

# The social inclusion of mental health service users in Brazil: Applying SCOPE-B scale

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**Abstract:** the study aimed to culturally adapt and validate the SCOPE scale for Brazil, focusing on measuring social inclusion among adults in community psychosocial centers in São Paulo. Utilizing a cross-sectional sample survey and the adapted SCOPE-B scale, it assessed 255 patients, revealing their low social inclusion levels. Findings highlighted the negative correlation between social inclusion and aspects like race, economic status, and employment, alongside a positive association with physical and mental health. The SCOPE-B scale demonstrated reliability, internal consistency, and construct validity, supporting its application in diverse cultural contexts.

**Keywords:** nurse; mental health; social inclusion; service evaluation; SCOPE-B.

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## **Introduction**

Brazilian psychiatric reform took shape and was implemented as government policy. This new policy adopted the psychosocial care model, aiming at deinstitutionalisation strategies that guarantee rights, promote autonomy and exercise of citizenship and, consequently, social inclusion. In this way, there was the reduction of beds in psychiatric hospitals and an increase of the financing of community mental health services, as well as Psychosocial Care Centre (adult CAPS).

In Brazil, there has been no instrument able to measure the construct 'social inclusion' as an outcome of the reforms. Thus, Social and Communities Opportunities Profile (SCOPE) validation is an opportunity to provide an instrument to measure social inclusion among people with severe and persistent disorders in Brazil.

Hence, the following hypothesis was posited: the translation of the SCOPE is expected to exhibit reliability and acceptable psychometric properties post-validation. Moreover, it is anticipated that the subsequent application of the SCOPE-B scale could yield information that will contribute to the contemplation of social inclusion initiatives within the Brazilian context and the refinement of services concerning the social inclusion of users.

## **Background of the Brazilian study**

Brazil is a country of continental dimensions and high social inequality. The health services, principally, mental health services are concentrated near big urban centres. In Brazil, there is no comprehensive data about prevalence and incidence of mental health problems, just some studies that compare such data from big cities of different regions of the country.

Data from the Ministry of Health indicate that 3% of the Brazilian general population suffer from severe and persistent mental health problems, 6% have severe psychiatric disorders due to alcohol and other drugs and 12% require other forms of care, either continuous or intermittent. The rate of utilisation of health services is low, around 13%. Most people with mental disorders do not seek psychiatric care, for reasons linked to stigma and ignorance of the disease (Santos, Barros and Huxley, 2018).

A study (Goncalves et al., 2014) defined the rate of common mental disorders among users of health facilities in Rio de Janeiro (51.9%), São Paulo (53.3%), Fortaleza (64.3%) and Porto Alegre (57.7%), indicating significant differences

between Porto Alegre and Fortaleza when compared to Rio de Janeiro. Mental health problems were especially high in women, the unemployed and low-income people, which suggests that mental health problems are strongly linked to the process of social inclusion/exclusion.

As social exclusion has been regarded as an important factor impairing the recovery of people with mental disorders, there is a need to understand characteristics and related determinants in Brazil. A Brazilian version of the SCOPE (i.e. SCOPE-B) was established to measure social inclusion among mental health services users in Brazil. This Brazilian instrument was based on an existing measure which has been validated. No similar studies have been conducted in Brazil. The findings will have both theoretical and practical implications.

The aim of the study was to culturally adapt and validate the SCOPE scale for the Brazilian context and to provide a tool to measure the social inclusion of adult CAPS users, contributing to the development of new indicators for mental health public policy of the Brazil.

## **Methods**

### **Development of SCOPE-B**

The Brazilian version of SCOPE, i.e. SCOPE-B, was developed from the original version of the Social and Communities Opportunities Profile (SCOPE).

The first author of this paper went through the English version questionnaire and identified questions and answers that would require cross-cultural adaptation using the guidelines of [Beaton et al. \(2000\)](#). These questions including elections (voted or not), types of accommodation, educational level, race, and types of income. These questions were rephrased using the Brazilian Census questionnaire. The SCOPE-B did not add any questions to SCOPE.

## **Results and discussion**

### **Social inclusion among mental services users in Brazil**

We received ethical approval from the local ethics committee in Brazil (1.508.559). The study involved a non-probability cross-sectional sample survey of 225 people with mental health issues who were users of adult CAPS. We used

the following inclusion criteria: (1) both sexes, (2) over 18 and under 65 years of age, (3) an adult CAPS member for at least 3 months (time for the user to have an individual therapy plan already in place), (4) verbal and understanding ability and (5) agree to participate in the study. All respondents were users of communities' mental health services of the city of São Paulo-Brazil. Diagnostic categories of respondents included recurrent depression, bipolar affective disorder, paranoid schizophrenia, anxiety disorder with anxiety attacks, and obsessive-compulsive disorder. All interviews were conducted at the premises of an outpatient clinic from December 2016 to March 2017. The median interview duration was 20 minutes.

There was racial diversity in the sample. All participants were born in Brazil but some were born outside of São Paulo state (22.2%). There were roughly equal numbers of female and male respondents. Their ages ranged from 19 to 68 years ( $M = 44.57$ ;  $SD = 11.43$ ). Further details regarding the participants are found in [Table 1](#).

## **Subjective and objective evaluations of opportunities**

### **Perceived Opportunities**

Perceived opportunities for each domain were rated from 1 (opportunities are extremely restricted) to 5 (plenty of opportunities). In general, respondents perceived good opportunities across various social domains except for items regarding housing and income, which were 2.2 and 2.63 respectively. The five items on perceived opportunities are summarized in [Table 2](#).

### **Objective Measures of Opportunities**

20 items were categorical, rated zero or one. Seven items were quasi-interval scales and two were interval scales, including monthly income and number of friends. [Table 3](#) shows the proportion of participants who gave positive responses to objective measures of opportunities in various social domains. Participants reported the highest objective measures of opportunities in the social domain, with frequent interaction with parents and friends. Objective measures of opportunities were positive on most items except crime victimization (23.1%), enrolled in a course (16.7) and in paid employment or self-employment (10.9%). However, the

Table 1  
Sample profile (n = 225)

Variable	N	%
Gender		
Female	117	52
Male	108	48
Type of accommodation		
Permanent residential flat	55	24.4
Permanent residential house	144	64
Permanent non-residential (a school, etc.)	02	0.9
Permanent residential room	17	7.6
Temporary residence (for temporary or seasonal stay)	05	2.2
Homeless	08	3.6
Employment status		
In paid employment (full or part time)	14	6.2
Self employed	24	10.7
Long term sick or disabled	70	31.1
Unemployed	88	35.1
Retired from paid work altogether	29	12.9
Full time student	0	0
Source of Income		
Earned income (employment, investment, property rental)	35	15.6
Pension (family, social, for invalids, etc.)	75	33.3
No source of income	60	26.7
Retirement pay	27	12
Prefer not to say	28	12.4
Educational qualification		
No qualification	16	7.1
No higher qualification	85	37.8
A level or above	124	55.1
Place of birth		
São Paulo	175	77.8
Other Place of Brazil	50	22.2
Race		
White	119	52.9

Table 1 (continued)

Variable	N	%
Black	28	12.4
Mixed	62	27.6
Indigenous	10	4.4
Asiatic	06	2.7

Table 2

Perceived opportunities in different social domains

	Mean	SD
Involvement with community groups	3.06	1.39
Suitable housing	2.63	1.26
Suitable work	3.66	1.30
Increase income	2.20	1.56
Education	3.07	1.31

Note. 5-point scale. Higher scores represent higher perceived opportunities.

objective measures indicated that participants made choices to be involved, such as voting, giving help to others, and inviting friends to their accommodation.

### Satisfaction with Opportunities

Satisfaction with opportunities for each domain were rated from 1 (terrible) to 7 (delighted). Table 4 summarised findings for the eleven items for satisfaction with opportunities. In general, respondents were not satisfied with opportunities in various social domains (except physical health care, mental health care and contact with family). The overall mean for all items or satisfaction with opportunities was 3.53.

Among all the social domains, contact with friends, mental health care and physical health care occupied a dominant position in determining the participants' experience of social inclusion. This finding contrasts with studies in Hong Kong and Poland, which found an emphasis on employment, financial and leisure activities in determining the experience of social inclusion. This suggests higher inequality in the Brazilian context. In addition, it may indicate the results of Brazilian Public Health Policy.

Table 3  
Objective measures of opportunities in different social domains

Domain	Question	% of yes
Community	Leisure facilities in your area	64.9
	Currently use any leisure facilities	52.7
	Gave unpaid help to someone (not a relative)	64.9
	Voted in 2015 parliamentary election	68
Housing/car	Own flat or house	49.7
	Own car	43.6
Work	In paid employment or self employed	10.9
Finance	Had any forms of income	60.9
	Knew someone who would be able to lend you a small amount of money	47.5
Safety	Had been a victim of a crime	23.1
Education	Enrolled in full-time or part-time course	16.7
Health	Visited GP about physical health	68
	Visited GP about mental health	56.9
	Attended a hospital or clinic for a physical health problem	49.8
	Attended a hospital or clinic for a mental health problem	53.3
Family and friends	Parents alive	54.2
	Contact parents face-to-face	59
	Contact parents (face-to-face or other means)	40.9
	Had at least one person you would call a friend	60.0
	Invited friends or neighbours to your house	52.9

The results show low social inclusion of Brazilian people with mental health problems. The aggregated overall social inclusion score was 3.53, indicating that the perception of social inclusion among the participants was poor.

### Community Opportunities, Social Inclusion, and Health

Our current study found that overall social inclusion correlated positively with physical health as well as mental health. The mean score for physical and mental health were 5.04 on 7-point scale and 4.05 on 7-point scale respectively. Regarding

Table 4

Satisfaction with opportunities in different social domains

	Mean	SD
Leisure activities	3.99	1.87
Involved with community groups	3.51	1.94
Suitable housing	3.96	1.80
Work (for employed and unemployed respondents)	2.67	1.76
Increase income	3.04	1.62
Live safely in area	3.55	1.91
Education	3.33	1.82
Physical health care	4.05	1.83
Mental health care	5.04	1.67
Contact with family	4.06	2.02
Contact with friends	3.82	1.81
Mean of the above items	3.53	1.85

Note. 7-point scale. Higher scores represent higher satisfaction.

the health domain, overall social inclusion had a significant positive correlation with number of friends ( $r = 0.42$ ,  $p < 0.001$ ) and frequency of having friends or neighbours visiting their house ( $r = 0.37$ ,  $p < 0.001$ ). The two key SCOPE-B variables, satisfaction with opportunities and overall social inclusion, significantly correlated with mental health and physical health. Perceived opportunities did not correlate with mental health and partially correlated with physical health. Social inclusion had a significant and positive correlation with both physical as well as mental health. Table 5 shows correlations between social inclusion and health variables.

The correlation of overall social inclusion with physical health was similar to studies in Poland, Hong Kong, and the UK. (Santos, Barros and Huxley, 2018; Chan K, Chiu MY, Evans S, Huxley PJ, Ng YL, 2016; Balwicki, Ł., Chan, K., Huxley, P.J. et al, 2018; Huxley et al., 2012). These findings are an outcome of mental health programs and interventions in each country.

### Psychometric properties of the SCOPE-B

We conclude this paper by looking at the psychometric properties of the SCOPE-B. We used Cronbach's alpha coefficients to examine the internal consistency of SCOPE-B.  $\alpha > 0.7$  is an acceptable value (Nunnally & Bernstein, 1994). The



Cronbach's alpha coefficients of SCOPE-B were similar to those for the UK version of SCOPE (Huxley et al., 2012), with a Cronbach's alpha of 0.756 for satisfaction with opportunities (compared to 0.77 for the UK) and of 0.626 for perceived opportunities (compared to 0.62 for the UK). The perceived opportunities scale did not quite meet the 0.7 acceptability level, probably because of the small number of items included. Nevertheless, the inter-item correlation for these scale items was 0.31, indicating a good correlation.

Construct validity was evaluated by examining the correlation between overall social inclusion, satisfaction with opportunities and perceived opportunities. They were significantly correlated with each other (see Fig. 1). Overall social inclusion had a higher correlation with satisfaction with opportunities than with perceived opportunities. Overall social inclusion was positively correlated with satisfaction with opportunities for eight out of eleven items. Overall social in-

Table 5  
Pearson correlations between social inclusion, physical health and mental health

Variables	Overall social inclusion	Physical health	Mental health
Satisfaction with Opportunities			
For leisure activities	0.21	0.06	0.05
For involvement with community groups	0.24	-0.05	-0.14
For suitable housing	0.27	-0.02	0.10
Work	0.30	0.07	-0.04
To increase income	0.36	0.08	0.09
To live safely in area	0.22	0.16	0.14
For education	0.49	0.16	0.16
For physical health care	0.16	--	--
For mental health care	0.13	--	--
For contact with family	0.42	0.16	0.16
For contact with friends	0.37	0.30	0.14
Perceived Opportunities			
For involvement with community groups	-0.15	-0.13	-0.13
For suitable housing	-0.17	-0.08	-0.12
For suitable work	-0.22	-0.13	0.04
To increase income	0.22	-0.04	0.01
For education	-0.25	-0.05	0.02

clusion was positively related to only one out of five items for perceived opportunities. Pairwise t-tests were used to examine whether objective measures of opportunities related with overall social inclusion. We found that those who currently have contact with families had a higher social inclusion score than those who have not ( $t = 3.80, p < 0.001$ ). In addition, those reporting greater satisfaction with opportunities for increase income had a higher social inclusion score than those who did not ( $t = 3.68, p < 0.001$ ). Figure 1: Pearson correlation between key concepts in SCOPE-B

We argue that SCOPE-B is a reliable and valid measure of social inclusion, because it has an acceptable level of internal consistency as well as construct validity. However, the objective measures of opportunities in various social domains did not demonstrate an acceptable level of internal consistency. There are two possible explanations for this. Firstly, even where society has provided certain opportunities, respondents may not be able to enjoy them due to the lack of time or resources. Secondly, the objective measures of opportunities were measured differently, including categorical data of yes and no, five-point scales, and seven-point scales, making them less compatible. Further studies are needed to develop a better scale for the objective measures of opportunities.

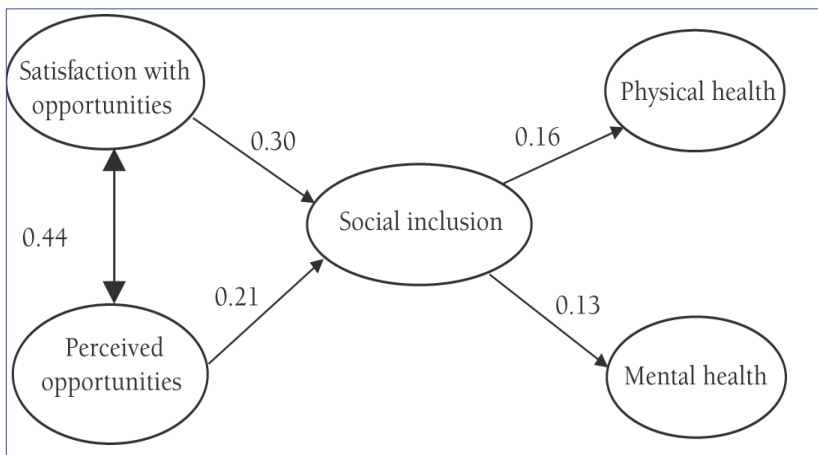


Figure 1: Pearson correlation between key concepts in SCOPE-B

## Conclusion

This Brazilian study offers further evidence that the concept of social inclusion is transferable between cultures. The successful adaptation of SCOPE into the Brazilian context supports recognition of the scale as method suitable in cross-cultural settings. Results from SCOPE-B suggest that Brazilian people with mental health problems are not satisfied with their level of social inclusion, especially when they are in poor economic circumstances and unemployed. The dominant role in this perception seems to be having good relationships with friends and families and access to Income. This suggests that the direction of mental health intervention programs post psychiatric reform are building support social networks and promote the autonomy with income, they facilitate the social inclusion of the people with mental health. The positive correlation between overall social inclusion and satisfaction with opportunities and perceived opportunities showed construct validity of the SCOPE-B.

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