12.

Crescenzo, F., Ciabattini, M., D'Alò, G. L., Giorgi, R., Giovane, C., Cassar, C., Janiri, L., Clark, N., Ostacher, M. J., & Cipriani, A. (2018). Comparative efficacy and acceptability of psychosocial interventions for individuals with cocaine and amphetamine addiction: a systematic review and network meta-analysis. *PLoS Medicine*, *15*(12), 1-24.

Crocq, M. A. (2022). Historical and cultural aspects of man's relationship with addictive drugs. *Dialogues in Clinical Neuroscience*, *9*(4), 355-361. https://doi.org/10.31887/DCNS.2007.9.4/macrocq.

Daley, D. C. (2013). Family and social aspects of substance use disorders and treatment. *Yao Wu Shi Pin Fen Xi*, *21*(4), 73-76.

Dimeff, L. A., Baer, J. S., Kivlahan, D. R., & Marlatt, G. A. (2002). *Alcoolismo entre estudantes universitários: uma abordagem de redução de danos*. São Paulo: Editora Unesp.

Dir, A. L., Tillson, M., Aalsma, M. C., Staton, M., Staton, M., & Watson, D. (2022). Impacts of COVID-19 at the intersection of substance use disorder treatment and criminal justice systems: findings from three states. *Health & Justice*, *10*(1), 1-10.

Duailibi, L. B., Ribeiro, M., & Laranjeira, R. (2008). Profile of cocaine and crack users in Brazil. *Cadernos de Saúde Pública*, *24*(Suppl. 4), s545-s557.

Duailibi, S., & Laranjeira, R. (2007). Políticas públicas relacionadas às bebidas alcoólicas. *Revista de Saúde Pública*, *41*(5), 839-848.

Fejes, M. A. N., Ferigato, S. H., & Marcolino, T. Q. (2016). Saúde e cotidiano de mulheres em uso abusivo de álcool e outras drogas: uma questão para a Terapia Ocupacional. *Revista de Terapia Ocupacional da Universidade de São Paulo*, *27*(3), 254-262.

Fonseca, R. M. A. M., & Gallassi, A. D. (2021). Práticas de cuidado extramuros nos Centros de Atenção Psicossocial Álcool e outras Drogas: a ocupação cidadã. *Interface: Comunicação, Saúde, Educação*, *25*, 1-19.

Frings, D., & Albery, I. P. (2015). The social identity model of cessation maintenance: formulation and initial evidence. *Addictive Behaviors*, *44*, 35-42.

Gallassi, A. D., Nakano, E. Y., Miranda, K. G., Santos, J. E., Rodrigues, D. S., & Oliveira, F. M. (2022). The increased alcohol and marijuana use associated with the quality of life and psychosocial aspects: a study during the Covid-19 pandemic in a Brazilian university community. *International Journal of Mental Health and Addiction*, 1-21. Online.

Gallassi, A. D., Nakano, E. Y., Wagner, G. A., Silva, M. N. R. M. O., & Fischer, B. (2016). Characteristics of clients using a community-based drug treatment service ('CAPS-AD') in Brazil: an exploratory study. *The International Journal on Drug Policy*, *31*, 99-103.

Gallassi, A. D., Oliveira, K. D., Silva, M. N. R. M. O., Machado, I. A., & Wagner, G. A. (2021). The relationship between level of education and moral judgment toward who abuse drugs. *Ciência & Saúde Coletiva*, *26*(6), 2335-2343.

Geels, L. M., Vink, J. M., van Beek, J. H., Bartels, M., Willemsen, G., & Boomsma, D. I. (2013). Increases in alcohol consumption in women and elderly groups: evidence from an epidemiological study. *BMC Public Health*, *13*, 1-13.

Ghitza, U. E., Epstein, D. H., & Preston, K. L. (2007). Psychosocial functioning and cocaine use during treatment: strength of relationship depends on type of urine-testing method. *Drug and Alcohol Dependence*, *91*(2-3), 169-177.

Godoy-Vieira, A., Soares, C. B., Cordeiro, L., & Campos, C. M. S. (2018). Inclusive and emancipatory approaches to occupational therapy practice in substance-use contexts. *Canadian Journal of Occupational Therapy*, *85*(4), 307-317.

Gomes, M. D., Teixeira, L., & Ribeiro, J. (2021). *Enquadramento da prática da terapia ocupacional: domínio & processo* (4th ed.). Leiria: Politécnico de Leiria.

Guinle, M. I. B., & Sinha, R. (2020). The role of stress, trauma, and negative affect in alcohol misuse and alcohol use disorder in women. *Alcohol Research: Current Reviews*, *40*(2), 1-17.

Hamed, S., Bradby, H., Ahlberg, B. M., & Thapar-Björkert, S. (2022). Racism in healthcare: a scoping review. *BMC Public Health*, *22*(1), 1-22.

Harding, T. W., Arango, M. V., Baltazar, J., Climent, C. E., Ibrahim, H. H., Ladrido-Ignacio, L., Murthy, R. S., & Wig, N. N. (1980). Mental disorders in primary health care: a study of their frequency and diagnosis in four developing countries. *Psychological Medicine*, *10*(2), 231-241.

Hawk, M., Coulter, R. W. S., Egan, J. E., Fisk, S., Friedman, M. R., Tula, M., & Kinsky, S. (2017). Harm reduction principles for healthcare settings. *Harm Reduction Journal*, *14*(70), 1-9.

Henrique, I. F., Micheli, D., Lacerda, R. B., Lacerda, L. A., & Formigoni, M. L. (2004). Validation of the Brazilian version of Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). *Revista da Associação Médica Brasileira*, *50*(2), 199-206.

Hirdes, A. (2009). A reforma psiquiátrica no Brasil: uma (re) visão. *Ciência & Saúde Coletiva*, *14*(1), 297-305.

Huber, M., Knottnerus, J. A., Green, L., van der Horst, H., Jadad, A. R., Kromhout, D., Leonard, B., Lorig, K., Loureiro, M. I., van der Meer, J. W., Schnabel, P., Smith, R., van Weel, C., & Smid, H. (2011). How should we define health? *BMJ*, *343*, d4163.

Kessler, R. C., & Ustün, T. B. (2004). The World Mental Health (WMH) survey initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). *International Journal of Methods in Psychiatric Research*, *13*(2), 93-121.

Kiepek, N., & Magalhães, L. (2011). Addictions and impulse-control disorders as occupation: a selected literature review and synthesis. *Journal of Occupational Science*, *18*(3), 254-276.

Lacerda, C. D. B., & Fuentes-Rojas, M. (2016). Significados e sentidos atribuídos ao Centro de Atenção Psicossocial Álcool e outras Drogas (CAPS AD) por seus usuários: um estudo de caso. *Interface: Comunicação, Saúde, Educação*, *21*(61), 363-372.

Laranjeira, R. (2014). *II Levantamento Nacional de Álcool e Drogas (LENAD): relatório 2012*. Retrieved in 2023, May 2, from https://inpad.org.br/wp-content/uploads/2014/03/Lenad-II-Relatório.pdf

Lim, T. V., & Ersche, K. D. (2023). Theory-driven computational models of drug addiction in humans: fruitful or futile? *Addiction Neuroscience*, *5*, 1-11.

Lima, E. M. F. A. (2006). A saúde mental nos caminhos da Terapia Ocupacional. *O Mundo da Saúde*, *30*(1), 117-122.

Lopes, R. E., & Malfitano, A. P. S. (2021). *Social occupational therapy: theoretical and practical designs*. Philadelphia: Elsevier.

Machado, A. R., & Miranda, P. S. C. (2007). Fragmentos da história da atenção à saúde para usuários de álcool e outras drogas no Brasil: da justiça à saúde pública. *História, Ciências, Saúde-Manguinhos*, *14*(3), 801-821.

Madrigal, C., Bower, E., Simons, K., Gillespie, S. M., Van Orden, K., & Mills, W. L. (2021). Assessing social functioning during COVID-19 and beyond: tools and considerations for nursing home staff. *Journal of the American Medical Directors Association*, *22*(10), 1989-1997.

McCaul, M. E., Roach, D., Hasin, D. S., Weisner, C., Chang, G., & Sinha, R. (2019). Alcohol and women: a brief overview. *Alcoholism, Clinical and Experimental Research*, *43*(5), 774-779.

McClelland, G. T. (2005). The effects and management of crack cocaine dependence. *Nursing Times*, *101*(29), 26-27.

Meirelles, J. A. C. M., Chohfi, M. C. F., Basilio, M. M., Geraldini, A., Araújo Filho, G. M., Laranjeira, R. R., & Silva, C. J. (2015). Nível de adesão ao tratamento ambulatorial de pacientes dependentes de substâncias psicoativas. *Revista Espacios*, *36*(4), 12-15.

Melemis, S. M. (2023). Relapse and relapse prevention. In D. B. Cooper (Ed.), *Alcohol use: assessment, withdrawal management, treatment and therapy: ethical practice* (pp. 349-361). Cham: Springer.

Messas, G. P., Fukuda, L., & Pienkos, E. (2019). A phenomenological contribution to substance misuse treatment: principles for person-centered care. *Psychopathology*, *52*(2), 85-93.

Meyer, P. J., King, C. P., & Ferrario, C. R. (2015). Motivational processes underlying substance abuse disorder. In E. H. Simpson & P. D. Balsam (Eds.), *Behavioral neuroscience of motivation* (pp. 473-506). Cham: Springer. (Current Topics in Behavioral Neurosciences, 27).

Mota, F. O., Fonseca, R. M. A. M., Santos, J. E. D., & Gallassi, A. D. (2019). Aspectos do cuidado integral para pessoas em situação de rua acompanhadas por serviço de saúde e de assistência social: um olhar para e pela terapia ocupacional. *Cadernos Brasileiros de Terapia Ocupacional*, *27*(4), 806-816.

Narasimha, V. L., Butner, J. L., Hanafi, E., Farokhnia, M., Bhad, R., Chalabianloo, F., Kouimtsidis, C., Baldacchino, A., & Arunogiri, S. (2022). Harm reduction and abstinence-based models for treatment of substance use disorders during the COVID-19 pandemic: a global perspective. *BJPsych International*, *19*(3), 66-69.

Nogueira, A. M., & Pereira, A. R. (2014). Ações de terapeutas ocupacionais na atenção à pessoa com problemas relacionados ao uso de álcool e outras drogas. *Cadernos Brasileiros de Terapia Ocupacional*, *22*(2), 285-293.

Oliveira, L. G., & Nappo, S. A. (2008). Characterization of the crack cocaine culture in the city of São Paulo: a controlled pattern of use. *Revista de Saúde Pública*, *42*(4), 1-8.

Pettersen, H., Landheim, A., Skeie, I., Biong, S., Brodahl, M., Oute, J., & Davidson, L. (2019). How social relationships influence substance use disorder recovery: a collaborative narrative study. *Substance Abuse: Research and Treatment*, *13*, 1-8.

Pontes, T. B., & Polatajko, H. J. (2016). Habilitando ocupações: prática baseada na ocupação e centrada no cliente na Terapia Ocupacional. *Cadernos Brasileiros de Terapia Ocupacional*, *24*(2), 403-412.

Pugh Junior, M., Perrin, P. B., Rybarczyk, B., & Tan, J. (2021). Racism, mental health, healthcare provider trust, and medication adherence among black patients in safety-net primary care. *Journal of Clinical Psychology in Medical Settings*, *28*(1), 181-190.

R Core Team. (2018). *R: a language and environment for statistical computing*. Vienna: R Foundation for Statistical Computing. Retrieved in 2023, May 2, from https://www.r-project.org/

Reif, S., George, P., Braude, L., Dougherty, R. H., Daniels, A. S., Ghose, S. S., & Delphin-Rittmon, M. E. (2014). Residential treatment for individuals with substance use disorders: assessing the evidence. *Psychiatric Services*, *65*(3), 301-312.

Silva, C. R., Santos, C. N., Nogueira, J. N., & Malfitano, A. P. S. (2015). Mapeamento da atuação do terapeuta ocupacional nos Centros de Atenção Psicossocial de Álcool e Outras Drogas (CAPS AD) do interior do estado de São Paulo. *Cadernos Brasileiros de Terapia Ocupacional*, *23*(2), 321-334.

Silva, É. C., & Tucci, A. M. (2015). Intervenção breve para redução do consumo de álcool e suas consequências em estudantes universitários brasileiros. *Psicologia: Reflexão e Crítica*, *28*(4), 728-736.

Sim, W., Lim, W. H., Ng, C. H., Chin, Y. H., Yaow, C. Y. L., Cheong, C. W. Z., Khoo, C. M., Samarasekera, D. D., Devi, M. K., & Chong, C. S. (2021). The perspectives of health professionals and patients on racism in healthcare: a qualitative systematic review. *PLoS One*, *16*(8), 1-15.

Singh, D., Müller, C. P., Vicknasingam, B. K., & Mansor, S. M. (2015). Social functioning of kratom (*Mitragyna speciosa*) users in Malaysia. *Journal of Psychoactive Drugs*, *47*(2), 125-131.

Sousa, P. F., Ribeiro, L. C. M., Melo, J. R. F., Maciel, S. C., & Oliveira, M. X. (2013). Dependentes químicos em tratamento: um estudo sobre motivação para a mudança. *Temas em Psicologia*, *21*(1), 259-268.

Sy, M. P., Bontje, P., Ohshima, N., & Kiepek, N. (2020). Articulating the form, function, and meaning of drug using in the Philippines from the lens of morality and work ethics. *Journal of Occupational Science*, *27*(1), 12-21.

Sy, M. P., Reyes, R. C. D., Roraldo, M. P. N. R., & Ohshima, N. (2021). Uncovering the lived experiences of Filipino drug recoverees towards occupational participation and justice through an interpretative phenomenological analysis. *Scandinavian Journal of Occupational Therapy*, *28*(6), 457-470.

Thørrisen, M. M., Bonsaksen, T., Hashemi, N., Kjeken, I., Van Mechelen, W., & Aas, R. W. (2019). Association between alcohol consumption and impaired work performance (presenteeism): a systematic review. *BMJ Open*, *9*(7), 1-15.

Tiffany, S. T., Friedman, L., Greenfield, S. F., Hasin, D. S., & Jackson, R. (2012). Beyond drug use: a systematic consideration of other outcomes in evaluations of treatments for substance use disorders. *Addiction*, *107*(4), 709-718.

United Nations Office on Drugs and Crime – UNODC (2020). *International standards for the treatment of drug use disorders*. Retrieved in 2023, May 2, from https://www.unodc.org/documents/drug-prevention-and-treatment/UNODC-WHO_International_Standards_Treatment_Drug_Use_Disorders_April_2020.pdf

United Nations Office on Drugs and Crime – UNODC. (2021). *World drug report 2021*. Vienna: UNODC. Retrieved in 2023, May 2, from https://www.unodc.org/unodc/en/data-and-analysis/wdr2021.html

White, H. R., & Labouvie, E. W. (1989). Towards the assessment of adolescent problem drinking. *Journal of Studies on Alcohol*, *50*(1), 30-37.

Worley, J. (2017). Recovery in substance use disorders: what to know to inform practice. *Issues in Mental Health Nursing*, *38*(1), 80-91.

Zaidi, U. (2020). Role of social support in relapse prevention for drug addicts. *International Journal of Innovation, Creativity and Change*, *13*(1), 915-924.

Author's Contributions

Samantha Ferreira da Costa Moreira was responsible for conception and design of the study, acquisition of data, and drafting the manuscript. Eduardo Yoshio Nakano was responsible for conception and design of the study, analysis/interpretation of data, and drafting the manuscript. Helton Saulo Bezerra dos Santos was responsible for conception and design of the study, analysis/interpretation of data, and drafting the manuscript. Karina Diniz Oliveira was responsible for analysis/interpretation of data, and revising the manuscript critically for important intellectual content. Kleverson Gomes de Miranda was responsible for analysis/interpretation of data, drafting the manuscript, and revising the manuscript critically for important intellectual content. Rafaela Maria Alves Martins Fonseca was responsible for analysis/interpretation of data, and revising the manuscript critically for important intellectual content. Andrea Donatti Gallassi was responsible for conception and design of the study, acquisition of data, and drafting the manuscript.
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